



1981

Changes in Cognitive Appraisal of Mood State in Psychiatrically Hospitalized Adolescents

Margaret J. Rohde
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CHANGES IN COGNITIVE APPRAISAL
OF MOOD STATE IN
PSYCHIATRICALY HOSPITALIZED ADOLESCENTS

by

Margaret J. Rohde

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

January

1981

ACKNOWLEDGEMENTS

The author wishes to express her gratitude to Alan S. DeWolfe, Ph.D., Director of her dissertation, and to James E. Johnson, Ph.D., and Thomas P. Petzel, Ph.D., committee members. All three were helpful and supportive through the project. Frank Slaymaker, Ph.D., also provided some greatly appreciated guidance with the data analysis. The private-practice therapists and the hospitals involved went above and beyond the call of duty in accommodating to the needs of the research, and the author is grateful to them and to their patients for participating. Finally, Mr. Joseph S. Bongiorno and the author's parents, Mr. & Mrs. Raymond Rohde, helped sustain the author's motivation and lifted her sagging spirits when necessary. To all these people and others too numerous to mention, the author wishes to extend a hearty "thank you".

VITA

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CHAPTER I

INTRODUCTION

Depressive disorders are one of the oldest documented psychiatric disturbances, and there is a striking similarity between ancient accounts of "melancholia" and current descriptions of the symptoms of depression. Even though there has long been agreement as to the symptoms of depression - sad mood, hopeless thoughts, apathy, and vegetative signs - the understanding of depression remained stagnant until the beginning of this century. Then, theoretical work flourished as the early psychoanalysts speculated as to the causes and psychodynamics of depression. In the past quarter century, depression has begun to be studied empirically as well as theoretically. Relative to the several centuries spent solely in describing depression, modern empirical analyses of depression are comparatively new.

The present study was an attempt to provide some insight into three general areas of depression. First, the study focused on depression in psychiatrically hospitalized adolescents. Second, the possible usefulness of the psychoanalytic hypothesis of the need to suffer and the cognitive hypothesis of the negative view of self, in explaining depressive phenomena in psychiatrically hospitalized adolescents, was investigated. Finally, the issue of masked and un-

masked depression in psychiatrically hospitalized adolescents was explored via measurements of depression and of self-disclosure taken over the first month of treatment, and via comparisons of ratings on those dimensions by patients and by therapists.

The literature and clinical bases for the hypotheses and methodology employed in this study are reviewed in the next chapter.

CHAPTER II

REVIEW OF RELATED LITERATURE

General Overview of Depression

History

Documentation of depressive disorders can be found as far back in history as the writings in the Old Testament. Knoff (1975) quotes verses from the first book of Samuel, which relates Saul's frequent episodes of despair, and from the book of Job, which described Job's despondency. For Saul, relief was obtained when he listened to David play the harp; for Job, his faith in God supported him. In Homeric times, Hesiod also attested to the therapeutic effects of "music catharsis".

While these early writers emphasized the description of the depressed moods of their heroes and means for temporary relief, Hippocrates (Bemporad, 1978a; Knoff, 1975), in the Fourth Century, B.C., began the theoretical work on the etiology of depression. He first used the term "melancholia" and attributed the disorder to an excess of "black bile", a bitter, toxic humor produced in the intestine or spleen, in the depressed individual. This theory of mental illness based on humors, expounded further by Galen in the Second Century, A.D., remained the dominant one through the Middle Ages,

even though other prominent writers of the time, such as Aretaeus of Cappadocia and Soranus (Drabkin, 1946), argued that age, sex, alcohol, drugs, and psychological factors, such as anger, guilt, anxiety and strain over school, work or interpersonal relationships, were the sole causes of melancholia.

In reviewing the history of the study of depression to the present day, one is struck by the ever-recurring themes. For example, the physiological-psychological debate of the ancients is still with us today. Also, most ancient physicians agreed that "melancholia is an affection which damages the judgment, causes a grave disturbance of the mood, and an estrangement from those most closely associated" (Siegel, 1968), and that definition is one with which most current authors on depression would still agree. And, as early as the Fifth Century, A.D., Caelius Aurelianus (Knoff, 1975) was prescribing alkaline spring waters, which contain lithium salts, for the treatment of mania and melancholia. The marked similarity, over time, in the accounts of depression will become even more obvious as this review progresses.

During the Renaissance, interest in the study of depression increased, a fact which suggests a renewed outbreak of the disorder. Several authors devoted entire works primarily to the description of melancholia - Timothy Bright wrote Treatise on Melancholia in 1586 (Veith, 1970); Thomas Walkington wrote Optick Glass of Humours around

1606 (Veith, 1970); and Robert Burton (1927) wrote Anatomy of Melancholy in 1621. Other authors included Plater in 1602 (Knoff, 1975), Baxter (orig. 1673; 1830), Bonet in 1684, Schacht in 1747, and Herchel in 1768 (Bemporad, 1978a).

Burton (orig. 1621; 1927) classified melancholia into three types - general, hypochondriacal, and head melancholy (included love and religious melancholy). Burton did not list guilt as a symptom of depression. In fact, according to Murphy (1978), it was not until the 1670's that Baxter (orig. 1673; 1830) first related the prominence of self-reproach, despair and delusions of guilt in the depressive. Murphy claims that the neglect of the symptom of guilt may be due to the personal biases of earlier authors, who believed there must be some factual basis for the troubled conscience of the depressed person. Yet, Murphy notes, African cultures are currently beginning to experience the same, sudden emergence of guilt as a symptom of depression. He attributes this to similar cultural factors in the mid-1600's in Europe and in Africa today. Plater's work (Knoff, 1975) in the early 1600's is especially intriguing in that it seems to be a forerunner of the current cognitive theories of depression. Plater described melancholia as a "mental" affliction and suggested that the depressed person's negative cognitions led to his negative affects.

Moving into the beginnings of modern psychiatry, Pinel (orig.

1801; 1962) and Kraepelin (1921) were quite influential; Pinel for his description of the symptoms of depression - "taciturnity, a thoughtful, pensive air, gloomy suspicions, and a love of solitude", and Kraepelin for his inclusion of manic-depressive psychosis as one of the three major categories of mental illness. The word "depression" was finally substituted for "melancholia" in 1904 by Meyer (1948-1952), because he believed the term "melancholia" should be reserved at least until such time as evidence of an organic basis for the disorder could be found.

Theoretical Perspectives

The study of depression began to flourish in the early 1900's, when the first psychoanalysts began to speculate on the causes for the depressive symptoms which earlier authors had only been able to compile and describe. Despite criticisms, such as Mendelson's (1960), of psychoanalytic theories for being oversimplified, based on insufficient data, and over-emphasizing childhood data, these theories have been extremely influential in shaping current conceptions of depression.

One of the earliest psychoanalytic theorists was Abraham (orig. 1911; 1960a), who remarked that the depressed individual's ego experiences a love-hate ambivalence toward a rejecting love object, and the person gives up hope of ever satisfying his desire for the love object. Depression results from the difficulty in

repressing the hateful side of the ambivalence. Abraham (orig. 1916; 1960b) suggested that three mechanisms - repression, projection and internalization - operate to produce depressive symptoms. He postulated complex maneuvers wherein the depressed person repressed his own hatred of the love object ("I do not detest him"), projects that hatred into the love object ("He detests me"), and then internalizes the hate ("I am detestable").

Abraham (orig. 1916; 1960b) also viewed depression as a vain effort to incorporate the lost love object via regression to the oral stage of development. He (Abraham, orig. 1924; 1960c) proposed five necessary and predisposing factors in depression: 1) a constitutional tendency toward oral-eroticism, 2) fixation of the libido at the oral level, 3) repeated injuries to infantile narcissism due to disappointments from those toward whom the child is most affectionate, 4) experience of the first important disappointment prior to resolution of the oedipal strivings, and 5) repetition of that disappointment in later life. Further modifications in psychoanalytic theory were made by Gero (1936), who expanded Abraham's original notion of the importance of orality in depression to include the depressive's psychological needs for dependency, gratification, love and warmth.

In "Mourning and Melancholia", Freud (orig. 1917; 1957b) stated that three factors were necessary for depression - loss of a love object, a high degree of ambivalence toward the object, and

regression of libido into the ego. He compared depression to normal grief, noting, however, that in grief the loss is external while in depression the loss occurs within the ego. The ego is identified with the rejecting object, and feelings of hatred toward the lost love object cause the depressive to feel guilty and exhibit a need to suffer. This marked the beginnings of the psychoanalytic view that the depressive person is motivated to suffer because of his simultaneous identification with and hatred of the lost love object. It is important to remember, though, that this formulation was meant to pertain only to psychotic depression and that it was written prior to Freud's (orig. 1922; 1957a) brief conceptualization of the superego in relation to the ego in depression.

Despite Freud's caveat regarding generalizability of his need to suffer theory, his advice was not heeded. Many theorists proposed a need to suffer as the basis for depression in general. Melanie Klein (1948) claimed that the "depressive position" is a stage which every infant experiences. She postulated two stages in the first year of life - the "paranoid position" and the "depressive position". In the former, the infant projects bad objects into the environment; that is, he experiences danger emanating from the world. In the depressive position, which occurs around four to five months of age, the infant is beginning to learn that his mother is a "whole" object; that is, she can be both good and bad, or nourishing and non-nourishing. The infant feels frustration and anger when he experiences his

mother as bad, non-nourishing, and he feels self-reproachful for his own hostility toward her. While the normal child resolves this crisis by seeing both his mother and himself as whole objects, the child with tendencies toward depression constantly fears losing his mother's love due to his own hostility, which he fears may overpower his love.

While these early psychoanalysts emphasized the role of introjected anger in depression, this view soon began to come into question (Deutsch, 1932; Gero, 1953; Rado, 1951). Psychoanalytic theory was further developed by Rado (orig. 1927; 1956), with his emphasis on the interaction between the intrapsychic and the interpersonal aspects of depression. Rado pointed out the paradoxical behavior of the depressed individual, who, at the same time, harshly accuses himself and angrily attempts to force love from someone else. Rado (1928) further noted that depression begins as a function of the superego, the ego and a love object. Because the depressive's self-concept is precarious and externally based, the loss of a loved one is extremely threatening. His self-accusations and need to suffer are designed at first to appease the other, but when the depressive realizes his efforts to regain the lost love object are in vain, the struggle becomes an intrapsychic one, and a maladaptive, internal, cycle of hostility, guilt and contrition results (Rado, 1951).

Fenichel (1945) consolidated and clarified much of this early

work on depression. He defined depression as a diminution of self-esteem following the real or imagined loss of an ambivalently-held object. He emphasized that the drop in self-esteem results from a perceived disparity between the actual state of the self and the desired ego ideal. Thus, Fenichel combined the early notions of loss and ambivalence with the later ideas regarding self-esteem and interpersonal dynamics.

Several neo-analytic theorists continued to evolve the concept of self-esteem in depression. Jacobson (1971) conceptualized the basic conflict in depression as flowing from frustration, which leads to rage, which leads to hostile attempts at gratification. If the ego is unable to realize its goal, the aggression is turned toward the self-image in the search for suffering, making for a greater disparity between the self-image and the ideal self, and resulting in lowered self-esteem and further desire for suffering. Jacobson (1953) stated that the depressive becomes angrily and guiltily convinced that he can never realize his goal of adequate love. Sandler and Joffe (1965) reiterated this last idea in their pronouncement that it is not necessarily a particular object that the depressive seeks but, rather, a sense of well-being.

Bibring (1953) agreed that depression involves a need for suffering within the ego, caused by a sense of helplessness in rectifying the loss and a felt disparity between the actual and the ideal self. He went on to say that the regression can be to the

anal or phallic stages, as well as the oral stage. He suggested depressions might be classified according to the stage of regression. Thus, oral depressives would be characterized by dependency, loneliness and a need for love; anal depressives might see themselves as weak and helpless and feel guilty for this; and depressives who regress to the phallic stage might be marked by feelings of inadequacy, inferiority and ineffectiveness.

Other neo-analytic theorists picked up on the theme of the depressive's interpersonal relationships and concluded that depressive symptomatology occurs in reaction to societal demands. Becker (1964) distinguished schizophrenics and depressives by noting that schizophrenics exhibit a marked disregard for social conventions while depressives exhibit an overregard for them. Via case studies, Cohen, Blake, Cohen, Fromm-Reichman, and Weigert (1954) saw the depressives they studied as being constantly haunted by the threat of loss because they were used by their parents as levers to better their positions in society.

Alfred Adler (orig. 1914; K. Adler, 1961; Ansbacher & Ansbacher, 1956) viewed the depressed person as attempting to obtain power through his illness. In other words, the depressed individual exploits others with his weaknesses, complaints and self-accusations. K. Adler (1967) drew a direct line between the child who cries in order to get what he wants and the adult depressive who "tyrannizes" others with his depressive symptomatology.

Bonime supports this position, as well. He sees depression as a "practice", a way of life which is the expression of an extremely competitive personality (Bonime, 1966). The depressed person alleges weakness and dependency in order to exploit others and disguise his hostility toward them (Bonime, 1960, 1962, 1976). This practice develops out of the parent-child relationship. The depressive's parents are depriving and manipulative, and their child develops the practice of depression as the result of his interactions with them (Bonime, 1966).

The existentialist view of depression might be mentioned here as well, even though it did not develop out of psychoanalytic thought. According to Tellenbach, a German existentialist author, the depressive feels incomplete, unreal and impotent, and a vicious spiral ensues in which he tries to avoid situations which might elicit guilt, and he places excessive demands on himself in order to avoid guilt, but he ends up feeling guilty anyway because his standards for himself are so stringent as to be impossible to reach (Beck, 1967).

In recent times, the movement has been away from the speculations of the psychodynamic theories and toward more heuristic models of depression. Especially prominent among these are Seligman's learned helplessness model (Seligman & Maier, 1967), the behavioral model based on the concept of reinforcement (Lazarus, 1968), and Beck's (1967) cognitive theory.

Seligman has developed a model of depression in humans based on observations of dogs in experimental situations (Seligman & Maier, 1967). The dogs were placed in circumstances in which they received a painful shock which they could not escape. When the dogs were then placed in circumstances in which escape was possible, they did not make use of it, having learned, instead, to be helpless. Seligman has generalized these findings to humans, suggesting that this paradigm may explain the depressive's attitude that there is no relationship between what he does and what happens to him; in other words, his attitude of helplessness.

Representative of the behavioral viewpoint, Lazarus (1968) states that depression is a function of inadequate or insufficient reinforcement. One criticism of the behavioral theory of depression is that it limits itself to specific aspects of depression which have been studied experimentally, and as a result, behavioral theory neglects the subjective experience of depressive affects such as sadness and hopelessness.

Beck (1967), a leading cognitive theorist, has conducted extensive research in the field of depression and incorporated those findings into a full theory of depression. In opposition to the assumption of most writers in this field, Beck does not view depression as primarily a mood disorder. Rather, the depressive's cognitive schema (Beck, 1974), triggered by a loss, causes the emotional, cognitive, motivational and physical symptoms of depression (Beck, 1976).

The underlying cognitive disturbance, or "cognitive triad" (Beck, 1970), consists of the depressive's negative expectations of the environment, negative view of himself, and negative expectations of the future.

Beck (in Friedman & Katz, 1974) views the experience of losses, and the distorted interpretation of them, as central to the development of depression. An individual who is vulnerable to depression often has a history of parental loss, rejections by peers, loss of status, and gaps between his performance and his standards for himself. A chain reaction of misinterpreted losses results in a full-blown depression. Central to Beck's theory is the notion of the depressive's negative view of self. Contrary to the psychoanalytic theories, which claim the depressed person is motivated to suffer in order to punish the internalized rejecting love object, cognitive theory holds that the depressed person's negative view of self results in his feeling he deserves to suffer, even though he would prefer not to suffer.

Jamison, Gerner, Hammen, and Pakesky (1980) surveyed 61 patients and found that bipolar manic-depressive patients indicated their disorders were associated with positive experiences. However, few unipolar depressed patients reported any pleasure in their illnesses. Thus, Jamison, et al.'s study supported the need to suffer hypothesis for bipolar manic-depressives only; it did not address the issue of the negative view of self hypothesis, which

could have been operating in the unipolar depressed group.

Wallington (1973) presented some limited evidence for the negative view of self hypothesis when she reported that dysphoric affect was observed in subjects following their committing a transgression. This result was explained along the lines of the cognitive viewpoint, which holds that depressive affect is the result of negative cognitions regarding oneself, one's environment, and the future. In the Wallington study, it can be said that the transgressions of the subjects led to their holding a negative view of themselves, and that they then experienced depressive affect as a result of their negative cognitions. Wallington also found that transgressing subjects engaged in self-punitive activities which had no restitutive function. This result was also seen by Wallington as providing evidence for the cognitive view. It was argued that the function of the self-punitive behavior was not to appease someone else, but rather, was the result of the subjects' negative self-view. However, the possible role of the need to suffer cannot be ruled out on the basis of Wallington's findings, since the motivation of the subjects was not assessed. Perhaps transgressing subjects prefer to suffer. This alternative explanation of the results was not addressed by Wallington, and further experimentation would be needed to assess its applicability.

The present study seeks to assess the applicability of the need to suffer and the negative view of self hypotheses by incor-

porating measures of present, preferred and deserved mood state.

If the need to suffer hypothesis is correct, then depressed subjects should indicate they prefer to experience negative affects. However, if the negative view of self hypothesis is appropriate, then depressed subjects should indicate they believe they deserve to experience negative affects, even though their preference would be for more positive affects. The specifics of these two alternatives are discussed in more detail in the Hypotheses section.

Clinical Aspects

Despite the wide variety in the theories of depression, there appears to be general agreement across the board as to the symptoms of depression. There has been little change in the description of depression from ancient physicians who stressed the affective, cognitive and social impairments of the depressive. Thus, Beck's (1967, 1974) four-component model would probably accommodate most, if not all, of the symptoms emphasized by any theorist. Beck (1967, 1974) has described each component in detail. Under the emotional component, he includes dejected mood, negative feelings toward the self, reduction in gratifications, loss of emotional attachments, crying spells, and loss of mirth response. As cognitive components, he categorizes self-blame, indecisiveness, and the cognitive triad of negative views toward the self, the environment and the future. The motivational component is made up of increased dependency, paralysis of the will, suicidal ideation, and wishes to avoid,

escape and withdraw. Finally, the physical signs of loss of appetite, sleep disturbance, loss of sexual response, fatigability, stooped posture and slow movements are included in the fourth component.

The personality characteristics of the depression-prone person have received considerable attention from researchers. The particular characteristics emphasized usually reflect the particular theoretical bias of the writer. Bonime (1966), for example, has listed six characteristics of the depression-prone person - hostility, anxiety, guilt, manipulativeness, aversion to being influenced by others, and unwillingness to give gratification to others. Bonime's list attests to his previously described view of the depressive as an individual who appears weak and dependent on the surface but actually is using those characteristics to take advantage of others.

Bemporad (1978b) has developed a separate list of five personality characteristics of the depressed person: 1) restricted sources of self-esteem; 2) fear of autonomous gratification; 3) establishment of "bargain" relationships; 4) feelings of helplessness to alter the world; and 5) cognitive avoidance of overt anger. Like Bonime (1966), Bemporad (1978b) also stresses the excessive dependency of the depressive, but he attributes it not to competitiveness but to the depressive's fear of loss of his externally-based self-esteem.

Among the many other personality attributes of the depressive which have received attention in the research literature are learned helplessness (Abramson & Seligman, 1978) and low self-esteem (Pachman & Foy, 1978).

Even though the symptoms of depression have been well delineated and the several associated personality variables researched, there is some controversy as to the status of "depressive equivalents" and "masked depression". Kennedy and Wiesel (1946) introduced the term "depressive equivalents" to describe three patients who exhibited physical and vegetative signs of depression but no affective component. Because these patients recovered completely after receiving ECT, they were considered to be suffering from "depressive equivalents". Bemporad (1978b) noted the depression may be "masked" by hypochondriacal complaints and, sometimes, by depersonalization, and Lesse (1974) claimed that fully 30% of the depressives he interviewed as a psychiatric consultant to a medical unit had masked depression. Nowhere is the issue of masked depression more relevant than among adolescents. This topic will be reviewed in the next section.

Depression in Adolescents

The subject of depression in adolescents is one about which there has been a great deal of theoretical and individual case

exploration. One of the major questions in this area has been whether or not depression occurs, or even can occur, in adolescents. Several highly respected writers, among them Deutsch (1967), A. Freud (1946, 1958, 1969), Gardner (1959), Geleerd (1961), Josselyn (1954), Spiegel (1951) and Winnicott (1971), hold the view that adolescent development consists of a great deal of inner turmoil and character upheaval and, therefore, the distinction between the normal and psychopathological adolescent is so blurred that any psychiatric diagnosis is almost always uncalled for.

Many psychiatric writers refute this viewpoint (Douvan & Adelson, 1966; Grinker, 1962; Kysar, Zaks, & Schuschman, 1969; Masterson, 1968; Offer, 1969; Offer & Offer, 1971; Silber, Coelho & Murphey, 1961; Weiss, Segal, & Sokol, 1965). Also, Weiner (1970, 1971, 1972) reported that there is no common picture of adolescent turmoil which would simulate psychopathology, and that adolescents do not display any more psychological disruption or instability than normal adults. In addition, there is no reason to expect a troubled adolescent to "grow out" of his difficulties, since Masterson (1967a, 1967b) found that disturbed adolescents continued to experience difficulties in adulthood. Follow-up studies by Garber (1972), Garber and Polsky (1970), Hartmann, Glaser, & Greenblatt, (1968), King, (1970), and Levy (1969) reiterated that finding. In 1969, 51% of adolescents presenting with a diagnosis of "transient situational personality disorder" received psychiatric treatment, a figure which is comparable to patients with other diagnoses. (Outpatient Psychi-

atric Service, 1969). Thus, it seems there is little hesitancy to treat psychiatric disturbances in adolescents; rather, the hesitancy is to label the disturbance.

With regard to affective disorders, though, most authors agree that bipolar manic-depressive disease is relatively uncommon in adolescents, at least before age 16. Kraepelin (1921), relying on patient reports, stated a few patients remembered having their first episode before age 10, and one as early as age 5, but actual observed cases before puberty are extremely rare. In fact, several authors (Anthony & Scott, 1960; Berg, Hullin, Alropp, O'Brien, & Macdonald, 1974; Feinstein & Wolpert, 1973; Kasanin & Kaufman, 1929; Varsamis & MacDonald, 1972; Weizman, Weizman, Tyano, & Wijzenbeek, 1979) have documented cases of bipolar depression in young people primarily because these cases are so few and far between. Campbell (1952, 1953) is an exception to this point of view, as he has compiled several case histories of manic-depressive illness in children.

Other authors go so far as to contend that even unipolar depression is rare in adolescents. Beres (1966), Rie (1967) and Rochlin (1959) were major proponents of the view that depression does not and can not occur in adolescents. Their arguments were based on psychoanalytic theoretical grounds that adolescents do not have the requisite psychic structure to develop depressive phenomena. Still others, among them cognitive theorists (Bemporad, 1978a) have argued that adolescents cannot sustain a dysphoric mood and that their "here

and now" orientation makes the possibility of a self-perpetuating, clinical depression less than likely.

Jacobson (1961) agrees that adolescence is a time of psychic turmoil and states that, because of the inner upheavals, transient depressions are to be expected in adolescents. Jacobson argues that the huge biological, social and psychological changes of adolescence force a remodeling of the individual's psychic structure and produce tremendous emotional lability. The transient depressions occur in connection with guilt conflicts, feelings of failure for not living up to unrealistic expectations, and the relinquishing of childhood attachments and interests. Thus, even though Jacobson claims depression is common in adolescents, he does not equate the mood swings of adolescence with actual clinical depression, since he claims these transient depressions are to be found in all adolescents.

In a fairly recent article, Siomopoulos and Inamdar (1979) continue to take the position that depression is impossible in adolescents, when they remark that hopelessness is a central feature of depression and that this feeling is conspicuous by its absence from the depressive phenomena in adolescents (Inamdar & Siomopoulos, 1978). They contend that cognitive-affective development and the development of the concept of time must reach a certain level in adolescents in order for them to exhibit clinical depression similar to adults.

Many recent writings, however, take a different stance. Ainsworth (1969), Ainsworth and Bell (1970), Bowlby (1969), and

Maccoby and Masters (1970) all have provided evidence that, if depression is defined as a reaction to a real or fantasied loss, then there is a theoretical basis for depression even in infancy, since children begin making attachments to others as early as six to eight months of age.

Toolan (1969, 1971) has attempted to bridge the gap between the two camps by pointing out that a disorder can be manifested in different ways among different age groups. He agrees that adolescents do not necessarily present with clear, adultlike signs of depression such as overt crying, self-recriminations, and expressed feelings of guilt. Yet, Toolan (1978) claims, the dynamics of depression in the two age groups are similar. The experience of a loss leads to a drop in self-esteem and feelings of helplessness. Depending on the individual's level of development, he will respond in different ways to these feelings. Toolan (1969, 1971) refers to the early adolescent responses as "depressive equivalents" - boredom, restless, alternating fatigue and bursts of energy, and difficulty concentrating. These symptoms combine with the tendencies to denial and acting out common during this stage of development. Their persistence differentiate depressed adolescents from normal adolescents.

In middle and late adolescents, the picture changes, often because the defenses used in early adolescence are worn down. Toolan (1969, 1971) documents considerable experience with middle and late adolescents who exhibit classically adult depressive symptomatology -

retarded physical and mental activity, depressed mood, feelings of worthlessness, nihilism, apathy, insomnia, and suicidal thoughts. He states that by middle adolescence the superego has developed to such an extent that more adultlike symptomatology is possible. Yet, as Gallemore and Wilson (1972) point out, even though the symptoms are adultlike, the overall picture is heavily influenced by the particular developmental concerns of adolescence.

Bemporad (1978b) views depression as being fostered by unconscious cognitive distortions which can only occur after a certain level of cognitive development has been attained. While he does not equate them with adult depression, Bemporad does say that adolescents experience pathological moods and affects and that the developmental process influences their expression. He says depressions of adolescence are usually characterized by exaggerated urgency, time distortion and impulsivity, and are usually based in an inability to fulfill an internalized parental ideal or an inability to separate from the family. The depression becomes accentuated by the adolescent's cognitive distortions as to the finality of events.

Cytryn and McKnew (1974) have elaborated this view that the manifestation of depression is a function of the stage of development of the individual. They claim that masked depression is more common among children than among adolescents because children can ward off depressed feelings as long as they mature and grow, can substitute love objects for one another, and have less developed consciences and

reality testing. Yet, the adolescent can develop a masked depression if he has poor reality testing and continues to rely on denial and other primitive defenses.

Cytryn and McKnew (1974) also note that depression can be expressed through fantasy, verbal expression, and mood and behavior. In masked depression, only the depressive fantasies are present. The defenses of denial, projection, introjection, acting out, avoidance and splitting are usually operating here to prevent the experience of the depression. When there is depressive fantasy material as well as the verbal expression of depressive ideas, the individual is most likely in the midst of an acute depressive reaction or a receding chronic depressive reaction. The individual is probably relying on reaction formation and the dissociation of affect. When all three manifestations - fantasy, verbalization, and depressive mood and behavior - are present, the individual is probably suffering from an early acute depressive reaction or a chronic depressive reaction, and his defenses against the depression have failed.

The psychoanalytic view of adult depression as a reaction to loss can be applied to adolescents as well, since the loss can be real or imagined, an actual love object or a previous state of the self. Bibring (1953), Brandes (1971) and Sandler and Joffe (1965) discuss the latter concept as being a feeling of being deprived of the state of childhood, as the adolescent grows and changes, thus losing his former status. Friedman and Doyal (1974) point out that

the loss of an object often leads to feelings of loneliness and helplessness, and the loss of self-esteem results in feelings of self-depreciation. The loss is particularly difficult for a child, according to Miller (1971) because, unlike adults, children do not go through a stage of mourning whereby they would gradually give up the inner representation of the lost object. Instead, children deny what has occurred, through a complex set of defenses. Lee and Park (1978) advocate a developmental approach to treatment, in which the depressed adolescent is gradually helped to make the connection between his angry feelings and his feelings of worthlessness.

Krakowski (1970) has also taken the position that depression is just as common in adolescents as it is in adults, although the manifestations may differ. In fact, he states that adolescents are particularly prone to depression because that particular stage of life is one in which the person struggles with dependence versus independence and often experiences difficulties expressing hostility toward the previously depended-upon person, e.g., a parent.

This difficulty with the expression of hostility has also been noted by Burks and Harrison (1962) who contend that aggressive behavior in delinquents is an attempt to avoid depressed feelings. Thus, the adolescent may experience difficulty in modulating hostility and in choosing appropriate objects toward which to express angry feelings. In fact, says Cary (1979), the acting out of disowned urges by adolescents can become self-destructive, in their desperate

attempts to deny feelings of guilt.

Krakowski (1970) goes on to note that boredom, destructiveness, distractibility, fatigability and hypochondriasis are major symptoms of depression, and he also points out that relief may be sought by acting out in groups of adolescents with alcohol, drugs and sexual promiscuity. The acting out, however, often intensifies the guilt, which feeds into the depression, leading to a vicious cycle of more acting out and increased guilt and depression.

Renshaw (1974) lists several symptoms of depression in adolescence - exaggerated and extended apathy and inactivity, loss of appetite or excessive eating, loss of sleep or excessive sleeping, tearfulness, supersensitivity, and withdrawal from peer activities. In addition, she says, there are certain behaviors which point to the possibility of masked depression - sudden occurrence of stealing, promiscuity, academic decline, or use of drugs or alcohol in a previously conscientious adolescent.

Brandes (1971) addresses the role of adults in adolescent depression. He notes the strong reactivity of adolescents to significant adults such as teachers and parents. In addition to the actual loss of a significant adult to death, adolescents react to temporary losses during separations and to losses of attention and approval from depressed, angry or critical significant adults. Siomopoulos (1980) also takes such an interpersonal approach to the issue of the

development of affect in general.

Copeland (1974) has classified affective disorders in adolescents into six categories: cyclothymia, depressiveness, depressive equivalents, depressive suicidal behavior, anxiety disturbance and guilt disturbance. Cyclothymia, or mood swings, can be differentiated from the normal adolescent emotional pattern by at least five aspects which are found in disturbed teens: 1) presence of bipolar depressive history in the family; 2) presence of personality disruptions; 3) incapacity to perceive the mood swings as atypical and alien; 4) pattern of overcompliance to authority figures; and 5) preoccupation with ideas of guilt and impending loss.

Copeland (1974) maintains that the second category, depressiveness, is characterized by sadness of mood, negative or derogatory sense of self, ideas of rejection, altered body functions such as anorexia nervosa, loss of libido, and impaired academic functioning. Depressive equivalents, according to Copeland, are its atypical masked forms which the adolescent uses as defenses against depression, such as inexplicable outbursts of hostility. Next, depressive suicidal behavior is another classification of depression in adolescents, the fifth leading cause of death in 15 to 19 year olds (Kraus, 1972), but Copeland (1974) sees suicide as not necessarily related to depression in the same way as it is in adults; rather it may be more of an act of impulsiveness by a depressed adolescent.

Also, anxiety disturbance is a psychophysiological response to nonexternal, intrapsychic stress characterized by feelings of uneasiness, fear, dread, or a sense of impending danger. Anxiety disturbance can be distinguished from the normal degree of anxiety during adolescence when it impairs personality functioning, object relations and psychological development. Finally, guilt disturbance is marked by crisis of conscience, the pervasive feeling of having done something wrong and being hated for it, denial of instinctual impulses, especially sexual ones, and general curtailment of activities and heterosexual relationships. The rest of the personality remains intact and there is an absence of bizarreness such as in schizophrenia, but the adolescent does tend to act out in his quest for punishment (Copeland, 1974).

Easson (1977) lists several characteristics of depression in adolescents, but he warns that, to be meaningful, these symptoms must be measured against the standards for normal adolescents rather than those for adults. He lists lowered mood level, poor self-image or attempts to cover same via distancing defenses such as drugs or sexual promiscuity, lowered energy level, and somatic symptoms such as pain, eating variations, sleep changes, elimination difficulties, and skin problems, as characteristics of depression in adolescents.

Easson (1977) also differentiates five manifestations of depression in adolescents: 1) endogenous depression, which often goes untreated because the adolescent attempts to medicate himself

through illicit drugs; 2) reactive depression, in response to real or fantasied losses of objects or of dreams for oneself; 3) anhedonic depression, in which the adolescent decides he honestly has nothing to live for; 4) anaclitic depression, in which the loss of a relationship removes the gratification as well as necessary support and the adolescent becomes overwhelmed; and 5) depression secondary to another disorder or event, such as schizophrenia, chronic drug use or physical illness.

Malmquist (1975) has also developed a classification system for childhood and adolescent depression. He lists six types of adolescent depression: 1) mood lability as a developmental process; 2) reaction to current loss; 3) unresolved mourning from current loss; 4) reaction to earlier loss; 5) schizophrenias with prominent affective components; and 6) continuation of any of the childhood depressions.

The function served by particular symptoms of depression has been reviewed by Weiner (1975). He claims that the symptoms of fatigue, hypochondriasis and poor concentration represent the psychological toll of being depressed, while the symptoms of boredom, restlessness and flight toward or away from others represent the adolescent's efforts to defend against or ward off his own aggression and depression. Specific kinds of acting out, especially suicidal behavior, may also represent an appeal for help.

Unwin (1970) noted the "common thread of depression" which runs through the descriptions of several groups of alienated adolescents. He attributed the depression to a feeling of shame which results from the perceived discrepancy between the ideal self and the real self. Kaufman and Heims (1958), too, have noted the severely impoverished self-image of delinquents with underlying depression. Lynch (1976) has commented on the narcissistic losses and resultant depression experienced by late adolescents who are forced by the realities of the world to relinquish their idealized views of themselves and of their parents.

Anyan (1978) has addressed the issue of suicidal behavior in adolescents. He views depressed mood, as well as changes in somatic functions, pain, fatigue, and changes in sleep patterns, appetite and body weight as being important elements in the antecedent history of suicidal behavior. The precipitating event, he states, is usually an acute drop in the realm of self-esteem. The spectrum of suicidal behavior may range from a fleeting thought to lethal action. Tooley (1978) has hypothesized that the differentiating characteristic of suicidally depressed adolescents is their lack of hope for future change.

Research in the area of adolescent depression remains relatively scant. Only a few studies, such as Hudgens (1974), have attempted to empirically document the nature of depressive phenomena in adolescents. Inamdar, Siomopoulos, Osborn, and Bianchi (1979)

compared depressed adolescents and depressed adults and found that depressed mood, loss of interest and poor concentration were present in at least 70% of the adolescent and adult subjects. However, there were some striking symptom differences. For example, somatic symptoms were present in 74% of the adults, but only 37% of the adolescents, and suicidal ideation was present in 77% of the adolescents but only 41% of the adults.

Carlson and Cantwell (1980) directly addressed the issue of masked depression. They reviewed two alternative views of depression - the first holding that adolescent depression resembles adult depression in its dysphoric mood, low self-esteem, diminished psychomotor behavior and physical problems, and the second view holding that depression in adolescents must be inferred from conduct disorders, psychological reactions, somatic complaints and school problems. Carlson and Cantwell used a systematic interview approach with both parent and child and found that it was possible to diagnose children over age seven as having a major depressive disorder using adult diagnostic criteria. They attributed this success to the systematic interview approach. In addition, they pointed out that some children with depression met the criteria for other diagnoses as well, which may account for the prevalence of alleged masked depression. Also, in children who were depressed, behavior problems existed, but in children with both depressive and behavior disorder diagnoses, the behavior problems were more severe and chronic.

Most other research studies which have been conducted have focused on specific demographic and behavioral variables. Several researchers (Bowlby, 1961; Brown, 1961; Gregory, 1965; Masterson, Tucker, & Berk, 1963) have found a tendency to depression among people who have experienced parental deprivation.


Caplan and Douglas (1969) found that early separation from a parent, whether due to death, divorce, desertion, illness or other family breakup, was more common in depressed children and adolescents than in non-depressed children and adolescents. King and Pittman (1970) compared adolescent patients with affective disorders and adolescent patients with other psychiatric disorders, and they found that family histories of affective disorder or alcoholism or both were more common among patients with affective disorders than in patients with other psychiatric diagnoses. McKnew and Cytryn (1973) studied 50 children with affective disorders and found five common environmental factors: frequent separations, sudden loss, deprecia-tion and rejection, loss of involvement, and depression in a parent.

Hollon (1970) reviewed four individual cases and suggested that poor school performance may point to underlying depression in adolescents. Smith (1970) investigated 63 cases of anxious school refusers and found they could be grouped into three categories, one of which was a group of older adolescents who seemed to be depressed and to fear rejection and failure at school. The prognosis for these

adolescents returning to school was worse than for the younger, non-depressed groups.

This review makes it evident that experimentation in the field of adolescent depression is rather scanty. Instead, much of the literature on depression in adolescents is theoretical in nature. As outlined here, many authors have devoted considerable attention to clinical descriptions of the symptoms of adolescent depression. Numerous others have proposed classification schemes to account for these symptoms, often including a category called "masked depression". Yet, empirical data is noticeably missing from many of these works. Adolescent depression is said to differ from adult depression; yet, there is a conspicuous absence of empirical research on the dynamics of adolescent depression. As documented here, theoretical concepts certainly have progressed from the days of the early psychoanalysts, but empirical research now needs to focus on differentiating among theories and carefully honing individual concepts.

The current study provides empirical data regarding two specific areas of adolescent depression: 1) the dynamics of adolescent depression, and 2) the category of "masked" depression. In particular, regarding the first issue, the focus in the present study is on whether the need to suffer hypothesis or the negative view of self hypothesis is useful in explaining the experience of depression in psychiatrically hospitalized adolescents. The present study is, in part, a replication of Johnson, Petzel, and Rohde's



(1979) efforts to compare the two hypotheses. They found support for the negative view of self hypothesis for young adults in that depressed subjects rated themselves as deserving to have significantly more depressive features than non-depressed subjects. Both groups were similar in their ratings of preferred mood states. The present study investigated whether the same relationships apply to low- and high-depressed psychiatrically hospitalized adolescents. If the need to suffer hypothesis applies, then one would expect depressed subjects to indicate a desire for depressive affect. However, if the negative view of self hypothesis is correct, then one would expect depressed subjects to indicate they believe they deserve to experience depressive affect, even though their preference would be for less unpleasant feelings. Also, if the dynamics of adolescent depression differ from adult depression, then one would expect a different pattern of cognitive appraisals of current, preferred and deserved mood states than that found by Johnson, et al. (1979); on the other hand, if the dynamics of adolescent and adult depression are similar, then one would expect a similar pattern of cognitive appraisals of current, preferred and deserved mood states.

The second major area of interest was whether there are differences in level of depression and in level of self-disclosure, over the course of treatment, between masked and unmasked depressed adolescents. In the present experiment, therapists were asked to

categorize their patients according to the level of their depression and their willingness to acknowledge their depression. Those adolescents who were judged by their therapists to acknowledge their depression were considered to exhibit unmasked primary or secondary depression, while those adolescents who were judged by their therapists not to acknowledge their depression were considered to exhibit masked primary or secondary depression. Inventories measuring depression and self-disclosure were administered to the adolescents periodically over the first month of treatment. If the mask lifts over the first month of treatment, then adolescents with masked primary and secondary depression would appraise themselves as being more depressed and more self-disclosing over time, whereas adolescents with unmasked primary depression would appraise themselves as less depressed over time while maintaining the same level of self-disclosure. Adolescents with unmasked secondary depression would not be expected to change over time in their appraisals of their level of depression or self-disclosure. These expectations are further delineated in the Hypotheses section.

Hypotheses

The present study investigated the need to suffer and the negative view of self hypothesis in high- versus low-depressed adolescent subjects. Levels of depression were measured over one month of hospitalization with the Multiscore Depression Inventory (MDI) developed by Berndt, Petzel, and Berndt (1980). Measures of present

("Now"), preferred ("Like") and deserved ("Deserve") state levels of depression, as indicated on modifications (Johnson, et al., 1979) of the Depression Adjective Check List (DACL) developed by Lubin (1967), were taken over one month of treatment in a psychiatric hospital. Level of self-disclosure, as measured by the Self-Disclosure Inventory (SDI) developed by Jourard and Lasakow (1958), was assessed over one month of treatment. Therapist ratings of their patient's overall psychiatric condition (global psychopathology), level of depression and level of self-disclosure, were gathered over one month of treatment. In addition, therapists categorized their patients as belonging to one of five groups: 1) primary depression acknowledged by patient; 2) primary depression unacknowledged by patient; 3) secondary depression acknowledged by patient; 4) secondary depression unacknowledged by patient; and 5) depression not involved in psychopathology of patient. These categorizations were also obtained over one month of treatment. Groups 1 and 3 were considered to exhibit unmasked primary and secondary depression, respectively; Groups 2 and 4 were considered to exhibit masked primary and secondary depression, respectively.

The specific predictions for the current research are listed below. Higher scores on each DACL form reflect higher levels of depression.

1) High-depressed (MDI score ≥ 57) subjects' scores on the modified DACL compare with low-depressed (MDI score < 57) subjects' scores on the modified DACL in the following ways: a) high-depressed subjects obtain significantly higher scores on the DACL "Now" form than low-depressed subjects; b) high-depressed subjects do not obtain significantly different scores on the DACL "Like" form than low-depressed subjects; and c) high-depressed subjects obtain significantly higher scores on the DACL "Deserve" form than low-depressed subjects.

2) Within the high-depressed group, scores on the three modified DACL forms compare in the following ways: a) "Now" scores are significantly higher than "Like" scores; b) "Deserve" scores are significantly higher than "Like" scores; and c) "Deserve" scores are not significantly different from "Now" scores.

3) Within the low-depressed group, scores on the three DACL forms compare in the following ways: a) "Now" scores are not significantly different from "Like" scores; b) "Deserve" scores are not significantly different from "Like" scores; and c) "Deserve" scores are not significantly different from "Now" scores.

4) Over time, the DACL scores change in the following ways: a) high-depressed subjects' "Now" scores decrease significantly; and b) high-depressed subjects' "Deserve" scores decrease significantly.

5) High-depressed subjects' SDI scores are significantly higher (more self-disclosing) than low-depressed subjects' SDI scores.

6) Among the four groups of subjects judged by therapists to exhibit masked or unmasked, and primary or secondary, depression, the therapist ratings of overall psychiatric condition compare in the following ways: a) primary depressives receive higher (more global psychopathology) ratings than secondary depressives; b) unmasked depressives receive higher ratings than masked depressives; c) ratings of primary depressed subjects decrease significantly over time; and d) ratings of secondary depressed subjects do not change significantly over time.

7) Subjects judged by therapists to exhibit primary depression compare with subjects judged by therapists to exhibit secondary depression in the following ways: a) primary depressed subjects obtain significantly higher (more depressed) MDI scores than secondary depressed subjects; and b) primary depressed

subjects obtain significantly higher SDI scores than secondary depressed subjects.

8) Subjects judged by therapists to exhibit unmasked depression compare with subjects judged by therapists to exhibit masked depression in the following ways: a) unmasked depressed subjects obtain significantly higher MDI scores than masked depressed subjects; and b) unmasked depressed subjects obtain significantly higher SDI scores than masked depressed subjects.

Over time, the scores of the unmasked primary and secondary depressed subjects compare with the scores of the masked primary and secondary depressed subjects, as stated below.

9) For unmasked primary depressed subjects, the following relationships exist over time: a) MDI scores decrease significantly; and b) SDI scores do not change significantly.

10) For unmasked secondary depressed subjects, the following relationships exist over time: a) MDI scores do not change significantly; and b) SDI scores do not change significantly.

11) For masked primary depressed subjects, the following relationships exist over time: a) MDI scores increase significantly; and b) SDI scores increase significantly.

12) For masked secondary depressed subjects, the following relationships exist over time: a) MDI scores increase significantly; and b) SDI scores increase significantly.

13) The relationship between MDI scores and SDI scores is as follows: a) the overall linear relationship is significant; b) the linear relationship for unmasked primary depressed subjects is not significant; c) the linear relationship for unmasked secondary depressed subjects is not significant; d) the linear relationship for masked primary depressed subjects is significant; and e) the linear relationship for masked secondary depressed subjects is significant.

14) At each point in time, the following sets of scores correlate in the positive direction: a) MDI scores and therapist ratings of depression; b) MDI scores and therapist ratings of overall psychiatric condition; c) DACL "Now" scores and therapist ratings of depression; d) DACL "Now" scores and therapist ratings of overall psychiatric condition; and e) SDI scores and therapist ratings of self-disclosure.

CHAPTER III

METHOD

Subjects

The subjects were 44 adolescents (23 females, 21 males) between the ages of 12 years 11 months, and 18 years 8 months, at time of admission to a psychiatric hospital. The criterion for inclusion in this study was admission to an adolescent unit at one of three private psychiatric hospitals in the Chicagoland area, between August 29, 1980 and October 10, 1980. All subjects were treated by therapists in a private practice group of psychiatrists, psychologists and social workers, who specialize in the treatment of emotionally disturbed adolescents. The private practice group members and the administrators of the three hospitals reviewed the study in its proposed form and agreed to make available their patients and their facilities.

The subjects were referred for psychiatric hospitalization by a number of sources and for a variety of reasons. The referral sources included other professionals in the mental health field, social agencies, the court system, schools and parents. The reasons for admission for each subject varied but typically involved home and school maladjustment, negative peer group, dangerous behavior, suicidal ideation and/or attempt, withdrawal

from the environment, and drug abuse, among others.

Participation in the study was voluntary, and consents were obtained from the subjects themselves (Appendix A) and the parents of minor subjects (Appendix B). All prospective subjects contacted agreed to participate.

Materials

The Multiscore Depression Inventory (MDI), developed by Berndt, Petzel, and Berndt (1980), was administered to each subject on admission after two weeks and after four weeks of hospitalization. The MDI (Appendix C) is a 118-item self-report depression scale with a true-false format. The MDI provides a total depression score, as well as scores on ten subscales: cognitive difficulty, energy level, guilt, instrumental helplessness, irritability, learned helplessness, low self-esteem, pessimism, sad mood and social introversion. The MDI administered at admission was used as a screening device in the current study. Subjects with MDI scores greater than or equal to 57 were placed in the high-depressed group, and subjects with MDI scores less than 57 were placed in the low-depressed group.

Three adaptations of the Depression Adjective Check List (DACL), Form G, (Lubin, 1967) were also administered to each subject on admission, after two weeks and after four weeks of hospitalization. The DACL (Appendix D) is a brief, self-administered scale consisting of 32 adjectives, of which the subject checks those which

he believes apply to him. There are two sets of check lists, one with three equivalent lists of 34 non-overlapping items. The three lists in Set 2 intercorrelate .89, .86 and .84 (Lubin, 1965) and can be used interchangeably (Lubin, Dupre, & Lubin, 1967). Form G, a list with 32 adjectives, is used in this study.

The DACL has been shown to be sensitive to changes in mood in a normal population (Lubin, et al., 1967), and in a psychiatric population over one year (Lubin, Hornstra, & Love, 1974). Lubin and Himelstein (1976) replicated the alternate forms reliability of Set 2 and attested to the good split-half reliability. Test-retest reliability of the DACL was low, as would be expected in a measure of transient mood state. Set 1 of the DACL has been shown to be comparable, regardless of self-administration or examiner-administration (Lubin, Marone, & Nathan, 1978). The DACL has recently been used with a national sample of adults and adolescents and normative data compiled (Lubin & Levitt, 1979).

With normal subjects, the DACL correlates significantly with the Beck Depression Inventory and the Zung Self-Rating Depression Scale (Christenfeld, Lubin, & Satin, 1978), and with several other lesser known scales (Lubin, Roth, Dean, & Hornstra, 1978). The DACL has been used in a variety of studies (Levitt & Lubin, 1975; Lewinsohn, 1975; Lubin, 1977), including the measurement of mood changes during pregnancy (Lubin, Gardener, & Roth, 1975) and the relationship of mood and kind of activity in depressed patients

(Harmon, Nelson, & Hayes, 1980).

Johnson, Petzel, and Rohde (1979) adapted the DACL to investigate the need to suffer versus the negative view of self theories of depression. They modified the DACL to a trait measure by asking subjects to rate themselves with regard to each adjective on a six-point scale. Further, they employed three forms of the modified DACL - how do you typically feel, how would you ideally like to feel, and considering everything you know about yourself, how do you deserve to feel. In the current study, the DACL was used as a state measure of mood. Subjects were asked to rate themselves separately as to "how you feel NOW", "how you would LIKE to feel" and "how you DESERVE to feel". All three versions of the DACL were administered to each subject on admission, after two weeks and after four weeks of hospitalization.

The Self-Disclosure Inventory (SDI), developed by Jourard and Lasakow (1958), was administered to each subject on admission, after two weeks and after four weeks of hospitalization. The SDI (Appendix E) was developed to measure self-disclosure in adults regarding specific target persons and various aspects of their lives. As originally constructed, the SDI consisted of 60 items relative to self-disclosure in the following six categories: 1) attitudes and opinions; 2) tastes and interests; 3) work; 4) money; 5) personality; and 6) body. The subject was to indicate the degree to which he had revealed the specific information about himself to

mother, father, female friend and male friend. The odd-even split-half reliability of the original form was .94 for the total score and ranged from .78 to .99 for the six categories of information. Jourard (1961) then shortened the form for use with a younger group of students. In the present study, the shortened form of 30 items was used, except that the items in the "work" category were modified somewhat to suit adolescents and renamed "studies". The target persons were slightly modified to "parents", "best friend", and "therapist". Subjects were asked to indicate their willingness or unwillingness to reveal specific information about themselves to the target persons.

Procedure

This investigator conducted all the data gathering activities. Each subject was assigned an identification number to insure confidentiality. On completion of this study, the list matching subjects' names and numbers was destroyed.

All subjects completed the MDI on admission to the hospital after two weeks and after four weeks of hospitalization. On the basis of a median split of the admission scores on the MDI, 22 subjects were assigned to the high depression group ($MDI \geq 57$), and 22 subjects were assigned to the low depression group ($MDI < 57$).

Also on admission, and after two weeks and four weeks of hospitalization, all subjects completed the SDI and the three variations of

the DACL. The order of presentation of the measures was randomized.

The primary therapist of each subject rated that subject, on admission, after two weeks and after four weeks of hospitalization as belonging to one of five groups: 1) depression as primary disorder and acknowledged by patient; 2) depression as primary disorder and unacknowledged by patient; 3) depression as secondary disorder and acknowledged by patient; 4) depression as secondary disorder and unacknowledged by patient; and 5) depression not involved in psychopathology of this patient. On admission, after two weeks and after four weeks of hospitalization, the therapist rated the subject's overall psychiatric condition, (global pathology), level of depression and level of self-disclosure on a seven-point scale (Appendix F).

Data Analysis

The repeated measures analysis of variance was used to analyze the following: 1) the main effects and interactions of low or high MDI score (between-subjects variable), length of hospitalization and DACL instructions (within-subjects variables), on DACL scores (2 x 3 x 3 design); 2) the main effects and interaction of low or high MDI score (between-subjects variable) and length of hospitalization (within-subjects variable), on SDI scores (2 x 3 design); and 3) the main effects and interactions of therapist groupings of primary or secondary depression and acknowledged or unacknowledged depression (between-subjects variables), and length

of hospitalization (within-subjects variable) on therapist ratings of overall psychiatric condition.

The repeated measures analysis of variance and covariance was used to analyze the main effects and interactions of therapist groupings of primary or secondary depression, and acknowledged or unacknowledged depression (between-subjects variables), and length of hospitalization (within-subjects variable), on MDI scores and on SDI scores, as dependent variables and as covariates. Regression coefficients were obtained, overall and within groups, and the t statistic was used to determine the significance of the linear relationship between MDI and SDI scores, overall and within groups.

The Newman-Keuls procedure was employed to probe the nature of significant interactions (Winer, 1971).

Pearson product moment coefficients of correlation were computed, at each point in time, between the following five sets of scores: 1) MDI scores and therapist ratings of depression; 2) MDI scores and therapist ratings of overall psychiatric condition; 3) DACL "Now" scores and therapist ratings of depression; 4) DACL "Now" scores and therapist ratings of overall psychiatric condition; and 5) SDI scores and therapist ratings of self-disclosure.

CHAPTER IV

RESULTS

Data were obtained from 44 subjects, 23 of whom were female, and 21 of whom were male. The subjects ranged in age from 12 years 11 months to 18 years 8 months (\underline{M} = 15 years 11 months; \underline{SD} = 15.97 months). Female subjects ranged in age from 12 years 11 months to 18 years 8 months (\underline{M} = 15 years 9 months; \underline{SD} = 17.22 months), and male subjects ranged in age from 13 years 3 months to 18 years 5 months (\underline{M} = 16 years 2 months; \underline{SD} = 14.42 months). The subjects were inpatients being cared for on adolescent units at three private psychiatric hospitals in the Chicago area.

Scores on the MDI, administered at admission, ranged from 8 to 92 (\underline{M} = 55.77; \underline{SD} = 19.31). There were 22 subjects (10 females, 12 males) in the low-depressed group ($MDI < 57$) and 22 subjects (13 females, 9 males) in the high-depressed group ($MDI \geq 57$). Table 1 summarizes the frequency and mean age of subjects by sex and level of depression.

The main effects and interactions of low or high MDI score (between-subjects variable), length of hospitalization and DACL instructions (within-subjects variables), on DACL scores, were analyzed using the repeated measures analysis of variance (2 x 3 x 3 design). This analysis evaluates Hypotheses 1, 2, 3 and 4. Table 2

Table 1

Frequency and Mean Age of Subjects by Sex and Level of Depression

Level of Depression	<u>Female Subjects</u>		<u>Male Subjects</u>		<u>Total Subjects</u>	
	Frequency	Mean Age	Frequency	Mean Age	Frequency	Mean Age
Low-Depressed	10	16 yr. 5 mo.	12	16 yr. 5 mo.	22	16 yr. 5 mo.
High-Depressed	13	15 yr. 3 mo.	9	15 yr. 9 mo.	22	15 yr. 5 mo.
Totals	23	15 yr. 9 mo.	21	16 yr. 2 mo.	44	15 yr. 11 mo.

summarizes the mean DACL scores for the low- and high-depressed groups across time. There was a significant main effect of level of MDI score, $F(1,42) = 12.53$, $p < .01$, and a significant main effect of DACL instructions, $F(2,84) = 47.94$, $p < .01$. There was a significant three-way interaction, $F(4,168) = 2.57$, $p < .05$. This analysis is summarized in Table 3. The Newman-Keuls procedure was employed to probe the nature of the interaction. The results stated below evaluate Hypotheses 1, 2, 3 and 4.

1) In comparing low- and high-depressed subjects, the following results were obtained: a) high-depressed subjects obtained significantly higher scores ($p < .05$) on the modified DACL "Now" form at admission ($M = 17.5$, $SD = 5.73$) and after two weeks of hospitalization ($M = 14.55$, $SD = 8.0$) than low-depressed subjects obtained at admission ($M = 11.45$, $SD = 5.33$) and after two weeks of hospitalization ($M = 10.68$, $SD = 7.45$); b) high-depressed subjects did not obtain significantly different scores on the DACL "Like" form than low-depressed subjects at each point in time; and c) high-depressed subjects obtained significantly higher scores ($p < .05$) on the DACL "Deserve" form, after two weeks ($M = 11.59$, $SD = 6.99$), than low-depressed subjects obtained after two weeks ($M = 6.68$, $SD = 5.02$). Thus, Hypotheses 1a and 1c were partially supported, and Hypothesis 1b was supported at all three points in time.

2) Within the high-depressed group, the following results were obtained: a) "Now" scores were significantly higher ($p < .05$)

Table 2

Mean Depression Adjective Check List (DACL) Scores
for Low- and High-Depressed Groups Across Time

DACL Instructions	<u>At Admission</u>			<u>After Two Weeks of Hospitalization</u>			<u>After Four Weeks of Hospitalization</u>		
	"Now"	"Like"	"Deserve"	"Now"	"Like"	"Deserve"	"Now"	"Like"	"Deserve"
Low-Depressed	11.45	4.77	9.36	10.68	3.14	6.68	10.36	3.68	7.36
High-Depressed	17.5	5.27	9.55	14.55	5.14	11.59	12.91	7.05	9.41

Table 3

Summary of Repeated Measures Analysis of Variance
for the Effects of Level of Depression (D),
Length of Hospitalization (H), and Depression
Adjective Check List (DACL) Instructions (I),
on DACL Scores
(2 x 3 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> <u>subjects</u>	<u>3445.53</u>	<u>43</u>		
D	791.92	1	791.92	12.53**
Subjects	2653.61	42	63.18	
within grp.				
error (d)				
<u>Within</u> <u>subjects</u>	<u>15519.56</u>	<u>352</u>		
H	109.49	2	54.75	1.73
DH	31.55	2	15.78	.50
H x subjects	2660.52	84	31.67	
within grp.				
error (h)				
I	4297.52	2	2148.76	47.94**
DI	89.64	2	44.82	.82
I x subjects	4608.39	84	54.86	
within grp.				
error (i)				
HI	135.62	4	33.90	1.69
DHI	207.07	4	51.77	2.57*
HI x subjects	3379.76	168	20.12	
within grp.				
error (hi)				

* $p < .05$

** $p < .01$

at admission ($\underline{M} = 17.5$, $\underline{SD} = 5.73$), after two weeks ($\underline{M} = 14.55$, $\underline{SD} = 8.0$), and after four weeks ($\underline{M} = 12.91$, $\underline{SD} = 8.12$), than "Like" scores at admission ($\underline{M} = 5.27$, $\underline{SD} = 2.62$), after two weeks ($\underline{M} = 5.14$, $\underline{SD} = 3.93$), and after four weeks ($\underline{M} = 7.05$, $\underline{SD} = 4.93$); b) "Deserve" scores were significantly higher ($p < .05$) at admission ($\underline{M} = 9.55$, $\underline{SD} = 6.84$), and after two weeks ($\underline{M} = 11.59$, $\underline{SD} = 6.99$), than "Like" scores at admission ($\underline{M} = 5.27$, $\underline{SD} = 2.62$), and after two weeks ($\underline{M} = 5.14$, $\underline{SD} = 3.93$); and c) "Deserve" scores were significantly lower ($p < .05$) at admission ($\underline{M} = 9.55$, $\underline{SD} = 6.84$), and after four weeks ($\underline{M} = 9.41$, $\underline{SD} = 6.87$), than "Now" scores at admission ($\underline{M} = 17.5$, $\underline{SD} = 5.73$), and after four weeks ($\underline{M} = 12.91$, $\underline{SD} = 8.12$). Therefore, Hypothesis 2a was supported at all three points in time, whereas Hypotheses 2b and 2c were partially supported.

3) Within the low-depressed group, the following results were obtained: a) "Now" scores were significantly higher ($p < .05$) at admission ($\underline{M} = 11.45$, $\underline{SD} = 5.33$), after two weeks ($\underline{M} = 10.68$, $\underline{SD} = 7.45$), and after four weeks ($\underline{M} = 10.36$, $\underline{SD} = 7.19$), than "Like" scores at admission ($\underline{M} = 4.77$, $\underline{SD} = 2.81$), after two weeks ($\underline{M} = 3.14$, $\underline{SD} = 2.42$), and after four weeks ($\underline{M} = 3.68$, $\underline{SD} = 2.57$); b) "Deserve" scores were significantly higher ($p < .05$) at admission ($\underline{M} = 9.36$, $\underline{SD} = 7.85$) than "Like" scores at admission ($\underline{M} = 4.77$, $\underline{SD} = 2.81$); and c) "Deserve" scores were not significantly different from "Now" scores, at each point in time. On the basis of these results, Hypothesis 3a was not supported at all three points in time,

Hypothesis 3b was partially supported, and Hypothesis 3c was supported at all three points in time.

4) Over time, the following results were obtained: a) high-depressed subjects' "Now" scores at admission ($\underline{M} = 17.5$, $\underline{SD} = 5.73$) were significantly higher ($p < .05$) than their "Now" scores after two weeks ($\underline{M} = 14.55$, $\underline{SD} = 8.0$), and after four weeks ($\underline{M} = 12.91$, $\underline{SD} = 8.12$); and b) high-depressed subjects' "Deserve" scores did not change significantly. Based on these results, Hypothesis 4a was partially supported, while Hypothesis 4b was not supported during any time interval.

Figures 1, 2 and 3 display the mean DACL scores on each form for the low- and high-depressed groups at admission (Figure 1), after two weeks (Figure 2), and after four weeks (Figure 3). Figure 4 represents the mean DACL scores at admission, after two weeks and after four weeks for the low-depressed group, and Figure 5 represents the mean DACL scores at admission, after two weeks and after four weeks for the high-depressed group.

The main effects and interaction of low or high MDI score (between-subjects variable) and length of hospitalization (within-subjects variable), on SDI scores were analyzed using the repeated measures analysis of variance (2 x 3 design). This analysis evaluates Hypothesis 5. There were no significant main effects or interaction. This analysis is summarized in Table 4.

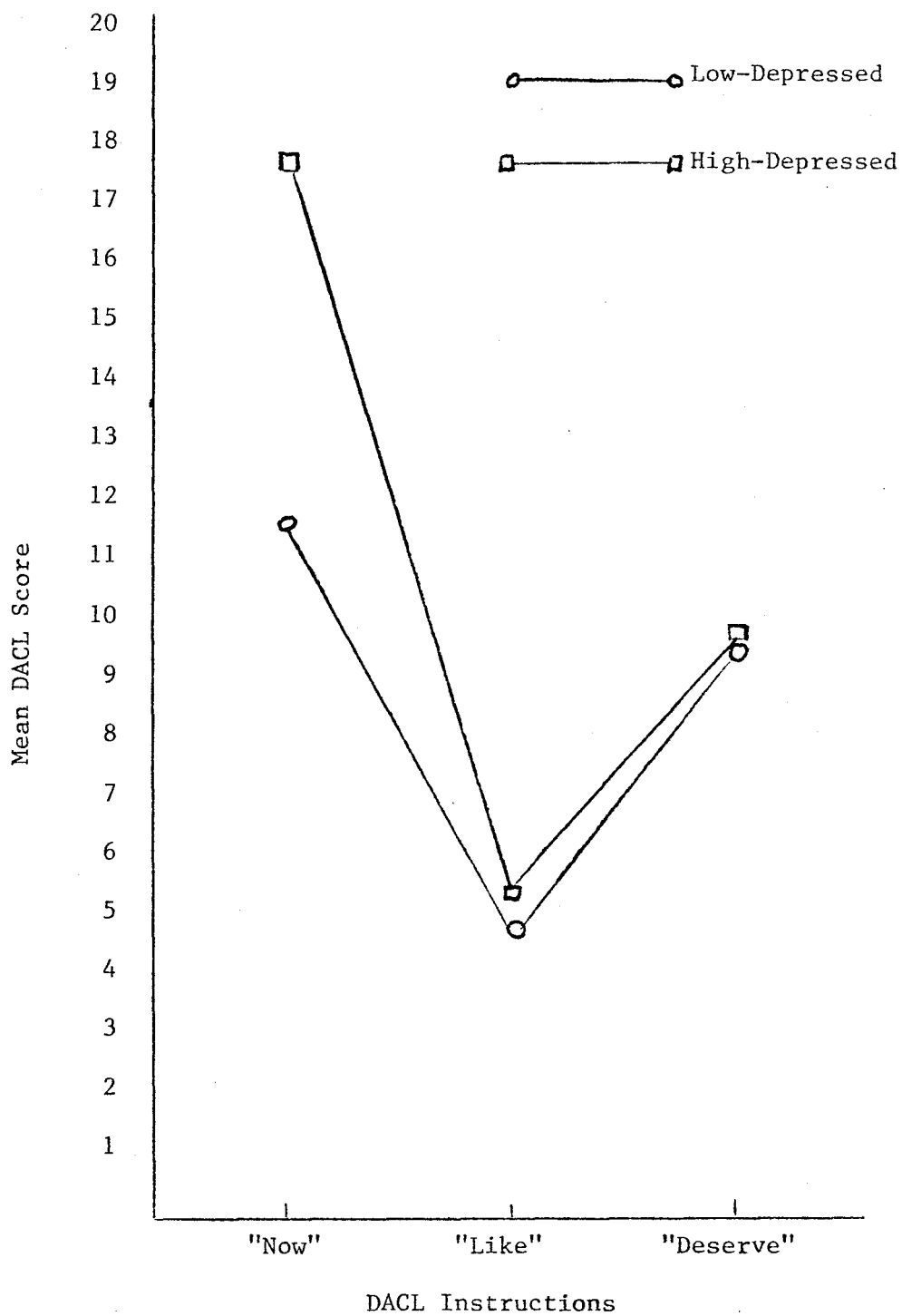


Figure 1. Mean Depression Adjective Check List (DACL) Scores at Admission

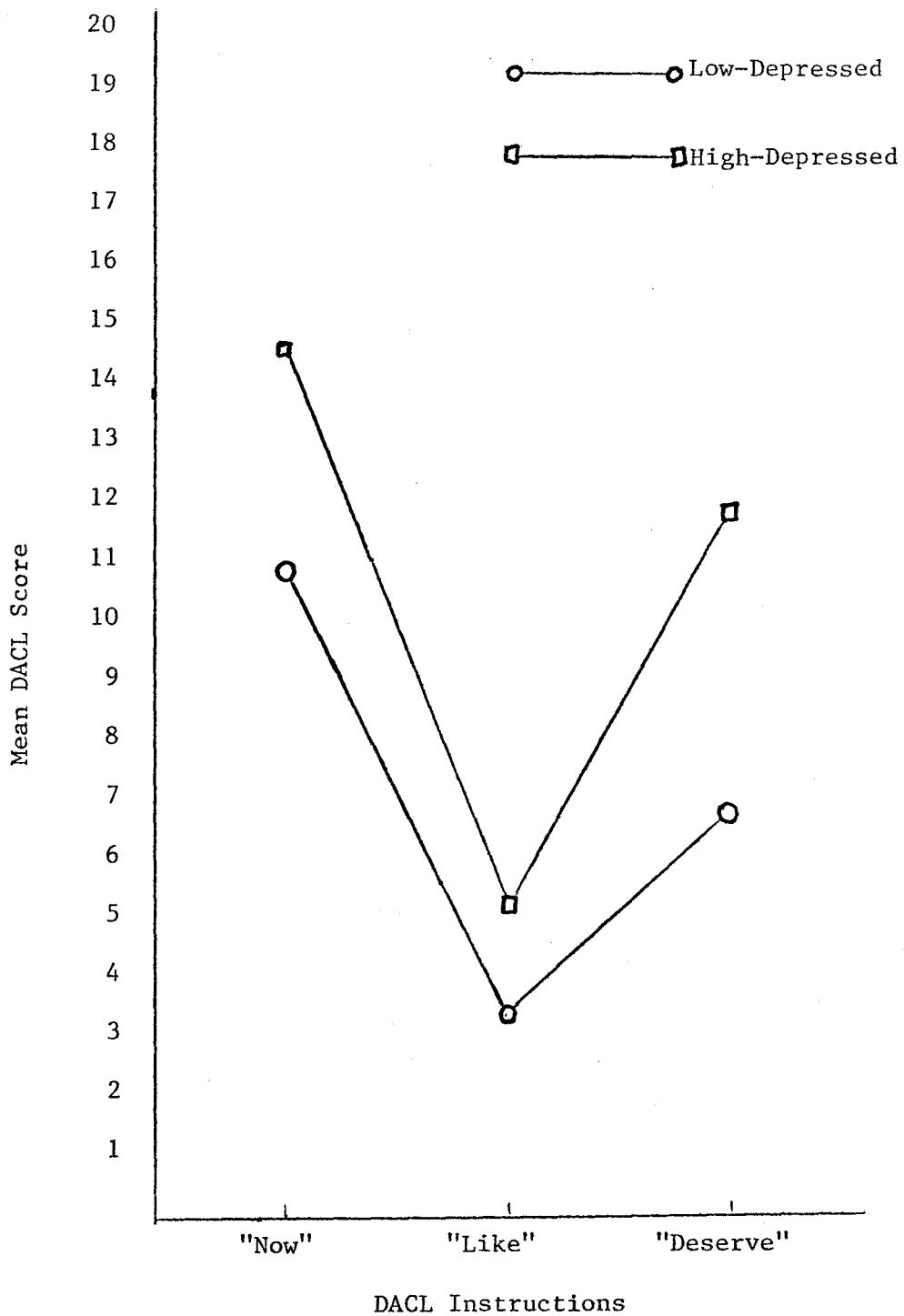


Figure 2. Mean Depression Adjective Check List (DACL) Scores after Two Weeks of Hospitalization

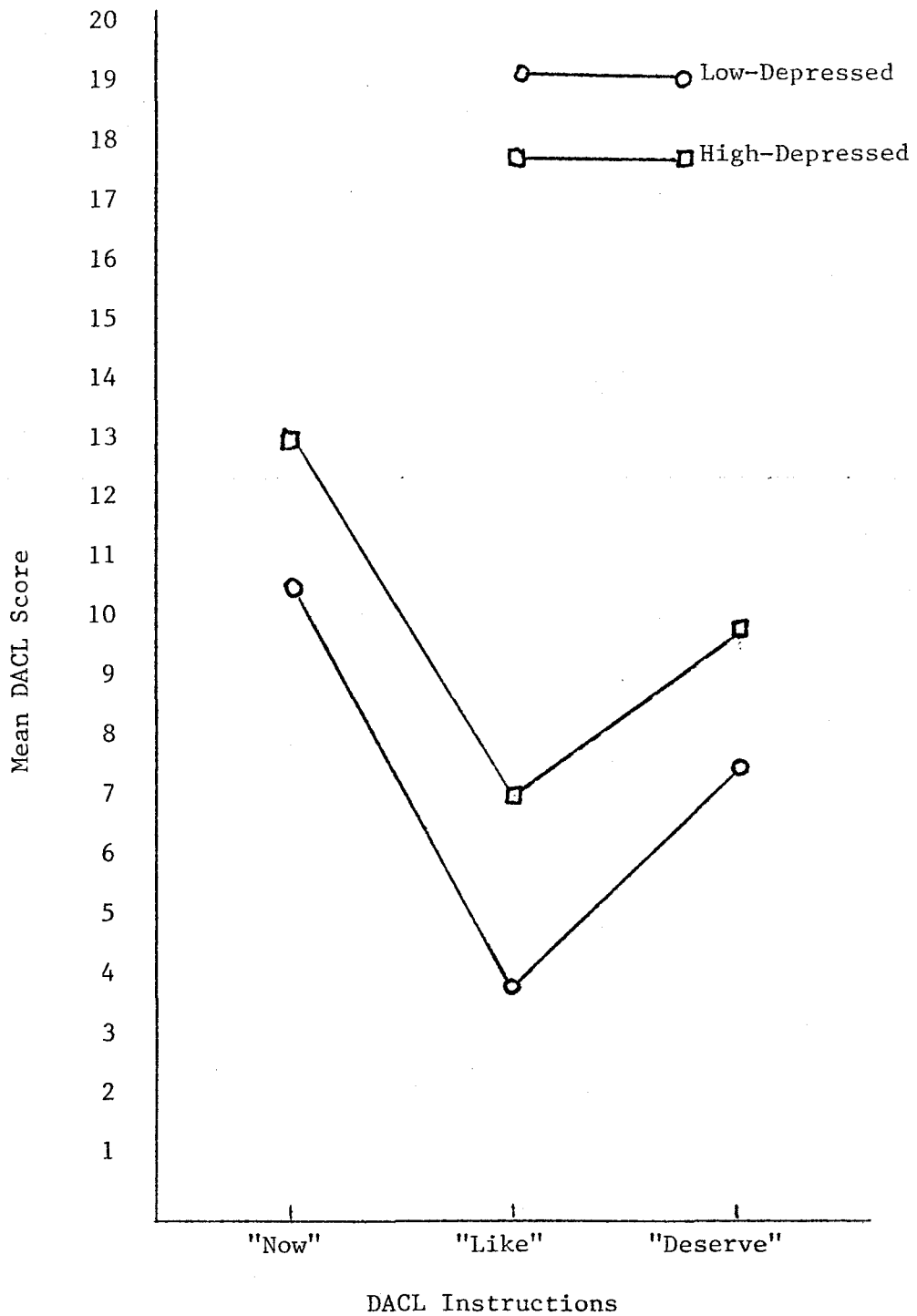


Figure 3. Mean Depression Adjective Check List (DACL) Scores after Four Weeks of Hospitalization

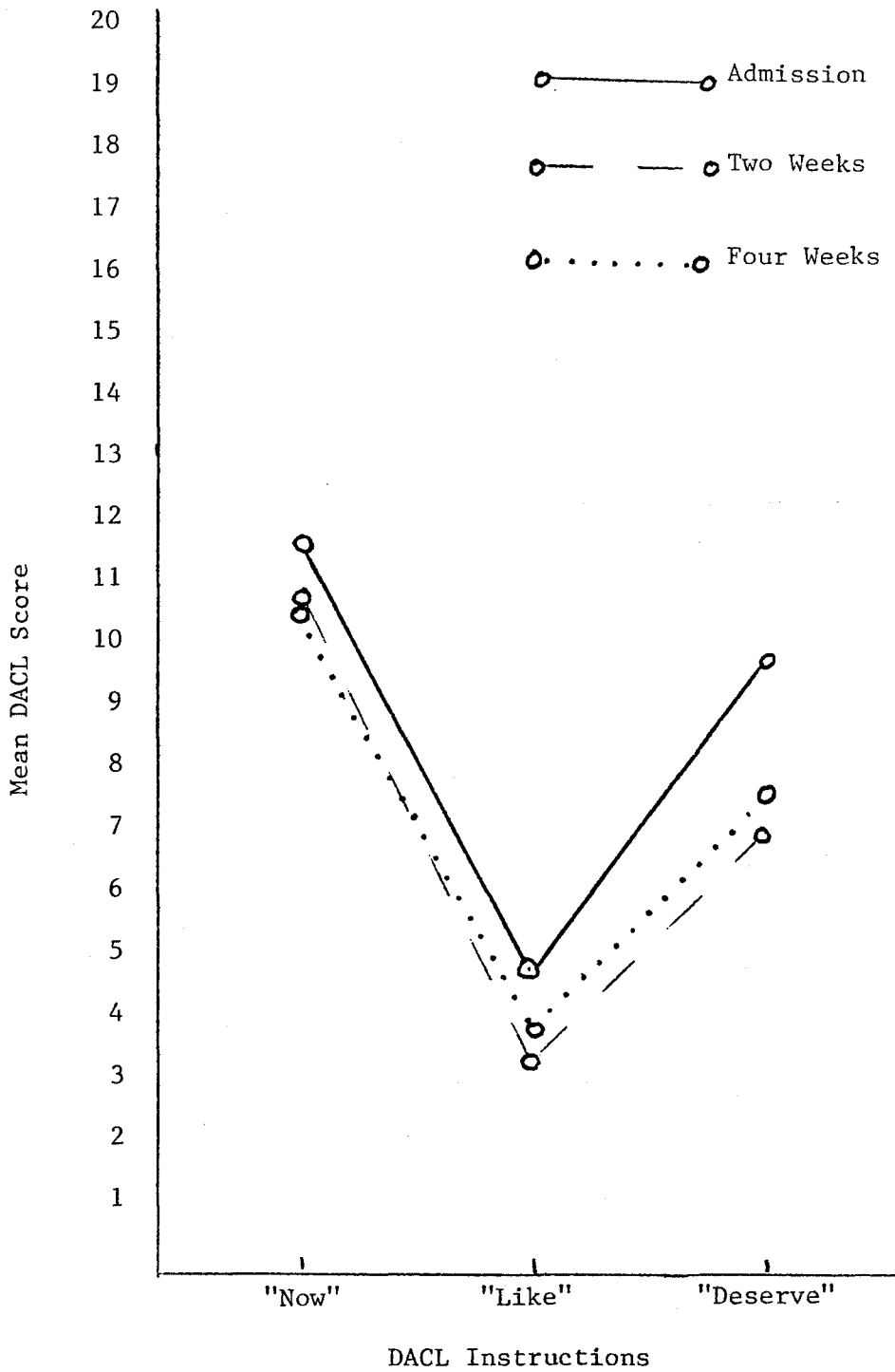


Figure 4. Mean Depression Adjective Check List (DACL) Scores for Low-Depressed Group

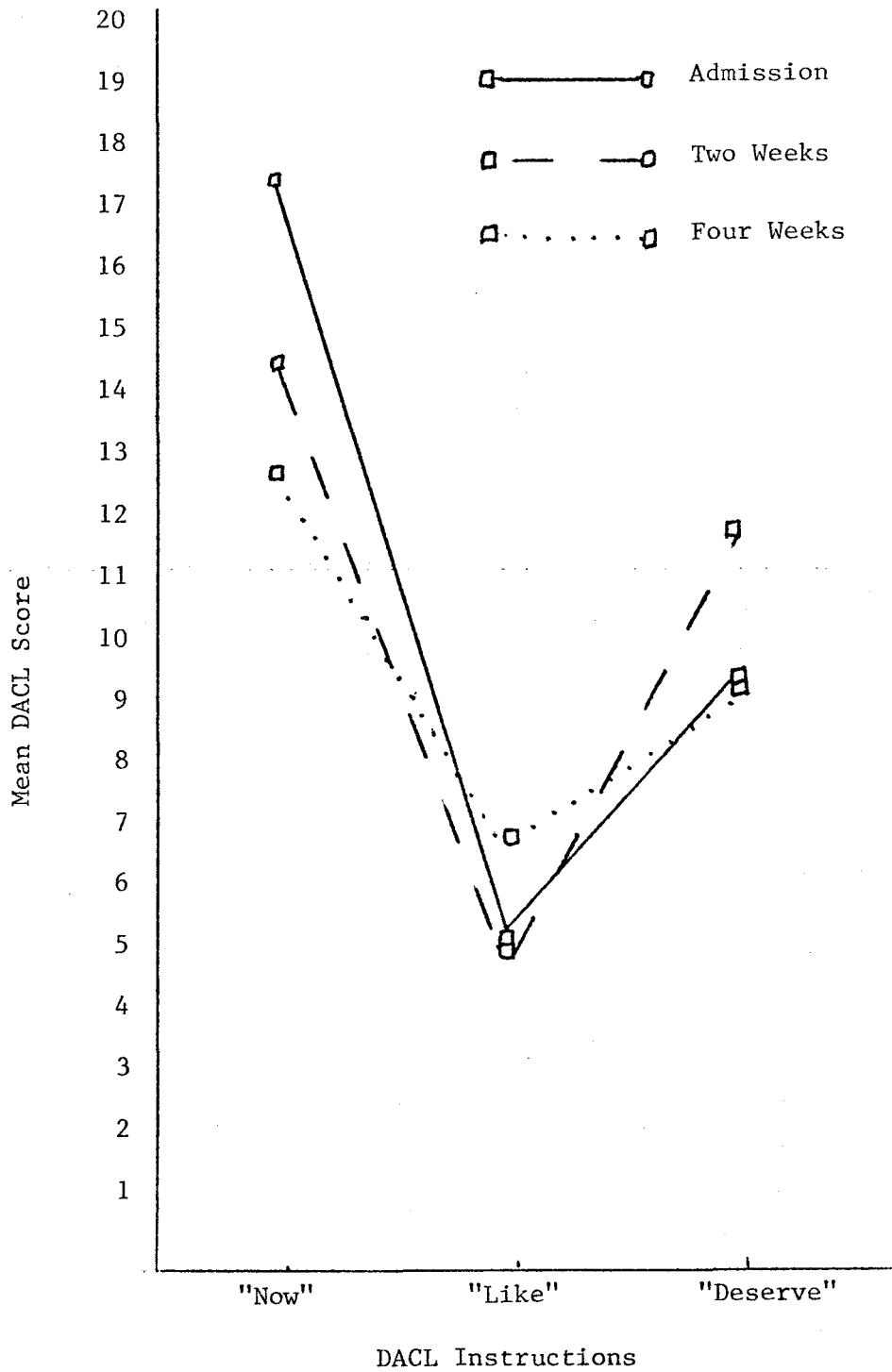


Figure 5. Mean Depression Adjective Check List (DACL) Scores for High-Depressed Group

Table 4

Summary of Repeated Measures Analysis of Variance
for the Effects of Level of Depression (D), and
Length of Hospitalization (H),
on Self-Disclosure Inventory Scores
(2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> <u>subjects</u>	<u>45891.06</u>	<u>43</u>		
D	1909.12	1	1909.12	1.82
Subjects within grp. error (d)	43981.94	42	1047.19	
<u>Within</u> <u>subjects</u>	<u>4426.67</u>	<u>88</u>		
H	49.41	2	24.71	.48
DH	40.47	2	20.24	.39
H x subjects within grp. error (h)	4336.79	84	51.63	

The main effects and interactions of therapist groupings of primary or secondary depression and acknowledged or unacknowledged depression (between-subjects variables), and length of hospitalization (within-subjects variable), on therapist ratings of overall psychiatric condition, were analyzed using the repeated measures analysis of variance (2 x 2 x 3 design). This analysis evaluates Hypothesis 6. There was a significant main effect of length of hospitalization, $F(2,80) = 9.84$, $p < .01$. This analysis is summarized in Table 5. The Newman-Keuls procedure revealed a significant decrease ($p < .05$) in overall psychiatric condition from admission ($M = 6.0$, $SD = .72$) to four weeks ($M = 5.48$, $SD = .98$), and from two weeks ($M = 5.89$, $SD = .75$) to four weeks ($M = 5.48$, $SD = .98$).

The results of the specific comparisons pertinent to Hypothesis 6 are listed below. Among the four groups of subjects judged by therapists to exhibit masked or unmasked, and primary or secondary depression, the therapist ratings of overall psychiatric condition compare in the following ways: a) primary depressives did not receive significantly different ratings than secondary depressives; b) unmasked depressives did not receive significantly different ratings than masked depressives; c) ratings of the primary depressed subjects did not change significantly over time; and d) ratings of secondary depressed subjects did not change significantly over time. Thus, Hypotheses 6a, 6b and 6c were not supported by the results, while Hypothesis 6d was supported.

Table 5

Summary of Repeated Measures Analysis of Variance
 for the Effects of Therapist Groupings of
 Primacy of Depression (P) and Acknowledgement of Depression (A),
 and Length of Hospitalization (H),
 on Therapist Ratings of Overall Psychiatric Condition
 (2 x 2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> <u>subjects</u>	<u>59.39</u>	<u>43</u>		
P	2.00	1	2.00	1.51
A	.26	1	.26	.20
PA	4.06	1	4.06	3.06
Subjects within grp. error (between)	53.07	40	1.33	
<u>Within</u> <u>subjects</u>	<u>34.67</u>	<u>88</u>		
H	6.65	2	3.33	9.84*
PH	.50	2	.25	.74
AH	.14	2	.68	2.00
PAH	.34	2	.17	.51
H x subjects within grp. error (within)	27.04	80	.34	

* $p < .01$

The main effects and interactions of therapist groupings of primary or secondary depression and acknowledged or unacknowledged depression (between-subjects variables), and length of hospitalization (within-subjects variable), on MDI scores and on SDI scores, as dependent variables and as covariates, were analyzed using the repeated measures analysis of variance and covariance ($2 \times 2 \times 3$ design). This analysis evaluates Hypotheses 7, 8, 9, 10, 11 and 12. There was a significant main effect of primacy of depression on MDI scores adjusted for the effect of the covariate SDI scores, $F(1,39) = 6.27$, $p < .05$, and on unadjusted MDI scores, $F(1,40) = 4.36$, $p < .05$. The covariation of MDI and SDI scores accounted for a significant portion of the error variance, $F(1,39) = 9.21$, $p < .01$. Tables 6, 7, 8 and 9 summarize the analyses of variance and covariance. Table 10 summarizes the adjusted and unadjusted cell means for the MDI and SDI scores. Regression coefficients were computed, and the t statistic was used to test the significance of the linear relationship between MDI scores and SDI scores, overall and within groups. The t statistics evaluate Hypothesis 13. On the basis of the foregoing analyses of variance and covariance and the t tests of the regression coefficients, Hypotheses 7, 8, 9, 10, 11, 12 and 13 were evaluated.

7) Subjects judged by therapists to exhibit primary depression compared with subjects judged by therapists to exhibit secondary depression in the following ways: a) primary depressed subjects

Table 6

Summary of Repeated Measures Analysis of Variance and Covariance
for the Effects of Therapist Groupings of
Primacy of Depression (P) and Acknowledgement of Depression (A),
and Length of Hospitalization (H),
on Multiscore Depression Inventory Scores
and the Covariate Self-Disclosure Scores
(2 x 2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> <u>subjects</u>	<u>45951.93</u>	<u>43</u>		
P	5020.62	1	5020.62	6.27*
A	1517.19	1	1517.19	1.89
PA	803.05	1	803.05	1.00
Covariate	7376.91	1	7376.91	9.21**
Subjects within grp. error (between)	31234.16	39	800.88	
<u>Within</u> <u>subjects</u>	<u>11514.04</u>	<u>88</u>		
H	68.58	2	34.29	.24
PH	9.17	2	4.58	.03
AH	361.42	2	180.71	1.29
PAH	29.48	2	14.74	.11
Covariate	11.79	1	11.79	.08
H x subjects within grp. error (within)	11073.60	79	140.17	

* $p < .05$

** $p < .01$

Table 7

Summary of Repeated Measures Analysis of Variance
for the Effects of Therapist Groupings of
Primacy of Depression (P) and Acknowledgement of Depression (A),
and Length of Hospitalization (H),
on Multiscore Depression Inventory Scores
(2 x 2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u>				
<u>subjects</u>	45357.82	43		
P	4209.64	1	4209.64	4.36*
A	1984.80	1	1984.80	2.06
PH	552.31	1	552.31	.57
Subjects within grp. error (between)	38611.07	40	965.28	
<u>Within</u>				
<u>subjects</u>	11546.80	88		
H	67.44	2	33.72	.24
PH	10.88	2	5.44	.04
AH	351.65	2	175.82	1.27
PAH	31.44	2	15.72	.11
H x subjects within grp. error (within)	11085.39	80	138.57	

* $p < .05$

Table 8

Summary of Repeated Measures Analysis of Variance and Covariance
for the Effects of Therapist Groupings of
Primacy of Depression (P) and Acknowledgement of Depression (A),
and Length of Hospitalization (H),
on Self-Disclosure Inventory Scores
and the Covariate Multiscore Depression Inventory Scores
(2 x 2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> <u>subjects</u>	<u>47230.26</u>	<u>43</u>		
P	1883.52	1	1883.52	2.03
A	51.68	1	51.68	.06
PA	525.62	1	525.62	.57
Covariate	8553.50	1	8553.50	9.21*
Subjects within grp. error (between)	36215.94	39	928.61	
<u>Within</u> <u>subjects</u>	<u>4303.01</u>	<u>88</u>		
H	3.69	2	1.84	.04
PH	88.75	2	44.38	.86
AH	67.07	2	33.54	.65
PAH	63.53	2	31.77	.62
Covariate	4.34	1	4.34	.08
H x subjects within grp. error (within)	4075.63	79	51.59	

*p < .01

Table 9

Summary of Repeated Measures Analysis of Variance
 for the Effects of Therapist Groupings of
 Primacy of Depression (P) and Acknowledgement of Depression (A),
 and Length of Hospitalization (H),
 on Self-Disclosure Inventory Scores
 (2 x 2 x 3 Design)

Source of Variation	Sum of Squares	df	Mean Square	F
<u>Between</u> subjects	<u>45329.03</u>	<u>43</u>		
P	230.02	1	230.02	.21
A	184.89	1	184.89	.17
PA	144.68	1	144.68	.13
Subjects within grp. error (between)	44769.44	40	1119.24	
<u>Within</u> subjects	<u>4300.49</u>	<u>88</u>		
H	3.25	2	1.62	.03
PH	89.49	2	44.74	.88
AH	63.46	2	31.73	.62
PAH	64.32	2	32.16	.63
H x subjects within grp. error (within)	4079.97	80	51.00	

Table 10

Adjusted and Unadjusted
Mean Multiscore Depression Inventory (MDI) Scores
and Mean Self-Disclosure Inventory (SDI) Scores
by Therapist Groupings of Primacy and Acknowledgement of Depression

Primacy and Acknowledgement of Depression		<u>At Admission</u>		<u>After Two Weeks of Hospitalization</u>		<u>After Four Weeks of Hospitalization</u>	
		<u>Mean MDI Score</u>	<u>Mean SDI Score</u>	<u>Mean MDI Score</u>	<u>Mean SDI Score</u>	<u>Mean MDI Score</u>	<u>Mean SDI Score</u>
Primary	Acknowledged	66.75	59.50	63.00	61.50	60.75	59.50
		65.76*	60.57**	62.58*	62.22**	59.76*	60.01**
Primary	Unacknowledged	58.88	63.79	58.33	65.42	59.88	67.63
		59.11*	64.13**	59.04*	65.70**	61.21*	68.06**
Secondary	Acknowledged	58.25	62.88	54.63	56.75	51.25	58.88
		58.23*	63.16**	52.85*	56.69**	50.09*	58.50**
Secondary	Unacknowledged	38.50	59.63	38.50	60.38	43.75	59.50
		37.55*	58.07**	37.76*	58.82**	42.76*	58.43**

*Adjusted for effect of covariate SDI scores

**Adjusted for effect of covariate MDI scores

obtained significantly higher MDI scores ($\underline{M} = 60.20$) than secondary depressed subjects ($\underline{M} = 46.54$) when adjusted for the effect of the covariate SDI scores, $\underline{F}(1,39) = 6.27$, $\underline{p} < .05$, and primary depressed subjects obtained significantly higher unadjusted MDI scores ($\underline{M} = 59.67$, $\underline{SD} = 22.30$) than secondary depressed subjects ($\underline{M} = 47.48$, $\underline{SD} = 17.0$), $\underline{F}(1,40) = 4.36$, $\underline{p} < .05$; and b) primary depressed subjects did not obtain significantly different SDI scores than secondary depressed subjects. Therefore, Hypothesis 7a was supported, while Hypothesis 7b was not supported.

8) Subjects judged by therapists to exhibit unmasked depression compared with subjects judged by therapists to exhibit masked depression in the following ways: a) unmasked depressed subjects did not obtain significantly higher MDI scores than masked depressed subjects; and b) unmasked depressed subjects did not obtain significantly higher SDI scores than masked depressed subjects. Thus, none of the predictions subsumed under Hypothesis 8 were supported.

9) For unmasked primary depressed subjects, the following relationships existed over time: a) MDI scores did not change significantly; and b) SDI scores did not change significantly. On the basis of these results, Hypothesis 9a was not supported and Hypothesis 9b was supported.

10) For unmasked secondary depressed subjects, the following relationships existed over time: a) MDI scores did not change significantly; and b) SDI scores did not change significantly. Thus, both predictions subsumed under Hypothesis 10 were supported.

11) For masked primary depressed subjects, the following relationships existed over time: a) MDI scores did not change significantly; and b) SDI scores did not change significantly. Therefore, neither prediction of Hypothesis 11 was supported.

12) For masked secondary depressed subjects, the following relationships existed over time: a) MDI scores did not change significantly; and b) SDI scores did not change significantly. As a result, neither prediction of Hypothesis 12 was supported.

13) The relationship between MDI scores and SDI scores is as follows: a) the overall linear relationship ($b = -.29$) is significant, $t(130) = 4.07$, $p < .01$; b) the linear relationship for unmasked primary depressed subjects is not significant; c) the linear relationship for unmasked secondary depressed subjects is not significant; d) the linear relationship for masked primary depressed subjects ($b = -.27$) is significant, $t(70) = 4.14$, $p < .01$; and e) the linear relationship for masked secondary depressed subjects

($b = -.72$) is significant, $t(22) = 2.64$, $p < .05$. Therefore, all the predictions made under Hypothesis 13 were supported.

14) Pearson product-moment coefficients of correlation were computed, at each point in time, between the following five sets of scores: 1) MDI scores and therapist ratings of depression; 2) MDI scores and therapist ratings of overall psychiatric condition; 3) DACL "Now" scores and therapist ratings of depression; 4) DACL "Now" scores and therapist ratings of overall psychiatric condition; and 5) SDI scores and therapist ratings of self-disclosure. These correlations evaluate Hypothesis 14. The correlations and their level of significance, at each point in time, are summarized in Tables 11 (admission), 12 (two weeks) and 13 (four weeks). Based on these correlations, Hypotheses 14a, 14b and 14e were not supported at any point in time, while Hypotheses 14c and 14d were partially supported.

Table 11

Pearson Product-Moment Coefficients of Correlation
at Admission

	Multiscore Depression Inventory Scores	Depression Adjective Check List "Now" Scores	Self-Disclosure Inventory Scores
Therapist Ratings of Depression	.29	.36*	
Therapist Ratings of Overall Psychi- atric Condition (global psycho- pathology)	.25	.40**	
Therapist Ratings of Self-Disclosure			.08

N = 44

* $p < .05$

** $p < .01$

Table 12

Pearson Product-Moment Coefficients of Correlation
after Two Weeks of Hospitalization

	Multiscore Depression Inventory Scores	Depression Adjective Check List "Now" Scores	Self-Disclosure Inventory Scores
Therapist Ratings of Depression	.25	.19	
Therapist Ratings of Overall Psychi- atric Condition (global psycho- pathology)	.21	.03	
Therapist Ratings of Self-Disclosure			.14

N = 44

Table 13

Pearson Product-Moment Coefficients of Correlation
after Four Weeks of Hospitalization

	Multiscore Depression Inventory Scores	Depression Adjective Check List "Now" Scores	Self-Disclosure Inventory Scores
Therapist Ratings of Depression	.28	.34*	
Therapist Ratings of Overall Psychi- atric Condition (global psycho- pathology)	.26	.14	
Therapist Ratings of Self-Disclosure			.21

$N = 44$

* $p < .05$

CHAPTER V

DISCUSSION

The results of the data analysis allow several conclusions to be made regarding the dynamics of adolescent depression and the manifestation of the phenomenon of masked depression in psychiatrically hospitalized adolescents. Since all the subjects in the present sample were psychiatrically hospitalized throughout the study, care should be taken in generalizing the results beyond similar populations. The adolescents were grouped according to level of depression on the basis of a median split of MDI scores obtained at admission. Although these groups were labeled as low- and high-depressed, the scores of the low-depressed group may have represented subjects with an intermediate level of depression, since their scores were elevated somewhat beyond what one would expect in a low-depressed population.

In comparing low- and high-depressed adolescents, it is evident that psychiatrically hospitalized adolescents are realistic in their cognitive appraisals of their current mood states, since high-depressed adolescents obtained higher depression scores than low-depressed adolescents on the DACL "Now" form at admission and after two weeks of hospitalization. These findings are in line with the prediction made in Hypothesis 1a. The convergence

of the two groups after four weeks of hospitalization is probably due to the significant decrease in current depressed mood state in the high-depressed group after being involved in an intensive treatment experience in a psychiatric hospital for one month.

As predicted in Hypothesis 1b, high- and low-depressed adolescents appraised themselves as desiring similar levels of mood state, at all three points in time. Thus, the need to suffer hypothesis is not supported by this study. The scores of the two groups on the "Deserve" form of the DACL differed only at two weeks of hospitalization, providing some limited support for Hypothesis 1c. At that point in time, the self-images of the high-depressed adolescents appear to have been more negative than the self-images of the low-depressed subjects. Thus, limited support is provided for the cognitive hypothesis of the negative view of self in high-depressed psychiatrically hospitalized adolescents. The lack of difference in the self-images of the two groups at admission may be due to possibly varying reactions of the low- and high-depressed psychiatrically hospitalized adolescents to the experience of being hospitalized. For the low-depressed adolescents, the shock of being hospitalized may result in a temporary increase in negative self-image associated with the negative stereotypes of psychiatric hospitals. For the high-depressed adolescents, the hospitalization may come as a relief to their suffering, and the feeling of having one's needs attended to may result in a decrease

in their negative self-view. These two factors combined may have resulted in the convergence of the DACL "Deserve" scores on admission. However, the data in the current study do not allow for investigation of that hypothesis, and further experimentation would be required to test it. After four weeks, the two groups' deserved mood states are again equal. It may be that high-depressed adolescents experience, as treatment progresses, improved self-esteem, resulting in the similarity of their deserved mood states with those of low-depressed adolescents. Again, further experimentation would be required for such a conclusion to be made. Also, the relative similarity of the two groups may reflect reduced heterogeneity in their level of depression.

For both the low- and the high-depressed groups, their assessment of their current mood state was more dysphoric than their assessment of their preferred mood state, at all three points in time. These results were predicted for the high-depressed group (Hypothesis 2a) but not for the low-depressed group (Hypothesis 3a). The variation from prediction may reflect a possibly higher level of depression in the low-depressed group than their label would suggest. It may be that the psychiatrically hospitalized adolescent's current mood state in the hospital is more dysphoric than it would be outside of the hospital, since the hospitalization may restrict his movements, may prevent him from enjoying his usual social activities, and may confront him with the psychological problems he has

attempted to avoid facing. In any case, the finding provides an additional argument against the need to suffer hypothesis in adolescents, since low- and high-depressed adolescents alike expressed a preference for more pleasant mood states than they were currently experiencing.

At admission, both the low- and high-depressed adolescents appraised themselves as deserving more unpleasant affect than they would prefer to experience. This was predicted for the high-depressed group (Hypothesis 2b) but not for the low-depressed group (Hypothesis 3b). This phenomenon might be explained by the adolescents' possible reactionary remorse upon being hospitalized. After two weeks of hospitalization, only the high-depressed adolescents exhibited the pattern of appraising themselves as deserving more unpleasant affect than they would prefer, while low-depressed adolescents indicated they believed they deserved to feel the way they preferred to feel. At this point in time, the results matched the predictions and provide additional limited support for the negative view of self hypothesis in depressed psychiatrically hospitalized adolescents. However, after four weeks of hospitalization, both groups of adolescents expressed an equivalence of their deserved and preferred mood states. This latter finding may be due to improved self-images of the high-depressed adolescents over the course of treatment; however, since the change in deserved mood state over time was not significant within the high-depressed group,

this suggestion can not be unequivocally supported on the basis of the current study.

In comparing the current and deserved mood states of adolescents, as predicted in Hypothesis 3c, low-depressed adolescents revealed no difference at any point in time. It was originally expected (Hypothesis 2c) that high-depressed adolescents would view themselves as currently experiencing and deserving equivalent levels of depression. However, at admission and after four weeks of hospitalization, high-depressed adolescents appraised themselves as currently experiencing even more dysphoric affect than they believed they deserved. Only at two weeks of hospitalization did the high-depressed adolescents see themselves as currently experiencing and deserving equivalent levels of depression. This is probably due to the significant drop in current depression in this group after two weeks, as well as to some possible slight worsening of the self-view as the relief of hospitalization may have worn thin. The role of the negative view of self in adolescent depression is not necessarily contradicted by these limited findings, since high-depressed adolescents still indicated that they deserved to feel worse than they would prefer to feel and that they deserved to feel more depressed than low-depressed adolescents.

Over the course of hospitalization, there were few significant changes in the adolescents' cognitive appraisals of their mood states. It was expected (Hypothesis 4) that involvement in

treatment for one month in a psychiatric hospital would cause the high-depressed subjects' current and deserved mood states to improve. However, only the high-depressed adolescents exhibited a decrease in their assessment of their current mood state from admission to two weeks of hospitalization and from admission to four weeks of hospitalization. These decreases seem most likely to be due to the involvement of these adolescents in an intensive psychiatric treatment regimen which enabled their mood state to improve. Also, these decreases may represent regression of this group toward the mean. The fact that there was no significant difference in current mood state from two weeks to four weeks of hospitalization may indicate that the first two weeks of hospitalization are crucial for high-depressed adolescents and that diminishing returns, as far as current affective state is concerned, soon set in after that crucial period. Future research might profitably examine the changes in mood state in highly depressed adolescents over the entire course of hospitalization, rather than over only the first phase of treatment, as was done in the current study. In addition, a study which would compare hospitalized and non-hospitalized highly depressed adolescents could address the question of whether time alone or the involvement in an intensive psychiatric treatment experience resulted in the decrease in dysphoric mood.

This focus on the improvement in level of current depression, among high-depressed patients for only a brief period of time,

should not be taken as evidence that the low-depressed patients did not make any gains at all during their first month of treatment, nor that high-depressed patients stopped improving after two weeks of hospitalization. Rather, it is likely that the measurements taken in the current study did not assess the particular problems of the low-depressed patients, and that the patients made many other gains besides those in the affective realm. Another study might compare low- and high-depressed psychiatrically hospitalized adolescents on a variety of measures in order to determine whether there are distinct patterns of kinds of improvement in the two groups.

While there were relatively few changes over time, inspection of the specific differences found at each point in time revealed some interesting findings. First, although the high-depressed adolescents appraised themselves as being more depressed than low-depressed adolescents on admission and after two weeks of hospitalization, by four weeks of hospitalization the two groups rated themselves as experiencing equivalent mood levels. While regression toward the mean may account for some portion of this phenomenon, the explanation for the movement toward equivalency of cognitive appraisal of current mood state of low- and high-depressed adolescents over time may lie in the changes in level of depression made by the high-depressed adolescents, since a significant difference on the DACL "Now" scale was observed over time in that group.

Also, it was expected that the "Deserve" scales of the low- and high-depressed groups would move toward equivalency over time. Instead, a curvilinear relationship was observed, with the two groups' deserved mood states being similar at admission and after four weeks of hospitalization, but the high-depressed adolescents exhibited a more negative self-appraisal of deserved mood state than the low-depressed adolescents after two weeks of hospitalization. As previously discussed, the two groups may have had differing reactions to the experience of hospitalization, possibly resulting in a worsening of the low-depressed adolescents' deserved self-appraisal and an improvement in the high-depressed adolescents' deserved self-appraisal. After four weeks of hospitalization, the two groups' scores again approach one another, although the differences within each group are not significant. Another possible explanation of the curvilinear relationship is that some event occurs at two weeks of hospitalization which worsens the high-depressive's deserved mood state and/or improves the low-depressive's deserved mood state. A time-series study which would employ measures of events occurring during the course of therapy might answer this question.

One of the purposes of the current research was to shed some light on the dynamics of adolescent depression, specifically with regard to the need to suffer and the negative view of self hypotheses. It was expected that if the need to suffer hypothesis applied to depressed adolescents, then high-depressed subjects would

appraise themselves as preferring more negative mood states than low-depressed subjects. However, if the negative view of self hypothesis were correct were regard to adolescents, then high-depressed subjects would appraise themselves as deserving more negative mood states even though they would prefer less unpleasant affect. The results did not provide evidence for the need to suffer hypothesis among psychiatrically hospitalized adolescents, since the "Like" scores of the two groups did not differ significantly at any point in time. Also at each point in time, both groups expressed a preference for more pleasant mood states than their current mood states.

Regarding the negative view of self hypothesis, some limited evidence was found in its support among psychiatrically hospitalized adolescents. After two weeks of hospitalization, the high-depressed adolescents appraised themselves as deserving more dysphoric affect than the low-depressed adolescents. At the same point in time, high-depressed adolescents indicated they deserved to feel more unpleasant affect than they would like to feel, while low-depressed adolescents indicated an equivalency of their deserved and preferred moods.

The literature review presented earlier in this manuscript dicussed the works of several authors who contend that depression does not and can not exist in adolescents, and that even if it does exist, its dynamics are not the same as those in adult depression.

The current research, though, has presented evidence that, so far as the need to suffer and the negative view of self hypotheses are concerned, adolescents exhibit a number of characteristics similar to those manifested by adults. The current research follows a design similar to the work of Johnson, et al. (1979), who found five specific differences, listed below, between and within depression-prone and non-depression-prone young adults, using a trait adaptation of the DACL "Now", "Like" and "Deserve" forms.

- 1) Depression-prone young adults obtained higher scores on the DACL "Now" form than non-depression-prone subjects. This finding was replicated across time in high- and low-depressed psychiatrically hospitalized adolescents in the current study.
- 2) Depression-prone subjects and non-depression-prone subjects received similar scores on the DACL "Like" version. This result was also replicated over time among the high- and low-depressed psychiatrically hospitalized adolescents in the current research.
- 3) Depression-prone subjects obtained higher scores on the DACL "Deserve" form than non-depression-prone subjects. In the current study, after two weeks of hospitalization, high- and low-depressed psychiatrically hospitalized adolescents also exhibited this difference.
- 4) Both depression-prone and non-depression-prone subjects obtained lower DACL "Like" scores than "Now" scores. At all three points in time, the low- and high-depressed psychiatrically hospitalized adolescents studied here exhibited the same pattern.
- 5) Both depression-prone

and non-depression-prone subjects obtained lower DACL "Deserve" scores than "Now" scores. This was also true among low-depressed psychiatrically hospitalized adolescents studied here at all three points in time and among high-depressed adolescents at admission and after four weeks of hospitalization.

The trend among the adolescents in the current study was to exhibit patterns of current, preferred and deserved mood state which were similar to those exhibited by the young adults studied by Johnson, et al. (1979). A determination should be made in future investigations as to whether the findings of Johnson, et al., and of this study can be generalized to apply to other age groups as well.

It was expected (Hypothesis 5) that high-depressed psychiatrically hospitalized adolescents would be more self-disclosing than their low-depressed counterparts. However, no differences were found, neither between groups nor within groups over time. The adolescents studied seem not to see themselves as becoming more self-disclosing over time. It may be that one month of treatment is too short a time for changes in self-disclosure to appear. Therefore, a longer time-series study could investigate this further.

In order to investigate the phenomenon of masked depression, the therapist of each patient classified that patient as belonging to one of the following groups: 1) primary depression acknowledged

by patient; 2) primary depression unacknowledged by patient; 3) secondary depression acknowledged by patient; 4) secondary depression unacknowledged by patient; and 5) depression not involved in psychopathology of patient. Groups 1 and 3 were considered to represent unmasked primary and secondary depression, respectively, and Groups 2 and 4 were considered to represent masked primary and secondary depression, respectively. No subjects were classified as belonging to Group 5, and therefore that group was dropped from the analysis. It should be noted, though, that the failure of the therapists to classify any of their patients in Group 5 indicates they viewed their patients as being depressed to some degree. This view may be quite accurate, since it has also been noted here that even the subjects in the low-depressed group, based on MDI scores, obtained relatively high depression scores. Therefore, care should be taken in generalizing the results of this study beyond psychiatrically hospitalized adolescents with at least moderate levels of depression. Reduced heterogeneity of the subjects in the current study can also be observed in the categorizations by therapists of subjects according to acknowledgement of depression. More than half the adolescents were categorized as primary unacknowledged (masked) depressives, while less than one-tenth were placed in the primary acknowledged (unmasked) group. Again, because of the reduced heterogeneity, the results should be interpreted cautiously.

While it was expected (Hypothesis 6) that therapist ratings of overall psychiatric condition (global psychopathology) would differ among the four groups, this was not the case. However, therapists did rate their patients, overall, as improving in their overall psychiatric condition from admission to four weeks of hospitalization and from two weeks to four weeks of hospitalization. This provides additional support for the suggestion made earlier that even though the affective states of low-depressed adolescents did not improve, those adolescents may have made other improvements in other areas more crucial to their specific needs which were not measured in this study. Because an alternative explanation for this result might be a bias on the part of the therapists to view their patients as improving, another study which would gather ratings from other sources, such as parents, patients and mental health workers, would allow for a more definitive statement on this issue.

As predicted in Hypothesis 7, adolescents rated by therapists as primary depressed were more depressed, as measured by the MDI, than those rated by therapists as secondary depressed. This was true both when level of self-disclosure was accounted for and when it was not. The covariation between MDI and SDI scores accounted for a significant portion of the variance, suggesting that self-disclosure is an element in depression. The nature of the relationship is discussed later in this study. Contrary to expectations (Hypothesis 7b), primary and secondary depressed adolescents

did not differ in terms of level of self-disclosure. Also contrary to expectations (Hypothesis 8), masked and unmasked depressives did not differ in level of depression exhibited on the MDI nor in level of self-disclosure exhibited on the SDI. In addition, there were no changes over time within any of the four groups (Hypotheses 9, 10, 11, 12) in terms of level of depression or of self-disclosure. This relative lack of significant difference among the groups may be due to the reduced heterogeneity of the subjects in the current study, as discussed previously. The data analysis also revealed a considerable amount of error left unaccounted for, even after the variance due to self-disclosure was apportioned. Clearly, depression is a complex phenomenon made up of many variables, only a few of which are considered here.

The linear relationship between MDI and SDI scores, pooled over all the groups, is a significant one, with a negative slope. Thus, it appears that one element of a high level of depression is a low level of self-disclosure, in psychiatrically hospitalized adolescents. The cognitive theory of the negative view of self may provide a possible explanation of these results. According to cognitive theory, and as partially supported by this study, one dynamic in adolescent depression is the negative view of self. One would expect that an adolescent with a negative self-view would be reluctant to disclose information about himself to others.

On the other hand, a less depressed adolescent, with a corresponding less negative self-view, would be more willing to self-disclose.

Within the four groups, the linear relationships between MDI and SDI scores for both unmasked primary and secondary depressed subjects were not significant. The paucity of subjects in the unmasked primary group may have contributed to the lack of significance there. However, for both masked primary and secondary depressed subjects, the linear relationships were significant, both with negative slope. A similar explanation as for the overall linear relationship appears appropriate here. The fact that these depressions were masked seems to have heightened the effect of lack of self-disclosure in producing an inverse linear relationship between depression and self-disclosure. Because interpretation of these results is tempered by the reduced heterogeneity in the current sample and by the small number of subjects studied here, future studies might investigate a broader range of subjects, perhaps of varying ages and levels of psychopathology, in order to determine further the nature of the relationship between depression and self-disclosure.

Finally, the scores of patients on the depression and self-disclosure measures, and the therapist ratings of overall psychiatric condition, depression and self-disclosure were correlated. On admission, the subjects' DACL "Now" scores were significantly correlated in the positive direction with therapist ratings of depression and of overall psychiatric condition (global

psychopathology). After two weeks of hospitalization, none of the correlations were significant, and after four weeks of hospitalization, the DACL "Now" scores correlated only with therapist ratings of depression. The sparse agreements between patients and therapists as to the patients' characteristics suggests that further research is needed to determine the particular qualities patients and therapists take into consideration in making their assessments of psychiatric variables.

To summarize, the current study provided further empirical information regarding the dynamics of adolescent depression and regarding masked depression in psychiatrically hospitalized adolescent. Evidence for the need to suffer hypothesis was seen to be lacking, and the negative view of self hypothesis was seen to possibly explain some of the manifestations of depression in psychiatrically hospitalized adolescents. The adolescents studied here were shown to exhibit similar patterns of depression to their young adult counterparts in a similar design (Johnson, et al, 1979). Reluctance to self-disclose was shown to be associated with depression, and this was discussed in terms of the cognitive theory of the negative view of self. Correlations between subjects' scores and therapists' ratings of psychiatric variables were rare. Alternative explanations for some phenomena and suggestions for further research were offered.

SUMMARY

The purpose of the study was to investigate the dynamics of adolescent depression, specifically regarding the applicability of the need to suffer hypothesis or the negative view of self hypothesis to adolescents. In addition, the nature of the relationships of depression and self-disclosure in masked depressions was also examined. The subjects were 44 psychiatrically hospitalized adolescents (23 female, 21 male) who were screened for level of depression at admission on the Multiscore Depression Inventory (MDI). There were 22 low-depressed and 22 high-depressed adolescents. Subjects completed three forms of the Depression Adjective Check List (DACL), which measured current, preferred and deserved mood states, and the Self-Disclosure Inventory (SDI), at admission, after two weeks and after four weeks of hospitalization. The MDI was also administered after two weeks and after four weeks. Therapists rated subjects as to their level of depression, overall psychiatric condition (global psychopathology) and level of self-disclosure, and they categorized subjects according to primacy and acknowledgement of depression. The results provided evidence against the need to suffer hypothesis and in limited support of the negative view of self hypothesis for psychiatrically hospitalized adolescents. The adolescents studied exhibited similarities to a previously studied sample of young adults, in terms of current, preferred and deserved mood states. Subjects categorized by therapists as

primary depressed obtained higher MDI scores than secondary depressed subjects, both when self-disclosure was accounted for and when it was not. Therapists rated the overall psychiatric condition of subjects as improving over time, with no differences among groups. The negative linear relationship between depression and self-disclosure was discussed in terms of the cognitive theory of the negative view of self. Several suggestions for further research were offered.

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APPENDIX A

PATIENT CONSENT FORM

Project Title: Mood Study

I, _____, a minor _____ years of age, consent to participate in a program of research being conducted by Margaret J. Rohde, of Loyola University of Chicago.

I understand that the study has been designed to help understand the moods of adolescents. I understand that I will be asked to complete a set of questionnaires on no more than three occasions during my first month of hospitalization. I have been told that the questionnaires require about 20 minutes to answer, all together, on each occasion. I have also been told that my participation or refusal to participate in this study will not affect my treatment by Associates in Adolescent Psychiatry or by hospital staff.

It has been explained to me that the results of the study will be made known in group form; no individual results will be revealed to anyone but the examiner. Hospital staff members, Associates in Adolescent Psychiatry staff, myself, and my parents will not have access to individual scores. However, after the completion of the entire study, the group findings will be made known.

I acknowledge that _____ has fully explained to me the risks involved and the need for the research; has informed me that I may withdraw myself from participation at any time without prejudice; has offered to answer any inquiries which I may make concerning the procedures to be followed; and has informed me that I will be given a copy of this consent form. I freely and voluntarily consent to participate in the research project.

Signature of Patient

Signature of Staff Member

Date

APPENDIX B

PARENTAL CONSENT FORM

Project Title: Mood Study

I, the parent or guardian of _____, a minor _____ years of age, consent to his/her participation in a program of research being conducted by Margaret J. Rohde, of Loyola University of Chicago.

I understand that the study has been designed to help understand the moods of adolescents. I understand that my child will be asked to complete a set of questionnaires on no more than three occasions during his/her first month of hospitalization. I have been told that the questionnaires require about 20 minutes to answer, all together, on each occasion. I have also been told that my child's participation or refusal to participate in this study will not affect his treatment by Associates in Adolescent Psychiatry or by hospital staff.

It has been explained to me that the results of the study will be made known in group form; no individual results will be revealed to anyone but the examiner. Hospital staff members, Associates in Adolescent Psychiatry staff, myself, and my child will not have access to individual scores. However, after the completion of the entire study, the group findings will be made known.

I acknowledge that _____ has fully explained to me the risks involved and the need for the research; has informed me that I may withdraw my child from participation at any time without prejudice; has offered to answer any inquiries which I may make concerning the procedures to be followed; and has informed me that I will be given a copy of this consent form. I freely and voluntarily consent to my child's participation in the research project.

Signature of Parent

Signature of Staff Member

Date

APPENDIX C

PLEASE DO NOT PUT YOUR NAME ON THIS PAGE.

DIRECTIONS: This is a questionnaire designed to discover some of your typical feelings and attitudes. Your task is to read each item very carefully and decide whether or not that item is true for you. There are no right or wrong answers, since different people have different attitudes and moods. We are interested in how you usually feel, about yourself and about your world. Answer each item either true (T) if it usually applies to you, or false (F) if it does not usually apply to you.

- _____ 1. The more people around me, the better I feel.
- _____ 2. I blame myself when things go wrong.
- _____ 3. I often have trouble setting my mind to things.
- _____ 4. Lady luck is usually on my side.
- _____ 5. My blood boils when someone upsets me.
- _____ 6. As a rule I have a lot of zest and zip.
- _____ 7. I am always interested in the world around me.
- _____ 8. I usually feel gleeful and jolly.
- _____ 9. I usually feel unattractive.
- _____ 10. No one seems to understand when I complain.
- _____ 11. My mind is usually uncluttered.
- _____ 12. I always enjoy being around people.
- _____ 13. I often have a heavy conscience.
- _____ 14. It seems like I am always tired.
- _____ 15. I usually feel free and unrestrained.
- _____ 16. I usually feel bright and carefree.
- _____ 17. I am often annoyed with people.
- _____ 18. The wheel of fortune is often on my side.
- _____ 19. I am often held back by my inadequacies.

- _____ 20. I am quite satisfied with the love I get.
- _____ 21. I hardly ever regret any of my actions.
- _____ 22. I have let myself down many times.
- _____ 23. My thoughts keep going round in circles.
- _____ 24. I frequently feel drowsy and in need of a nap.
- _____ 25. I always expect the worst.
- _____ 26. I often feel downcast.
- _____ 27. I don't often argue with people.
- _____ 28. I generally feel inferior.
- _____ 29. I want to go away somewhere, away from people.
- _____ 30. I don't get enough support from the people I need.
- _____ 31. I am in full control of my life.
- _____ 32. I am usually full of ambition.
- _____ 33. My opinion of myself is fairly high.
- _____ 35. It is unusual for me to dislike someone.
- _____ 36. My future looks rosy.
- _____ 37. I generally feel high in spirits.
- _____ 38. I often feel I get a raw deal out of life.
- _____ 39. The same thoughts run through my head over and over again.
- _____ 40. I am usually full of vim and vigor.
- _____ 41. I often feel sluggish and slowed down.
- _____ 42. I often feel like my troubles are never going to end.
- _____ 43. I am always thinking about my mistakes.
- _____ 44. I am sure most people find me boring.
- _____ 45. I am usually inventive and resourceful.

- _____ 46. My life is often full of joy.
- _____ 47. The fewer people around me, the better I feel.
- _____ 48. I usually feel talkative.
- _____ 49. I am easily provoked.
- _____ 50. My friends often ignore my problems.
- _____ 51. My thought processes are crisp and precise.
- _____ 52. I never feel hatred towards myself.
- _____ 53. I rarely feel like facing my problems.
- _____ 54. A few mistakes never stop me.
- _____ 55. Most people think highly of me.
- _____ 56. I often feel worn out.
- _____ 57. My future seems to get better and better.
- _____ 58. I frequently feel blue.
- _____ 59. I frequently feel merry and playful.
- _____ 60. People don't treat me fairly.
- _____ 61. No one ever considers how I might be feeling.
- _____ 62. I am hot headed.
- _____ 63. I rarely lose track of my thoughts.
- _____ 64. I often feel droopy and tired.
- _____ 65. I am an optimist.
- _____ 66. I often feel bad about the things I've done.
- _____ 67. Other people find me interesting.
- _____ 68. I am rarely any influence on people.
- _____ 69. I am a loner.
- _____ 70. I flare up when someone crosses me.

- _____ 71. I always have trouble making important decisions.
- _____ 72. I am a sociable and outgoing person.
- _____ 73. I am always willing to try again.
- _____ 74. I usually wish people would just leave me by myself.
- _____ 75. I often feel weak and fatigued.
- _____ 76. My future, for the most part, looks pretty bright.
- _____ 77. I never seem to do anything right.
- _____ 78. I am short tempered most of the time.
- _____ 79. I usually get adequate consideration.
- _____ 80. I have a permanent case of the blues.
- _____ 81. My mind is usually buzzing with confusion.
- _____ 82. I often feel motivated and aroused.
- _____ 83. Life is always full of opportunities.
- _____ 84. I don't often give up hope.
- _____ 85. I do many things that I later regret.
- _____ 86. I am usually full of pep.
- _____ 87. I often feel like laughing and smiling.
- _____ 88. Things usually seem to turn out well for me.
- _____ 89. I usually don't mind being in crowds.
- _____ 90. I fly off the handle easily.
- _____ 91. Nobody ever seems concerned enough about me.
- _____ 92. My thoughts are often jumbled.
- _____ 93. I usually feel lively and energetic.
- _____ 94. I usually feel pretty down.
- _____ 95. I often find it hard to put on a happy face.

- _____ 96. I often feel guilty.
- _____ 97. I often feel unworthy of my family's love.
- _____ 98. I usually think of myself as well-liked.
- _____ 99. I usually have a nasty temper.
- _____ 100. I usually make decisions easily.
- _____ 101. I get my fair share of attention.
- _____ 102. Things keep getting better in my life.
- _____ 103. My vitality is usually high.
- _____ 104. I often think negatively.
- _____ 105. I am a happy person.
- _____ 106. I frequently feel useless.
- _____ 107. I usually avoid parties.
- _____ 108. My energy level is usually high.
- _____ 109. I frequently feel I have nothing to look forward to.
- _____ 110. I often feel I am worthless.
- _____ 111. I often isolate myself from my friends.
- _____ 112. I often lose control of my temper.
- _____ 113. It often takes a long time even deciding what clothes to put on.
- _____ 114. On the whole I have little difficulty with thinking straight.
- _____ 115. My friends are never there when I need them.
- _____ 116. My family never give me enough attention.
- _____ 117. I often explode with anger and frustration.
- _____ 118. I find life fascinating.

APPENDIX D

PLEASE DO NOT PUT YOUR NAME ON THIS PAGE.

DIRECTIONS: Below you will find words which describe different kinds of moods and feelings. Please place a check mark next to ALL the words which describe the way you feel NOW.

CHEERLESS	_____	BUOYANT	_____
ANIMATED	_____	TORMENTED	_____
BLUE	_____	WEAK	_____
LOST	_____	OPTIMISTIC	_____
DEJECTED	_____	LOW	_____
HEALTHY	_____	DESERTED	_____
DISCOURAGED	_____	WONDERFUL	_____
BAD	_____	CRUSHED	_____
DESPONDENT	_____	BURDENED	_____
FREE	_____	SOMBER	_____
DESPAIRING	_____	INTERESTED	_____
UNEASY	_____	JOYLESS	_____
PEACEFUL	_____	CRESTFALLEN	_____
GRIM	_____	LUCKY	_____
DISTRESSED	_____	CHAINED	_____
WHOLE	_____	PESSIMISTIC	_____

PLEASE DO NOT PUT YOUR NAME ON THIS PAGE.

DIRECTIONS: Below you will find words which describe different kinds of moods and feelings. Please place a check mark next to ALL the words which describe the way you would LIKE to feel.

CHEERLESS	_____	BUOYANT	_____
ANIMATED	_____	TORMENTED	_____
BLUE	_____	WEAK	_____
LOST	_____	OPTIMISTIC	_____
DEJECTED	_____	LOW	_____
HEALTHY	_____	DESERTED	_____
DISCOURAGED	_____	WONDERFUL	_____
BAD	_____	CRUSHED	_____
DESPONDENT	_____	BURDENED	_____
FREE	_____	SOMBER	_____
DESPAIRING	_____	INTERESTED	_____
UNEASY	_____	JOYLESS	_____
PEACEFUL	_____	CRESTFALLEN	_____
GRIM	_____	LUCKY	_____
DISTRESSED	_____	CHAINED	_____
WHOLE	_____	PESSIMISTIC	_____

PLEASE DO NOT PUT YOUR NAME ON THIS PAGE.

DIRECTIONS: Below you will find words which describe different kinds of moods and feelings. Please place a check mark next to ALL the words which describe the way you DESERVE to feel.

CHEERLESS	_____	BUOYANT	_____
ANIMATED	_____	TORMENTED	_____
BLUE	_____	WEAK	_____
LOST	_____	OPTIMISTIC	_____
DEJECTED	_____	LOW	_____
HEALTHY	_____	DESERTED	_____
DISCOURAGED	_____	WONDERFUL	_____
BAD	_____	CRUSHED	_____
DESPONDENT	_____	BURDENED	_____
FREE	_____	SOMBER	_____
DESPAIRING	_____	INTERESTED	_____
UNEASY	_____	JOYLESS	_____
PEACEFUL	_____	CRESTFALLEN	_____
GRIM	_____	LUCKY	_____
DISTRESSED	_____	CHAINED	_____
WHOLE	_____	PESSIMISTIC	_____

APPENDIX E

PLEASE DO NOT PUT YOUR NAME ON THIS PAGE.

DIRECTIONS: Listed below are 30 statements. These statements are topics of conversation. On the right hand side are 3 columns - parents, best friend, and therapist.

Please READ each statement. Then, in the column marked "PARENTS", put a "0" if you would NOT be willing to discuss that topic with your parents. Put a "1" if you would be willing to discuss that topic with them. Do the same thing for each statement in the columns marked "BEST FRIEND" and "THERAPIST". If you would NOT be willing to discuss that topic with that person, put a "0" in the column. If you would be willing to discuss that topic with that person, put a "1" in the column. You should have either a "0" or a "1" in every column for every statement.

	PARENTS	BEST FRIEND	THERAPIST
1. What you think and feel about religion, your personal religious views.			
2. Your views on the present government - the president, government policies, etc.			
3. Your personal views on sexual morality - how you feel that you and others ought to behave in sexual matters.			
4. Your personal standards of attractiveness in someone of the opposite sex.			
5. The things you look for in a friend of the same sex.			

	PARENTS	BEST FRIEND	THERAPIST
6. Your favorite foods, the ways you like food prepared, and your food dislikes.			
7. Your likes and dislikes in music.			
8. The kinds of movies that you like to see best; the TV shows that are your favorites.			
9. Your taste in clothing.			
10. Your favorite ways of spending spare time.			
11. What you find to be the worst pressures and strains in school.			
12. What you enjoy most and get the most satisfaction from at school.			
13. What you feel are your shortcomings and handicaps that prevent you from working as you'd like to, or that prevent you from getting better grades.			

	PARENTS	BEST FRIEND	THERAPIST
14. What you feel are your special strong points and qualifications for your school work.			
15. How you feel that your schoolwork is appreciated by others.			
16. How much money you make at work or get as an allowance.			
17. Whether or not you owe money; if so, how much.			
18. Whether or not you have savings, and the amount.			
19. Whether or not others owe you money; the amount and who owes it to you.			
20. Whether or not you gamble; if so, the way you gamble and the extent of it.			
21. The aspects of your personality that you dislike, worry about, that you regard as a handicap to you.			

	PARENTS	BEST FRIEND	THERAPIST
22. The facts of your present sex life - including knowledge of how you get sexual gratification; any problems that you might have; with whom you have relations, if anybody.			
23. Things in the past or present that you feel ashamed and guilty about.			
24. What it takes to get you feeling real depressed and blue.			
25. The kinds of things that make you especially proud of yourself, elated, full of self-esteem and self-respect.			
26. How you wish you looked; your ideals for overall appearance.			
27. Your feelings about different parts of your body - legs, hips, waist, weight, chest or bust, etc.			

	PARENTS	BEST FRIEND	THERAPIST
28. Whether or not you now have any health problems - trouble with sleep, digestion, female complaints, heart condition, allergies, headache, etc.			
29. Your present physical measurements - height, weight, waist, etc.			
30. Your feelings about your adequacy in sexual behavior - whether or not you feel able to perform adequately in sex relationships.			

APPENDIX F

TO:
FROM:
RE:

The above-named patient is participating in the research I am conducting. Please answer the following four questions regarding this patient's condition as of _____.

1. Please check the category which best describes this patient:

- Depression as primary disorder and overtly admitted to by patient.
- Depression as primary disorder but not overtly admitted to by patient.
- Depression as secondary disorder and overtly admitted to by patient.
- Depression as secondary disorder but not overtly admitted to by patient.
- Depression not involved in psychopathology of this patient.

2. Please rate the patient's overall psychiatric condition on the following scale:

- Extremely poor condition
- Somewhat poor condition
- Slightly poor condition
- Neither poor nor good condition
- Slightly good condition
- Somewhat good condition
- Extremely good condition

3. Please rate the patient's level of depression on the following scale:

- Extremely depressed
- Somewhat depressed
- Slightly depressed
- Neither depressed nor elated
- Slightly elated
- Somewhat elated
- Extremely elated

4. Please rate the patient's level of self-disclosure on the following scale:

- _____ Extremely self-disclosing
- _____ Somewhat self-disclosing
- _____ Slightly self-disclosing
- _____ Neither self-disclosing nor non-self disclosing
- _____ Slightly non-self-disclosing
- _____ Somewhat non-self-disclosing
- _____ Extremely non-self-disclosing

Thank you very much.

APPROVAL SHEET

The dissertation submitted by Margaret J. Rohde has been read and approved by the following committee:

Dr. Alan S. DeWolfe, Director
Professor of Psychology

Dr. James E. Johnson
Associate Professor of Psychology

Dr. Thomas P. Petzel
Professor of Psychology

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

12/16/80
Date

Alan S. DeWolfe
Director's Signature