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THE RELATIONSHIP BETWEEN WILL, SELF-ESTEEM AND DEPRESSION

By

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Presented in partial fulfillment of the requirements for the

degree of

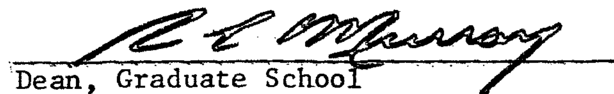
Master of Arts

UNIVERSITY OF MONTANA

1980

Approved:

Chairman, Master's Committee



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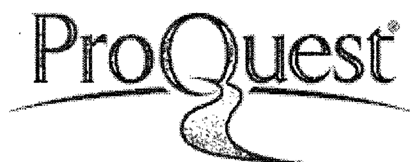

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The present study examined the relationship between will, self-esteem and depression. A significant negative correlation between depression and the variables of will and self-esteem was hypothesized. Further, there would be a significant difference in self-esteem and will between depressed and non-depressed individuals, in that both self-esteem and will would be lower in depressed individuals. The strongest correlation would be between depression and will, due to the proposed direct role of will in depression and the indirect role of self-esteem in depression. Lowered self-esteem was proposed to be primarily a consequence of reduced will leading to less willful action and a decreased perception of personal causation which in turn lowers self-esteem. To test these hypotheses, 101 college students in introductory psychology classes were administered the Beck Depression Inventory (BDI), the Tennessee Self Concept Scale (TSCS) and a Will Measure. Sixty-three subjects remained after eliminating those subjects who did not score in the same group on the BDI as on the pretest and randomly excluding several subjects to provide an equal *n* across groups. A low, medium and high depression group was formed, consisting of 21 subjects each. One way analyses of variance were performed, comparing the scores of the three BDI groups on the TSCS and the Will Measure, in addition to correlations between the Will Measure, TSCS and BDI scores. The TSCS scores were significantly different across groups in the predicted direction ($F=36.473$, $df=2/60$, $p<.001$). However, the Will Measure scores did not reveal any significant differences in the one way analysis of variance. A significant negative correlation emerged between the TSCS and the BDI scores ($F=-.7617$, $df=2/60$, $p<.001$) as predicted, but a significant positive correlation was observed between the Will Measure and the BDI scores ($r=.2591$, $df=2/6$, $p<.02$), contrary to predictions. To account for the results contrary to the hypotheses on the Will Measure, several issues were addressed. The lack of assessment of an action component in the Will Measure was considered in addition to a potential "paralysis of the will" in depression rather than an actual reduction of the will in this disorder. A revision and refinement of the relationship of several components of will to depression and self-esteem was proposed, to be tested by further research.

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CHAPTER I

Introduction

Depression has been recognized as a major mental health problem for many years. According to the National Institute of Mental Health, depression rivals schizophrenia as the nation's number one health problem (Secunda, 1973). This has led to a considerable amount of research, especially in the recent past (Becker, 1977).

In researching the etiology of this disorder, a repetitive theme cited as a probable predisposer to depression has been vulnerable self-esteem (Chodoff, 1973), among others. This concept has also been tied quite closely to depressive symptomatology (Beck, 1967), aside from the importance ascribed to it by many investigators in other fields (Coopersmith, 1967; Rogers, 1951; Wylie, 1974).

In addition, much recent humanistic literature has claimed that will is a central concept influencing all aspects of human behavior (Easterbrook, 1978; May, 1969). Given the importance of this construct, very little work has been done connecting it conceptually and empirically with other important human variables. This paper will attempt to partially remedy the situation by investigating the relationship of will to self-esteem and depression.

Depression

Depression as a phenomenon has concerned clinicians and researchers for many years. Its essential features are a dysphoric mood or a loss of interest or pleasure in all or almost all usual activities. Other symptoms associated with this syndrome are an appetite disturbance, change in weight, sleep disturbances, psychomotor agitation or retardation, decreased energy, feelings of worthlessness or guilt, difficulty concentrating or thinking and thoughts of death or suicide (American Psychiatric Association, 1980). Many theories have been advanced to account for this phenomenon, from psychodynamic to biochemical formulations.

Freud (1957) wrote an important paper on the topic called Mourning and Melancholia. His point of view has had a significant impact on subsequent theorists. He postulated that depressives are fixated at the oral stage of psychosexual development. They have narcissistic object relations, characterized by a great intensity, strong dependency and ambivalence. These relations are subject to regression, to a primitive form of relation to a particular object, especially under severe stress. The dependency these individuals feel induces anger and hostility, which is largely repressed. Insufficient energy is available to develop mature relationships and the object relations these people have are quite susceptible to disruption due to the strong negative emotions involved. When a loss of the love object is perceived, another external object cannot take its place and the ego becomes identified with the object. Anger at the love object, to punish it for deserting the individual is then expressed at the ego in the form of self-reproach. This mechanism

of turning aggression around upon the self serves two important functions (Mahl, 1971). It provides relief from the sense of guilt prompted by the original, outwardly directed anger and also provides some gratification of the repressed anger, by allowing it to express itself upon the individual. A depression results, with self-accusations upon the ego by the superego. Freud claimed that the depression lifts when the superego exhausts its "fury" or the internalized love object is abandoned or destroyed.

Bibring (1953), in a more ego-analytic conceptualization of depression, saw a loss of self-esteem as the central feature of depression. He stated that when the ego is unable to meet its vital aspirations, the sense of self-esteem decreases and depression results. According to his formulation, depressives have quite high and rigid ego ideals which are hard to live up to. This engenders a sense of helplessness and entails a loss of self-esteem in many situations, since the depressive person cannot meet the expectations he has set for himself. The characteristic inability to act and to express anger at the environment result from the ego's sense of powerlessness and a fear that external sources of gratification might be alienated. The anger expressed against the self is due to the perceived inability of the ego to meet its own expectations. Bibring considered helplessness a central feature of depression, but noted that one can be angry at oneself without being depressed.

Cohen, Baker, Cohen, Fromm-Reichmann and Weigert (1954), studying manic-depressives, formulated a more environmental theory of depression. They considered that the personalities of the parents determined

to a large extent the way these individuals were able to deal with stress. Mothers of their subjects enjoyed the dependency of their children and reacted to independence with punitiveness. Autonomy was linked with anxiety and anticipation of rejection by these pre-manic-depressive children. The children learned to see the world in highly conventional black and white terms and did not develop a capacity for empathy. In addition, there was an overemphasis on success and achievement in these families. Failure, which became more probable due to perfectionistic expectations, led to self-devaluation and despair. A real or perceived loss of a critical dependency relation, either the mother or some other person upon whom these feelings had been transferred also resulted in decompensation into a depressive episode.

Lewinsohn (1976), in a behaviorist framework, claimed that depressives are on an extinction schedule. He contended that low response contingent positive reinforcement elicits depressive behavior. Low rates of response contingent positive reinforcement is an unconditioned stimulus for eliciting dysphoria, fatigue and other symptoms of depression. These depressive behaviors are maintained by attention and concern in people interacting with the depressed person initially but these behaviors soon become aversive to these individuals. This leads to withdrawal on their part and a consequent reduction in the number of positively reinforcing events available to the depressive. The primary reason for initiation of this vicious circle, according to Lewinsohn, is a lack of social

skills in the depressive.

Seligman (1974) has proposed a "learned helplessness" model of depression. He derived his model from studies with dogs, in which the experimental animals were restrained from jumping over a barrier to avoid an unpredictable electric shock. When they were no longer restrained, the dogs passively endured the painful shock and did not learn to jump over the barrier. Even when they accidentally or by the prodding of the experimenter surmounted the barrier, they did not seem to learn from the experience. According to Seligman, this behavior was due to the unpredictable and uncontrollable nature of the trauma, not the trauma per se.

Miller and Seligman (1973) and Hiroto and Seligman (1975) investigated this phenomenon in humans. They concluded that subjects developed a trait-like system of expectancies that responding is futile in such situations and argued that extended, consistent experience with an inability to control aversive stimuli results in depressive symptomatology such as sadness, psychomotor retardation and self-devaluation. In subsequent theoretical articles (Abrahamson, Seligman & Teasdale, 1978; Seligman, 1978), Seligman integrated his learned helplessness approach with attribution theory to account for several findings (Buchwald, Coyne, & Cole, 1978; Costello, 1978; Depue & Monroe, 1978) which could not be accounted for by his original formulation. This resulted in a more cognitive approach.

Beck (1967, 1976) has developed a cognitive theory of depression. He regarded this disturbance as a primary thought disorder. According

to his formulation, a pre-depressive is raised with negative biases. These negative expectations or cognitive structures lead to failure in a self-fulfilling manner, further confirming the expectations. As pessimism deepens, less effort is expended in an attempt to deal with problems and as a consequence the person has less success.

A "cognitive triad" characterizes the depressive's outlook. He sees himself, the outside world and the future in a negative way. To maintain this point of view, cognitive distortions are employed. They include: drawing conclusions without evidence or contrary evidence, focusing on one aspect of a situation and ignoring others, overgeneralization from one detail to a whole situation, exaggerating or minimizing the significance of certain information and excessive personalization of largely impersonal events. Such cognitive distortions are seen as natural, are experienced automatically and involuntarily. In treatment, this approach focuses on allowing the client to experience success and changing perceptions of the world.

Carroll (1978), reviewing neuroendocrinological research in depression, claimed that the evidence for a primary limbic-hypothalamic defect is compelling, particularily for endogenous depression. A wide range of neuroendocrine disturbances have been documented in this disorder, including growth hormone, lutenizing hormone and thyroid-stimulating hormone abnormalities. In particular, the hypothalamic-pituitary-adrenal system seems to be implicated, with excessive adrenocorticotrophic hormone release and elevated plasma cortisol levels, which are sometimes in the range reported for Cushing's disease. In addition, circadian control of cortisol secreation

is abnormal, with inappropriately large amounts secreted at night. No causal factors have been identified, although a deficiency of norepinephrine in the limbic-hypothalamic pathways has been pointed to as a potential causal factor (Rubin, Gouin & Poland, 1971).

It is apparent from the above discussion that self-esteem has been tied closely to depression in theories of the etiology and maintenance of this disorder, especially in psychodynamic formulations. Will, on the other hand, has not been studied directly to determine it's relationship to depression. The present study will investigate the relationship of depression to self-esteem and will.

Will

The concept of will has received considerable attention since the early days of the discipline of psychology. It has been a concept much discussed but rarely investigated in a scientific manner. As a construct in psychological systems of thought, it has been prominent in early writings on human nature and in philosophical psychology. Bain (1899), wrote a book on Emotions and the Will. In it he defines will as "the existence of a spontaneous tendency to execute movements independent of the stimulus of sensations or feelings" (page 303), in other words, as independent volition. He assumes that spontaneity, self-conservation and retentiveness are prerequisites to this capacity. Ribot (1894) defines will as voluntary activity, "the distinctive reaction of an individual" (page 4). He traces this ability back to cerebral reflexes and claims that choice is the component that distinguishes willed

behavior from more simple forms of acting. He then enumerates "diseases of the will", which is the focus of his book.

Aveling (1931) discusses will as "conscious volition" (page 240) and makes the point that this volition always brings about changes in experience which in turn alter our relations between that experience and ourselves. This leads to a dynamic interaction between the self and the environment. The interaction is, according to his model, the mechanism by which humans influence their own continuous development. Aveling regards intelligent will, the capacity to contemplate means to ends and making one's own motives, as the attribute which makes us uniquely human.

More recently, Melden (1961) has defined will as volition, what a person wants or wishes with an implication of acting on these desires. He considers rational decisions and an element of choice to be essential for the exercise of will. Kenny (1963), taking a semantic approach, considers will to be volition and states that acts of will are intentional phrases, thereby deemphasizing the action component inherent in will. However, he insists that will is necessarily voluntary, as Melden does not. Zavalloni (1962), in summarizing much of the work done on the problem of will, quotes Spearman (1930) to define will as "consistency of action resulting from deliberate volition" (page 64). He ties this to his concept of self-determination, which he considers the hallmark of truly human action.

The concept of will has also received considerable attention in humanistically oriented literature. Rollo May (1965, 1969) attempts

to find insight into the meaning of will, especially in relation to love. He considers will as the quality of reaching out, moving toward and opening toward the other. Will is a positive force that an individual can utilize to become more sincerely human. May raises moral and ethical questions related to and implied by this approach to human existence. However, as the writers mentioned above do, he supports his contentions with deductions and assumptions about human nature, rather than relying on an empirical base. Other writers have most commonly employed will in their discussions of the freedom versus determinism issue, positing will as an essential quality of human beings, which makes them able to choose in a highly determined world (Easterbook, 1978; Kinget, 1975; Oleski, 1975). Hoover (1971) has applied the concept of will to schizophrenics rigidifying into a chronic state. She claims on the basis of clinical observation, that potentially chronic schizophrenics have a will to be sick which is due to their misconception that they can only be free to exist if they remain psychotic.

However, in most discussions of will in the humanistic literature, will is considered a vitalizing, positive force that has the power to free individuals from being mere reactors to the environment. It enables people to act on their environment in a unique, human way, reaffirming their ability to make choices about their existence in the world. For the purposes of this study, the concept of will will be defined as a positive force, conscious volition, which exists in the immediate present.

The difficulty with the concept has been that, although many

authors have considered it an important concept to consider, it has eluded objective measurement. Will cannot be identified except by inference from other processes. It is an intra-determined concept, and is a phenomenological state in an individual. Therefore, although much has been written on the topic, substantive data has not been generated to deal with it in an experimental framework. This lack of data has prevented the concept of will from being integrated with other concepts that have empirical bases and consequently the relationships between will and other concepts remains to be elucidated. The present study will attempt to clarify some of these relationships.

Self-esteem

In contrast to the concept of will, self-esteem as a variable used to describe a person has been studied by many investigators in an experimental framework (Chase, 1957; Payne & Farquhar, 1962; Wylie, 1961, 1974; Ziller, Hagey, Smith & Long, 1969).

Wilmot (1979), discussing self-concept literature, emphasizes the social interactionist approach to self-esteem. According to this formulation, self-esteem is primarily a product of what individuals think others in their environment think they are. That is, immediate communication transactions with others shape the self-esteem a person has. Accordingly, self-esteem varies across social situations, with a more stable and global self-concept in the background. Wilmot states that three components of what he calls the social self can be identified:

"This vitally important social self is built primarily in three ways: (1) by the reflected appraisal of others or the 'looking-glass self', (2) by the comparison of the self with others and (3) by the playing of social roles" (page 45).

This formulation, due to its stress of immediate external factors affecting self-esteem, has much difficulty explaining why some people are able to overcome present negative evaluations by others and maintain relatively high self-esteem (Coopersmith, 1967). This criticism suggests that a more internally anchored and global approach to self-esteem might be useful, although the social aspect of self-esteem should not be neglected.

Shaffer and Shoben (1956) define self-concept as a pattern of attitudes people hold about themselves. Each person develops a self-concept through various learning experiences he has, especially early in life. This set of attitudes is therefore acquired the same way other attitudes are. Like the other attitudes a person holds and which are acquired through learning, the self-concept influences the way a person perceives and acts in a new situation. These authors do not make a clear distinction between self-concept and self-esteem.

Gergen (1971) considers self-esteem to be the evaluative component of self-conception. He takes a socio-cognitive approach, emphasizing the process of conceptualizing one's own behavior, both external conduct and internal states. Self-evaluation adds an important emotional component to the network of concepts an individual develops about himself. Each element of the network of concepts has an emotional loading that is learned. When a person sees his own behavior as falling within a given category, he makes an evaluative judgement about it and integrates it into his feeling of self-esteem, especially if it has a strong emotional loading. According to Gergen this is how self-esteem is continually shaped in the person.

Rogers (1951) considers the self-concept as an "organization of hypotheses for meeting life" (page 191). It is basically stable although it is fluid and changing in its details. Positive self-esteem is maintained by the consistency of the self-concept without the perception of contradictory material which might call the self-concept into question. If contradictory material is perceived, tension is created and self-esteem decreases. This formulation does not explain the creation of the self-concept and self-esteem. It also implies that the self-concept will be positive in absence of data from the environment.

Coopersmith (1967) has filled the gap regarding self-esteem creation. He defines self-esteem as:

"...the evaluation which the individual customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy. In short, self-esteem is a personal judgement of worthiness that is expressed in attitudes the person holds toward himself" (page 5).

In examining the antecedents of self-esteem, Coopersmith identifies four factors. These are: 1) how the individual is valued by others, 2) the individual's values and aspirations, 3) the individual's manner of responding to devaluation and 4) his history of successes. These factors contribute to the development of self-esteem in an interactive fashion.

Each point of view presented accounts for the development of self-esteem in terms of relatively high conceptual levels. This paper proposes to explain the creation and maintenance (in part) of self-esteem at a more elementary level, largely without involving complex

processing and social judgements.

Relationship of Will to Self-esteem

In this study, a direct relationship between will and self-esteem is hypothesized. This hypothesis asserts that self-esteem arises out of the exercise of will and that self-esteem is in part maintained by this exercise of will.

First, a necessary condition for both will and self-esteem to exist is a consistent environment. Easterbrook (1978) maintains that a relatively well-defined environment is necessary for will to be present. He states that only in a consistent environment the consequences of an action can be known. If the environment is inconsistent and the individual receives different feedback almost every time, the person cannot choose different courses of action and tends to act relatively randomly. On the other hand, in a fairly determined environment, an individual is free to choose different courses of action, since the consequences of these courses of action are known and therefore he can exert his will to accomplish his aims.

A similar argument is made by Coopersmith (1967). Individuals need referents to judge their behavior by. A sufficiently well-defined environment is necessary for the creation of self-esteem. Coopersmith has pointed out that children exposed to few and poorly defined limits in their home environment do not have adequate opportunity to arrive at an integrated appraisal of their competencies and therefore are prone to develop low self-esteem.

Will is created by the person operating on the environment. In this process, the person acts upon the environment. There follows a

change in some aspect of the surroundings. When a person repeats this action and the same results are obtained relatively consistently, the person experiences a sense of having will in the situation. Stern (1972) puts it very well:

". . . environmental mastery develops as a function of successful solutions or feedback of success to problems in living. When a response in a complex learning situation or problem situation is correct or is rewarded, the probability that that response will occur again in the same or similar situation will be increased. As the probability of that response continues to increase, the response becomes the dominant effective coping strategy associated with the task cues. Consequently, as the response becomes the dominant effective coping response, the probability of success or receiving success feedback in problem-solving or environmental mastery increases" (page 9).

Therefore the individual perceives that he has control over this aspect of his existence in the world and attributes the event outcome to personal causation. Means and Gale (1971) call this the perception of being an effective causal agent. This is how willful action is created. The more the person sees that his actions have a relatively predictable effect upon the environment, the more he will engage in these actions because of their value in creating a sense that willful action will succeed. Subjective perception of will is increased and at the same time self-esteem is created.

This occurs by the process Bem (1967) and Wilkins (1971) have outlined. According to these investigators, self-observations of behavior change lead to attitude change. Since self-esteem is simply an attitude a person has about himself, this line of reasoning should also apply to self-esteem. A person willfully acting on the environment draws inferences from his overt behavior about how successful he is and this will in turn affect his self-esteem. As Coopersmith (1967)

points out, one of the antecedents to self-esteem is the history of successes the individual has had.

Therefore, will creates willful action. Willful action in turn produces the perception of personal causality by the mechanism of self-observation because of the predictable events that occur. The perception of personal causality leads to feelings of effectiveness and finally self-esteem. Once this chain of events and attributions has been created, it closes upon itself, self-esteem becoming less dependent upon every separate success or failure and inducing further willful action. This produces perceptions of causality and creates further self-esteem, which leads to further willful action and so on.

A person's values and aspirations and his manner of responding to devaluation, two other antecedent factors to self-esteem (Coopersmith, 1967), are influenced significantly by this perception of being an effective causal agent. If an individual has been an effective causal agent in the past, his values and aspirations will be realistic and positive, since he knows that he can act effectively on certain parts of the environment. Since he also knows that his willful action will probably produce results in the sense of shaping part of the environment to his wishes, he will probably cope easily with devaluation. He will be able to be relatively undefensive because his perception of being an effective causal agent will be independent to some extent of the immediate external environment if the closed loop described above has been in operation for some time in a consistent environment.

How the person is valued, the final antecedent mentioned by

Coopersmith, can be explained in the same framework. According to Bem (1967), a person self-observes and subsequently changes his attitude about himself if the behavior is inconsistent with previous attitudes. By the same token, other people around him should react in a similar manner since they are basing their judgements of the individual upon the same overt behavior, although perhaps on not as large a sample.

After self-esteem is created in childhood, it remains fairly stable (Chase, 1957; Fitts, 1964). However, even then it is still amenable to change by will, although gradually, through the same mechanisms described above, since it is now in part embedded in the past of the individual.

Relationship of Will and Self-esteem to Depression

If will is somehow decreased, less willful action will occur. In severe depressions, where there is an almost complete lack of volition, there is no perception of causality due to no actions taken. Means and Gale (1971) emphasize that perceiving oneself as an effective causal agent is essential to a general state of psychological well-being, i.e. the perception of oneself as an effective causal agent is central to a positive affective state. In contrast, when a person does not see himself as an effective causal agent, he is likely to be depressed. Beck (1967) names one of the symptoms of depression a "paralysis of the will". He states:

"The essence of the problem appears to be that, although he (the depressed person) can define for himself what he should do, he does not experience any internal stimulus to do it. Even when urged, cajoled, or threatened, he does not seem to be able to arouse any desire to do these things" (page 27-28).

In his review of the depression literature, Becker (1977) has noted that lowered self-esteem is also associated with depression. Many authors (Beck, 1967, 1976; Becker, 1977; Seligman, 1978) have maintained that demonstrating to a depressed person that he can be effective in the environment is most useful in treating the disorder because it alters the impact the person has on the environment, and his beliefs about the impact he does have. This treatment in fact is reestablishing the process described earlier of will leading to willful action which produces a sense of personal causation and increases self-esteem.

The above review of the literature suggests that will creates willful action, which in turn engenders a sense of personal causation. Perception of personal causation leads to the creation of self-esteem early in the person's life. After this process continues for some time, self-esteem becomes, in large part, embedded in the person's past, since self-esteem is a construct largely dependent upon a history of perception of personal causation, directly, and indirectly through other's judgements of the individuals successes and failures. Thus, self-esteem is somewhat resistant to the influence of the fluctuations of a person's will because it is also partially dependent upon the individual's past experience. However, will retains a role in the maintenance of self-esteem by continuing the positive feedback loop created by the chain described above.

It has been noted that, in depressed individuals, both will and self-esteem are lowered. According to the arguments presented above, these two constructs are associated causally, i.e. as a person's will

is reduced or eliminated, willful action and perception of personal causation decreases or ceases altogether, interrupting the positive feedback loop upon which self-esteem is partially dependent. Consequently, a person who is depressed will have lowered self-esteem because of a decreased will.

Will, therefore, plays a direct role in depression by influencing the perceived level of causal effectiveness of the individual, and plays an indirect role by influencing self-esteem.

The above argues that will, self-esteem and depression are related. Several hypotheses can be systematically derived from this discussion:

Hypothesis #1: There will be a significant and negative correlation between depression and the variables of will and self-esteem.

Hypothesis #2: The strongest correlation will be between depression and will.

Hypothesis #3: There will be a significant difference in self-esteem and will between non-depressed and depressed individuals in that both self-esteem and will will be lower in depressed individuals.

CHAPTER II

Method and Procedure

Subjects:

The Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock & Erbaugh, 1961) was administered to undergraduate students in the introductory and developmental psychology classes (see Appendix A) at the University of Montana. No experimental credit was granted for the initial administration of the BDI, but students were informed that they might be contacted and invited to participate in a study for experimental credit. High scoring students (10 and above), medium scoring students (5-9) and low scoring students (4 and below) were contacted and asked to participate in the study.

Based on schedule availability, approximately 30 students were selected per category (high, medium, low) for a total of 101 subjects. These subjects received experimental credit for participating in the research, to be applied as partial fulfillment of course requirements. Of the 101 subjects selected for further participation, 33 subjects were eliminated from the analyses because their initial BDI score did not fall into the same high, medium or low category on the second administration of the BDI as it had on the first administration. To provide equal numbers in each group for the analyses, three subjects were randomly excluded from the analyses in the low BDI group and two were eliminated in the medium BDI group. A total of 21 subjects remained per high, medium and low BDI group.

Materials:

Three instruments were used in this investigation: the Beck Depression Inventory, the Tennessee Self Concept Scale and a Will Measure.

Beck Depression Inventory (BDI):

The BDI consists of 21 items each of which is scored on a 4-point scale for degree of severity. Inventory items were derived from clinical observation and reflect somatic, motoric and cognitive/attitudinal areas of concern. According to Beck et al (1961), all items show a statistically significant relationship to the total obtained score. Also, according to the same study, the BDI accurately indicated changes in depth of depression in 85% of cases in 38 psychiatric patients compared to clinician ratings.

The split-half reliability coefficient reported for an n of 93 patients was .93 (Beck et al, 1961). Bumberry, Oliver and McClure (1978) established concurrent validity in a college population. The correlation between the BDI and psychiatric rating of depth of depression was .77 with a group of 56 college students. However, the correlation fell to .30 after one to 14 intervening days, indicating that the inventory measured state, not trait depression.

Giambra (1977) performed a principal components factor analysis on the BDI in a hospital population. This investigator concluded that the inventory measures depression by a severity (as opposed to frequency) approach. In addition, the BDI loads most heavily on the affective malaise or guilt depression factor, which was found to be dominant and a stable dimension of depression. This set of studies indicates that

the inventory is well correlated with psychiatric ratings of depression and can be applied to a college population, especially in a research setting.

Tennessee Self Concept Scale (TSCS):

The TSCS consists of 100 descriptive statements, each of which the subject rates on a 5-point scale from "completely true" to "completely false" in regard to himself. The Total P score, which will be used as a measure of self-esteem in this investigation, is the arithmetic sum of the subject's scores on 90 of the 100 items (the other 10 items are MMPI L scale items). The 90 items are phrased half positively and half negatively to control acquiescence response set and are scored differentially depending on the wording of the item. In other words, for 50% of the items, the scoring scale is reversed and a "completely false" response receives a score of 5.

The test-retest reliability coefficient reported in the manual for an _n_ of 60 college students over a two week interval was .92 for the Total P score (Fitts, 1965). The manual also mentioned a study by Congdon (1958) in which a correlation of .88 was obtained using psychiatric patients and a shortened version of the original scale. However, the time interval elapsed between the test and retest was not reported. Additional studies in which the Total P score differentiated groups of patients and various types of delinquents from normals were reported.

Vacchiano and Strauss (1968) performed a principal components factor analysis on items of the TSCS for 260 male and female subjects in a college sample. These investigators concluded that the scale is

a complex measure, providing measures of self, physical, moral-ethical, personal, family and social, and overall self-concept. This study lends support to the construct validity of the scale, and the authors recommend the use of the scale for similar age group populations.

Although these studies suggest that the Total P score is not solely a measure of self-concept, they do indicate that the scale has been related to several important behavioral variables. Consequently, the scale seems to have some potential usefulness, in particular to be utilized in further research.

Will Measure:

Means, Langer and Wolfe (1978) have developed a measure of will using a questionnaire format while studying free choice perception. This measure specifically examined the perceptions of 108 college student subjects of their own strength of desire towards accomplishing a goal they had chosen to examine. Their strength of desire was then compared with a subjective estimate of the likelihood of positive outcomes and with how much freedom to choose to continue pursuing the goal they felt they had. The strength of desire measure was seen as an indicator of will the subjects had towards accomplishing their goal. The results of the study indicated that the Will Measure correlated significantly with free choice perception ($r=.23$, $df=107$, $p<.05$), whereas the cognitive component of estimating outcome likelihoods did not. This suggests that the role of will in pursuing goals is more significant than the individual's estimate of the likelihood of attaining the goal.

In answering this questionnaire, the subject was able to remain in his phenomenological framework throughout the task, using only himself as a referent.

In the present study, to strengthen the Will Measure in this context, a measure of importance of the goal to the individual was added. This measure of importance was considered to be the link of will to more general relevance to the mood of the subject. That is, the more important the self-generated goal on the questionnaire is to the person, the more critical the desire to accomplish the goal may be to the life space of the individual. As is implicit in much of the work on depression, mood is influenced much more significantly when there is a disruption of the attainment of an important goal in comparison to a less important one. The mood pervades other areas of concern for the individual because he seeks to make his perceptions of his own mood congruent with the perception of the outer world and his thoughts.

Consequently, the 7-point desire and importance scale scores were totaled to provide a tentative measure of strength of will for the individual.

Procedure:

The administration of the instruments took place in a group setting of twelve subjects maximum. Since the experimenter might have unintentionally conveyed cues regarding expectations for the different groups of subjects according to the earlier administration of the BDI, an assistant scored the inventory and selected all subjects for each session according to their score on the inventory. Therefore, any

possible combination of BDI high, medium and low scoring individuals was possible in any particular group. After subjects were selected by the assistant, the experimenter contacted the subjects by phone and asked them to participate in "a study concerning attitudes, feelings and goals". They were scheduled to participate according to their availability.

During the actual experimental session, the BDI, the TSCS and the Will Measure were administered in that order, all with the standard written instructions. The instruments were given in this order for two reasons. The BDI, being largely a state as opposed to trait measure (Beck et al, 1961), gave the subjects a cognitive set of evaluating how they were feeling in the immediate present. In addition, the TSCS was thought to promote a systematic, extensive review of attitudes about the self in varying situations at the present time. This reflection on the part of the subject was considered desirable to obtain a more accurate measure of will. If the Will Measure had been administered first, a structured review of the present attitudes would probably not have occurred and could have led to a less accurate measure of strength of will.

After each subject in the group completed his packet, the subjects were reminded that they would be recontacted at which time they would receive experimental credit for their participation. The debriefing occurred within three weeks of the administration. This extension of time was necessary to enable the experimenter of another study to work with naive subjects. However, at the debriefing, the full purpose of the study was explained, any questions were answered and participants were given experimental credit.

CHAPTER III

Results

Only the data from participants who scored within the same category (high, medium, low) on the Beck Depression Inventory (BDI) on the second administration as they did on the first were used in the analyses. This procedure enhanced consistency in the data (Hammen, 1980).

SPSS one way analyses of variance were performed on the three BDI groups, comparing the scores of these groups on the Tennessee Self Concept Scale (TSCS) and the Will Measure. (see Table 1). Multiple comparisons were performed on the group means using Sheffé's test (Snedecor & Cochran, 1967).

Correlations were calculated for the following pairs of measures: the BDI with the TSCS, the BDI with the Will Measure and the TSCS with the Will Measure, across groups on the BDI and for each and for each group individually.

Table 1 Means and standard deviations on the Beck Depression Inventory (BDI), Tennessee Self-Concept Scale (TSCS) and the Will Measure for each low, medium and high depression group.

Group[a]	BDI	TSCS	Will Measure
low	$\overline{X}$=1.2381 SD=1.3002	$\overline{X}$=358.1905 SD=25.9954	$\overline{X}$=9.9524 SD=2.7654
medium	$\overline{X}$=6.5238 SD=1.3645	$\overline{X}$=338.9524 SD=22.3550	$\overline{X}$=9.7619 SD=1.9211
high	$\overline{X}$=15.2381 SD=5.7957	$\overline{X}$=291.9524 SD=28.8105	$\overline{X}$=11.4286 SD=2.8385

[a] *n*=21 for each group

There was a significant difference between BDI groups on the TSCS ($F=36.473$, $\underline{df}=2/60$, $p<.001$). In other words, self-esteem scores were different for the different levels of depression, as measured by the BDI. A Sheffé procedure was used to determine which of the three high, medium or low BDI groups significantly differed from each other in respect to the TSCS scores. A significant difference emerged between the mean of the low BDI group and the means of the medium and high BDI groups. That is, the group with low depression scores had significantly higher self-esteem as measured by the TSCS than did the other two groups. According to the Sheffé test, the groups scoring medium and high on depression did not differ significantly from each other.

No significant differences were found on the Will Measure comparing the three BDI groups.

There was a significant negative correlation between the TSCS and the BDI scores ($r=-.5189$, $\underline{df}=20$, $p<.01$) in the high-scoring BDI group ($n=21$). The higher the depression score was, the lower the self-esteem and vice versa in the high BDI group. Otherwise there were no additionally significant within group correlations between the Will Measure, TSCS and the BDI (see Table 2).

Combining the high, medium and low BDI groups, a significant correlation emerged between the BDI scores and the TSCS ($r=-.7617$, $\underline{df}=62$, $p<.001$). Subjects scoring high on depression scored low on the measure of self-esteem and vice versa. There was a low-order significant positive correlation between BDI scores and the Will Measure ($r=.2591$, $\underline{df}=62$, $p<.02$). In other words, those subjects scoring

high on depression also scored higher on the Will Measure than did their lower-scoring counterparts on the BDI (see Table 3).

Table 2 Correlations between the variables of depression (BDI), self-esteem (TSCS) and Will (Will Measure) for each depression group separately

Low BDI group (n=21)

	BDI	TSCS	Will Measure
BDI	1.0000	-.3254	.1702
TSCS		1.0000	.1490
Will Measure			1.0000

Medium BDI group (n=21)

	BDI	TSCS	Will Measure
BDI	1.0000	-.1368	.0454
TSCS		1.0000	.0032
Will Measure			1.0000

High BDI group (n=21)

	BDI	TSCS	Will Measure
BDI	1.0000	-.5189***	.1059
TSCS		1.0000	.1042
Will Measure			1.0000

***$p < .01$

No significant correlation was found between the TSCS and the Will Measure (see Table 3).

Table 3 Correlations between the variables of depression (BDI), self-esteem (TSCS) and Will (Will Measure) for all high, medium and low depression groups combined

	BDI	TSCS	Will Measure
BDI	1.0000	-.7617****	.2591**
TSCS		1.0000	-.1342
Will Measure			1.0000

****$p < .001$
** $p < .02$

In addition to the preceding tests of the main hypotheses, several other analyses were performed. A significant correlation was found across groups between the two components of the Will Measure, importance of the goal and strength of desire to accomplish the goal ($r = .7061$, *df*=62, $p < .001$). This means that the importance of the goal and the strength of desire to accomplish the goal the person had used were strongly related, indicating that the two dimensions overlapped and shared common variance.

The BDI scores across all groups were significantly related to the importance measure ($r = .2836$, *df*=62, $p < .02$), but not to strength of desire to accomplish the goal ($r = .1888$, *df*=62, n.s.). That is, the higher the depression score, the greater importance the person ascribed to the goal that was chosen (see Table 4).

Table 4 Correlations of the variables of desire to accomplish the goal, importance of the goal and depression (BDI)

	Desire	Importance	BDI
Desire	1.0000	.7061****	.1888
Importance		1.0000	.2836**
BDI			1.0000

****$p < .001$
** $p < .02$

Sex of the participant was correlated significantly to the BDI score ($r = .2347$, $df = 62$, $p < .05$). Females were represented more often in the higher depression categories than males. Findings of sex differences are quite common in depression (Weissman & Klerman, 1977).

CHAPTER IV

Discussion

The proposed model of the relationship between will, self-esteem and depression described earlier was only partially supported in the present investigation. There was a significant negative correlation between depression and self-esteem, as predicted, but a positive correlation between depression and will, contrary to predictions. The strongest correlation was between depression and self-esteem, not between depression and will as predicted.

Lower self-esteem was found in the depressed group, compared to the non-depressed group, confirming the prediction made. This has been a consistent result in empirical studies examining the two variables together (Beck, 1967; Chodoff, 1973; Wener & Rehm, 1975).

The preceding findings on self-esteem and its relationship to depression support the theories of Bibring (1953), Cohen et al (1954), Freud (1957) and Beck (1976).

Bibring saw loss of self-esteem as a central feature of depression, resulting from the ego's inability to meet it's vital aspirations. His model would predict that low self-esteem is closely related to depression. Similarily, Cohen et al (1954) postulated that failure in pre-depressives, leads to self-devaluation. This self-devaluation and consequent loss of self-esteem is not as central to their theory of depression as it is in Bibring's model, but it is an important link in the chain of cognitive events leading to depression. Therefore their model would predict the obtained results of lowered self-esteem in depression.

Freud (1957) saw loss of self-esteem in depression as a conse-

quence of the anger directed at the self after a perceived loss of the love object of the orally fixated individual. This loss of self-esteem is one of the end products of a depressive chain of events, following self-devaluation. Therefore his theory would predict the relationship found between self-esteem and depression in this study.

Beck's formulation (1967, 1976) of the etiology and maintenance of depression includes self-esteem as an important variable to be considered. He includes negative self-image as a part of the depressive's "cognitive triad", allowing the person to remain depressed. According to his formulation, this negative self-image is a permanent part of the cognitive organization of the individual, even though it may be dormant temporarily. Developmentally, a cycle is set up in which each negative self-judgement fortifies the negative self-image, which in turn facilitates a negative interpretation of subsequent experiences which further consolidates the negative self-concept. In depression, this negative self-concept emerges with great force and is maintained by the cognitive distortions the individual employs.

The learned helplessness theory of depression, although it does not deal with self-esteem directly, can accomodate the findings of the present study of lowered self-esteem in depression. Miller and Seligman (1973) and Hiroto and Seligman (1975) stated that depressed individuals have been exposed to an unusually large number of aversive, unpredictable situations in which they have little or no control. As a result of being exposed to these situations, depressed individuals

learn to perceive all their attempts at control as ineffectual. This perception of ineffectuality leads to self-devaluation as one of several consequences (Abrahamson, Seligman & Teasdale, 1978). Therefore their model would allow for the present findings on self-esteem in depression, even though they might not be willing to state it in terms of self-esteem per se.

Another writer's theory of depression, (Lewinsohn, 1976), does not deal directly with self-esteem, probably because he considers the concept to be at an unnecessarily high level of inference. His explanation that depressives are on an extinction schedule does not invoke any non-observable events, which is an exception to the theories mentioned above.

The findings obtained from the Will Measure are more difficult to interpret in relation to self-esteem and depression. Several possibilities exist. It would be an error to ignore that will might not contribute to the etiology and maintenance of depression, given the small correlation obtained between the Will Measure score and the depression score in the direction opposite to the prediction. The finding could be the result of a spurious association.

Particular methodological issues might also have a bearing on the results obtained. It would have been quite useful to include a more direct measure of the implied action component in the definition of will proposed in this study. The Will Measure assessed only two non-action components of will, desire to accomplish a goal and the importance of that goal to the individual. An assessment of actual movement towards the goal would have allowed the Will Measure to more

fully tap into the individual's will as expressed toward the particular goal.

The quality of the goal chosen may have affected the results obtained on the Will Measure. That is, if the subject had chosen an insignificant and specific goal, the will towards that goal might have been rated as relatively low, independently of the subject's mood, since it did not affect his life very much. On the other hand, a goal that involved unusual perserverence and whose accomplishment would have a major positive impact on the person's life might have been rated high on the Will Measure, regardless of the affective state. Therefore it might have been helpful to specify the type of goal to achieve greater standardization of responses to the Will Measure.

Another methodological consideration might be that the Will Measure was not inclusive enough of goals the individual has in the perceptual field. This measurement of additional goals might have elucidated the total motivational structure of the individual more completely, although this is not necessarily the case. The participants may have chosen only goals they felt reasonably confident about and might have been unwilling to reveal to others that they had not been as successful with so far, with the depressed individuals being particularilly reluctant to share goals that might have reflected unfavorably upon them. There is no way to assess this potential bias in the present study.

An additional possibility is that the Will Measure facilitated the review of past perceptions of the desirability and importance of

the goal chosen for the questionnaire. Even though the subjects were specifically instructed to choose a goal that they were concerned with at the present, goals with minimal present affect attached to them might have been selected. An estimate of past will might have been recorded. This may have been particularily true for the depressed group if one assumes that these individuals do not have many present goals toward which they are actively working to choose from due to their affective state. A more directly stated time dimension could be more rigorously designed into future instruments.

There is a chance that if more seriously depressed individuals would have been compared to the non-depressed group, entirely different results might have been obtained. A seriously depressed group may have obtained low Will Measure scores due to a much more complete withdrawal from the environment.

Among the methodological considerations discussed above, the issue of including a more direct measure of the action component in will can be dealt with further later on, as it appears to have a particular relevance to ascertaining the meaning of the data obtained in the present study.

The findings of this investigation can be related to several theories of depression aside from methodological considerations.

According to Bibring (1953), the depressive individual has high, rigid ego ideals that are hard to live up to. Seeing any goal as high in importance and having a great desire to accomplish it without actually going about doing it might increase the disparity between the pathological ego ideal and the person's perceived performance,

contributing to the lowering of self-esteem. According to Bibring, lowered self-esteem leads to depression.

In Cohen et al's formulation (1954), a similar line of reasoning might be employed. The perfectionistic expectations that the parents of pre-depressives foster in their children, and the emphasis on success and achievement in these families which is internalized by depressives, could lead to the results obtained in the present study. For these individuals all goals might be very important. They may want to achieve them all very badly, but they cannot accomplish them quickly and expertly. Such a cognitive set with the subsequent failure to reach at least some of the goals could lead to depression. This process could occur through a mechanism by which depressives set excessively high goals, perceive failure and anticipate rejection by the person with whom they have a critical dependency relationship. Anticipation of the potential loss of this object of dependence may lead to despair, self-devaluation and depression.

Beck (1967) clearly states that the depressed person suffers from a "paralysis of the will" (p. 27) and that such an individual interprets almost all experiences as a personal defeat, including experiences encountered while moving towards future goals. The depressed person attributes these defeats to some part of himself and regards himself as worthless because of it. Since this trait of worthlessness is seen as intrinsic to the individual, he sees no hope of changing it. The depressed person ceases any goal-directed activity, even of the simplest kind, expecting only failure and pain.

Beck does not speak of the importance the depressive attaches to

his goals as do other theorists, although he does mention a decreased or non-existent desire to accomplish any action. Therefore this theory would probably predict a lowered perception of will in depressed people, contrary to the findings in the present study. However, since the present study dealt only with mildly depressed individuals, it is difficult to say if the same trend would hold for seriously depressed individuals, from whom Beck obtained his data.

In the learned helplessness model that Seligman and his co-workers proposed (Miller & Seligman, 1973; Hiroto & Seligman, 1975), the depressed individual sees himself as helpless and has given up on exerting any influence on the world around him. According to this model, a trait-like system of expectancies that responding is futile predominates, preventing the person from seeing himself as causal. This formulation would allow for individuals who, although they desire a goal and consider it important, may not work toward it because of their perception of the environment as unaffected by their actions. Thus, although the learned helplessness theory does not address the issue of importance of a goal or a desire to achieve it, the results of the present study are not inconsistent with this theoretical framework, since only the depressive's perceived ability to act upon the environment is addressed by the model, not how much a person desires to accomplish something.

Since Freud considered an internalized love object upon which anger is expressed to be the central feature of depression, he did not deal directly with the aspect of will. However, since the anger expressed at the ego uses almost all the energy available to the

individual, according to Freud's formulation, insufficient energy would remain to be attached to accomplishing goals. Therefore, his theory might suggest that there would be a reduced desire to accomplish goals and a reduced importance attached to these goals. This could result in an outside or apparently objective perception of decreased will to accomplish a goal. However, Freud, like all of the preceding authors fails to specify clearly the nature of will as it relates to depression.

Drawing upon the above methodological considerations and theoretical perspectives, a revised hypothesis of the role of will in depression can be proposed.

The Will Measure did not assess the subject's likelihood of acting upon the stated goal, it assessed only two non-action aspects of will. If the action component had been measured, it might have shown that actual movement towards achieving the goal would have been less in depressed than non-depressed individuals, since decreased energy and withdrawal is an associated characteristic of depression (American Psychiatric Association, 1980). It is suggested that will in terms of desire and importance (non-action components) may even increase in less severe depressions and that will, in terms of actual action towards achieving a goal would decrease as depression increased. Beck's phrase "paralysis of the will" takes on a new meaning in this context. The will apparently remains intact, and in fact may increase, in terms of the desire for or the perceived importance of particular goals. Perfectionistic expectations and anticipation of rejection (Cohen et al, 1954), anticipation of failure (Bibring, 1953), and the

perceived intractibility of the environment (Miller & Seligman, 1973) all may serve to exacerbate this "paralysis of the will" in terms of action.

This "paralysis" may very well become a mechanism by which depression is maintained or increased. Attributing considerable importance to a goal that will probably not be reached and desiring this goal strongly attaches a strong affective valence to the attempt to accomplish the goal. If the action component of will is lacking, failure becomes likely and the individual may then feel angry, frustrated, guilty and/or depressed about this failure. In severely depressed individuals, will may be further eroded to include non-action components, resulting in apathy, anhedonia and other commonly cited symptoms of depression (Becker, 1976).

Which goal was chosen by the subject may interact with will, both non-action and action components. If a goal is chosen that is perceived as central to the dysphoric mood in a severely depressed person, will may be very low, both action and non-action components. On the other hand, the non-action component of will might be very high and the action component low in a mildly depressed individual. The level of depression might therefore affect the will towards a goal that is perceived as relatively central to the disorder in a much more direct and powerful manner, since this goal is seen as a focus of the depressive mood.

The actual content of the goals chosen by depressed and non-depressed individuals could have affected the results obtained on the Will Measure. Inspection of the data revealed that there may have

been differences in the quality of the goals chosen by the different groups. Accordingly, a post-hoc analysis of the data was designed to attempt to increase the objectivity of this visual inspection. Thus blind ratings of the goals on the dimensions of realism, generality and length of time to accomplish the goal were conducted with five expert judges (all third year graduate students in clinical psychology). These dimensions were chosen because of their potential clinical significance. To insure that no experimenter bias would enter into the rating process, the goals chosen by the three depression groups were listed randomly on the rating form and the raters were not aware of the hypotheses being tested. The only area in which experimenter bias entered was in the selection of the variables to be assessed in relation to the goals.

However, the data must be interpreted with extreme caution due to it's post-hoc nature. It is only included here as a possible springboard for further research.

Significant results for two of the dimensions, length of time to accomplish the goal and generality of the goal were obtained.

Only length of time to accomplish the goal was significantly different between BDI groups in a one way analysis of variance ($F=3.757$, $df=2/60$, $p<.05$). Using a Sheffé procedure to make multiple comparisons, the results obtained indicated that the medium BDI group's goals took significantly less time than the high depression group's goals.

The results obtained on the length of time to accomplish the goal are difficult to interpret unless one considers that the mean for the

low depression group nearly reached significance in the comparison with the medium depression score group. The mean low depression group score was quite close to that of the high depression group. Even though interpretation of nonsignificant trends is potentially misleading, the results provide some suggestive evidence that the time dimension might have been a relevant variable on which the three depression groups differed. If an individual is in a positive affective state, he may be able to realistically choose long-term goals to work toward in the present and feel he can achieve them. On the other hand, individuals further down the continuum toward a negative affective state (the medium depression group) may need to choose goals that are more short-term so that they do not feel overwhelmed in attempting to accomplish these goals. On the depressed end of the affective continuum, a reversal of the trend towards more short-term goals may be occurring, due to depressive mechanisms. Unrealistic expectations (Cohen et al, 1954) characteristic of depressives may lead to a choice of goals whose accomplishment lies in the distant future. A perception of failure becomes more likely, since it takes more perserverence over time to achieve such a goal and since depressives tend to stop acting on their environment (Seligman, 1980). In that sense Bibring's (1953) postulated anticipation of failure in depressives is realistic, since they perceive any attempts toward influencing the environment as futile, and therefore will not act upon their goals, and not reach them.

In addition to the results obtained on the length of time to achieve the goal, there was a significant correlation between the Will Measure

and the rated generality of the goal ($r=.2432$, $df=62$, $p<.05$). That is, as the goal became more general, the amount of perceived will to accomplish the goal increased as measured by the desire to accomplish it and the importance of the goal to the person.

A similar argument can be made for these results as for the results on the time dimension of the goal. Considering the results obtained on the ratings of the generality of the goals chosen by the different depression groups, as the non-action components of will become stronger, the goal will become more general. The non-depressed individual can probably realistically work towards such a general goal and therefore has a relatively high desire to accomplish the goal and considers the goal quite important, to allow him to go about reaching it. The depressed individual, with a high non-action component of will but with the action component missing, will not reach a general and therefore relatively major goal, allowing him to be depressed.

The obtained results of the content of the goals listed by depressed and non-depressed individuals suggests that it might be quite useful to conduct further research to determine which dimensions, if any, differentiate the goals chosen by individuals on a depressive continuum, using more goals and more raters to improve reliability and consistency of the results. Such differences in goals could lead to the further clarification of mechanisms initiating and maintaining depression.

The possibilities mentioned could be investigated further, allowing for confirmation of a specific depressive mechanism that has

not been described previously, especially if the Will Measure can be refined to include an action component and the goals obtained on the Will Measure can be examined more closely. It would also be quite useful to investigate the possibility of such a depressive mechanism in different populations, in particular severely depressed individuals, perhaps a hospitalized sample with the primary diagnosis of depression, to assess the relationship of the action and non-action components of will to self-esteem and the depth of depression and the role goals these individuals have played in maintaining their depression.

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APPENDIX A

BECK DEPRESSION INVENTORY

On this questionaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

BECK INVENTORY

Name____

Date____

7 ( ) 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

8 ( ) 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

9 ( ) 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

10 ( ) 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

11 ( ) 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

12 ( ) 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

13 ( ) 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

14 ( ) 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

15 ( ) 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

16 ( ) 0 I don't cry anymore than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

17 ( ) 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

18 ( ) 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

19 ( ) 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

20 ( ) 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

21 ( ) 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

22 ( ) 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

23 ( ) 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

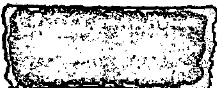
24 ( ) 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

25 ( ) 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less. Yes___No___

26 ( ) 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems, that I cannot think about anything else.

27 ( ) 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.



APPENDIX B

TENNESSEE SELF CONCEPT SCALE

INSTRUCTIONS

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put and X mark through the response and the circle the response you want.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a circle around the response number you have chosen for each statement.

	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
Responses-	1	2	3	4	5

You will find these response numbers repeated at the bottom of each page to help you remember them.

	Item No.
1. I have a healthy body	1
3. I am an attractive person	3
5. I consider myself a sloppy person	5
19. I am a decent sort of person	19
21. I am an honest person	21
23. I am a bad person	23
37. I am a cheerful person	37
39. I am a calm and easy going person	39
41. I am a nobody	41
55. I have a family that would always help me in any kind of trouble	55
57. I am a member of a happy family	57
59. My friends have no confidence in me	59
73. I am a friendly person	73
75. I am popular with men	75
77. I am not interested in what other people do	77
91. I do not always tell the truth	91
93. I get angry sometimes	93

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

	Item No.
2. I like to look nice and neat all the time	2
4. I am full of aches and pains	4
6. I am a sick person	6
20. I am a religious person	20
22. I am a moral failure	22
24. I am a morally weak person	24
38. I have a lot of self-control	38
40. I am a hateful person	40
42. I am losing my mind	42
56. I am an important person to my friends and family	56
58. I am not loved by my family	58
60. I feel that my family doesn't trust me	60
74. I am popular with women	74
76. I am mad at the whole world	76
78. I am hard to be friendly with	78
92. Once in a while I think of things too bad to talk about	92
94. Sometimes, when I am not feeling well, I am cross	94

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

Statement	Item No.
7. I am neither too fat nor too thin....................................	7
9. I like my looks just the way they are....................................	9
11. I would like to change some parts of my body....................................	11
25. I am satisfied with my moral behavior....................................	25
27. I am satisfied with my relationship to God....................................	27
29. I ought to go to church more....................................	29
43. I am satisfied to be just what I am....................................	43
45. I am just as nice as I should be....................................	45
47. I despise myself....................................	47
61. I am satisfied with my family relationships....................................	61
63. I understand my family as well as I should....................................	63
65. I should trust my family more....................................	65
79. I am as sociable as I want to be....................................	79
81. I try to please others, but I don't overdo it....................................	81
83. I am no good at all from a social standpoint....................................	83
95. I do not like everyone I know....................................	95
97. Once in a while, I laugh at a dirty joke....................................	97

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
8.	I am neither too tall nor too short	8
10.	I don't feel as well as I should	10
12.	I should have more sex appeal	12
26.	I am as religious as I want to be	26
28.	I wish I could be more trustworthy	28
30.	I shouldn't tell so many lies	30
44.	I am as smart as I want to be	44
46.	I am not the person I would like to be	46
48.	I wish I didn't give up as easily as I do	48
62.	I treat my parents as well as I should (Use past tense if parents are not living).	62
64.	I am too sensitive to things my family say	64
66.	I should love my family more	66
80.	I am satisfied with the way I treat other people	80
82.	I should be more polite to others	82
84.	I ought to get along better with other people	84
96.	I gossip a little at times	96
98.	At times I feel like swearing	98

Responses -	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
13.	I take good care of myself physically....................................	13
15.	I try to be careful about my appearance..................................	15
17.	I often act like I am "all thumbs".......................................	17
31.	I am true to my religion in my everyday life.............................	31
33.	I try to change when I know I'm doing things that are wrong..............	33
35.	I sometimes do very bad things...	35
49.	I can always take care of myself in any situation........................	49
51.	I take the blame for things without getting mad..........................	51
53.	I do things without thinking about them first............................	53
67.	I try to play fair with my friends and family............................	67
69.	I take a real interest in my family......................................	69
71.	I give in to my parents. (Use past tense if parents are not living).........	71
85.	I try to understand the other fellow's point of view.....................	85
87.	I get along well with other people.......................................	87
89.	I do not forgive others easily...	89
99.	I would rather win than lose in a game...................................	99

Responses -	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
14.	I feel good most of the time	14
16.	I do poorly in sports and games	16
18.	I am a poor sleeper	18
32.	I do what is right most of the time	32
34.	I sometimes use unfair means to get ahead	34
36.	I have trouble doing the things that are right	36
50.	I solve my problems quite easily	50
52.	I change my mind a lot	52
54.	I try to run away from my problems	54
68.	I do my share of work at home	68
70.	I quarrel with my family	70
72.	I do not act like my family thinks I should	72
86.	I see good points in all the people I meet	86
88.	I do not feel at ease with other people	88
90.	I find it hard to talk with strangers	90
100.	Once in a while I put off until tomorrow what I ought to do today	100

Responses–	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

APPENDIX C

WILL MEASURE

Many times we have things which we want to accomplish, but we temporarily say to ourselves that maybe we should put it off for a while. Pick a goal that has been on your mind for some time, but you just haven't gotten around to giving the goal very much thought. Make sure that you exclude any goals which you have nearly completed. Please take your time and choose a goal which clearly fits the above qualifications. Please indicate that goal in one sentence or less:

Goal:____

You have probably thought of other things you would like to accomplish before you wrote in your goal. Try to think about some of your other goals and their value to you. Take your time.

We want you to estimate on the scale below how strongly you feel you would like to accomplish the goal you wrote on the previous page. In other words, you are comparing the strength of your desire to achieve the goal written on the first page with any number of other goals you might wish to accomplish. Make an X at the appropriate place on the line.

STRENGTH OF DESIRE TO ACCOMPLISH GOAL LISTED ON FIRST PAGE

little desire to accomplish	very strong desire to accomplish

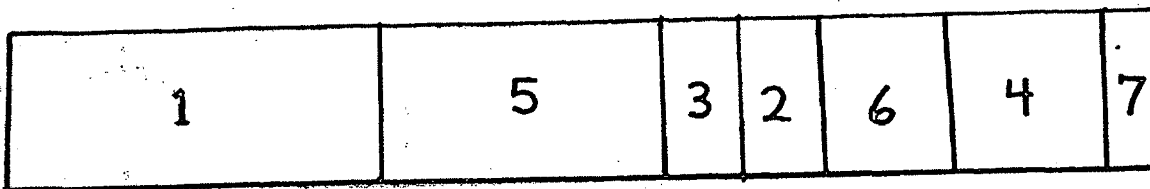
Now that you have figured out a goal and the amount of desire to accomplish that goal, we would like you to keep that same goal in mind as you begin the next task.

Even though we all have goals, many times we discover in our planning that there may be more than one possible outcome for that goal. For example, if one's goal was to seek employment, he might have one outcome, of finding the "perfect" job. Another outcome might be not finding any job. Another might be having to wait to start work for several weeks. Other outcomes could be finding a job you didn't like very well, etc. Thus, for most goals there are several possible outcomes, positive and negative. We want you to take your time again and try to think of a variety of possible positive and negative outcomes for the goal you stated earlier.

Please go to the next page. . .

Write each of the possible outcomes in the space provided below. Make sure you number your outcomes and put a - or a + sign by your respective outcomes to indicate if the outcome fits in the negative outcome category or the positive outcome category:

Below is a column which can be divided into different size segments. The following example illustrates how different likely outcomes can be represented by sections of the column. Let's consider the likely outcomes for finding employment. In this case we have seven (7) possible outcomes listed.



The most likely outcome was number one, represented by the largest segment, about 1/3 of the column. In other words, it's likelihood of occurrence is about 33% of the time compared to the other outcomes. Similarily, the second most likely outcome was number five and it is 1/4 of the total space or it's likelihood of occurrence is about 25% of the time. Number three is about 1/16 of the total and thus it's likelihood of occurrence is about 6% of the time as compared to the other outcomes. Go down to the category number seven which occupies about 1/32 of the space or is likely to occur about 3% of the time.

Getting back to the task, re-read each of your <u>likely outcomes</u> on page 4 and think about how they fit into the column. Again, take your time. Try to draw vertical lines which will divide the column in terms of the amount of likelihood of each outcome's occurrence as compared against all of the others.

Start with your most likely outcome and draw in a segment (portion) which represents it's likelihood of occurrence in comparison with all the other outcomes you have listed. Continue on with each of the outcomes you have listed until they have used up the entire column. Make sure you number each segment as it is numbered on your list. See page 4. Please feel free to erase and rearrange the segments to correctly represent the portion you want them to.

You are now nearly finished with the experiment. The next task will allow you the opportunity to reflect upon the importance of your stated goal to you.

Again, take another look at the column and all of the possible outcomes you have indicated. Please write your goal as stated on page 1 again:

Goal: ____

Now please estimate how important this goal is to you, considering the other goals you have. Make an X at the appropriate place on the line:

IMPORTANCE OF GOAL

|___|___|___|___|___|___|___|

little importance — considerable importance