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SELF-DISCREPANCIES, DEPRESSION PRONENESS,
AND CURRENT MOOD STATE:
A TEST OF HIGGINS' AND OGILVIE'S THEORIES

A Thesis Submitted to the College of
Graduate Studies and Research
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in the Department of Psychology
University of Saskatchewan
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By
Shannon Lee Baskerville
Summer 1999

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SUMMARY OF DISSERTATION
Submitted in partial fulfillment
of the requirements for the

DEGREE OF DOCTOR OF PHILOSOPHY

by

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Self-Discrepancies, Depression Proneness, and Current Mood State: A Test of Higgins’ and Ogilvie’s Theories

Higgins (1987) argued that perceived discrepancies between actual-self and ideal-self increase vulnerability to depression. Ogilvie (1987) argued that discrepancies between actual-self and undesired-self are more powerful determinants of depression. To test these claims, and to assess the effects of mood on reported discrepancies, 190 psychology undergraduates completed measures of their actual, ideal, and undesired selves, along with measures of depression (Depression Adjective Checklist and Beck Depression Inventory) and depression proneness (Depression Proneness Rating Scale). Approximately 3 weeks later, 147 of these participants were assigned to either a positive, negative, or no mood induction procedure, and again completed measures of actual, ideal, and undesired selves.

Actual-ideal discrepancies were associated with current depression ($r = .19, p = .008$) and with depression proneness ($r = .28, p = .001$). More importantly, the relationship between actual-ideal discrepancies and depression proneness was, to some extent, independent of current mood, as measured by the DACL (partial $r = .19, p = .008$). Nevertheless, induced moods also affected the reporting of actual-ideal discrepancies, with negative mood induction increasing discrepancy scores and positive mood induction decreasing discrepancy scores ($\beta = .49, p < .0005$). The above results are qualified by finding that when induced into a negative mood, high depression-prone participants (those with a history of depression) showed greater increases in
actual-ideal discrepancies than low depression-prone participants, suggesting that self-discrepancies are cognitive structures that can be made accessible (primed) by mood. Lastly, no support was found for Ogilvie's claim that actual-undesired self discrepancies can be more powerful determinants of depressive vulnerability than actual-ideal self-discrepancies.

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Abstract

Higgins (1987) argued that perceived discrepancies between actual-self and ideal-self increase vulnerability to depression. Ogilvie (1987) argued that discrepancies between actual-self and undesired-self are more powerful determinants of depression. To test these claims, and to assess the effects of mood on reported discrepancies, 190 psychology undergraduates completed measures of their actual, ideal, and undesired selves, along with measures of depression (Depression Adjective Checklist and Beck Depression Inventory) and depression proneness (Depression Proneness Rating Scale). Approximately 3 weeks later, 147 of these participants were assigned to either a positive, negative, or no mood induction procedure, and again completed measures of actual, ideal, and undesired selves.

Actual-ideal discrepancies were associated with current depression ($r = .19$, $p = .008$) and with depression proneness ($r = .28$, $p = .001$). More importantly, the relationship between actual-ideal discrepancies and depression proneness was, to some extent, independent of current mood, as measured by the DACL ($r = .19$, $p = .008$). Nevertheless, induced moods also affected the reporting of actual-ideal discrepancies, with negative mood induction increasing discrepancy scores and positive mood induction decreasing discrepancy scores ($\beta = .49$, $p < .0005$). The above results are qualified by finding that when induced into a negative mood, high depression-prone participants (those with a history of depression) showed greater increases in
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INTRODUCTION

Psychologists have long been interested in how conflicts or inconsistencies among different aspects of the self can lead to emotional difficulties. James (1948), for example, suggested that people feel disappointed when their achievements do not match their aspirations. Freud (1961) argued that conflicts among the Id, Ego, and Superego, cause emotional discomfort. Rogers (1961) related inconsistencies between the actual self ("self as now") and the idea self (the self a person would like to be) to the emergence of emotional distress. In the last decade, a promising new theory with close ties to this historical tradition has emerged. As the proponent of this theory, Higgins (1987; 1989b; 1990) argues that to understand the different emotional vulnerabilities experienced by different people, one must go beyond simply examining people's conception of their current attributes. Instead, one must explore and examine the patterns of people's various self-beliefs. According to this theory, called the self-discrepancy theory, distinct discrepancies among people's self-beliefs are associated with particular types of emotional distress. Of interest to this study is Higgins' claim that discrepancies between people's perceptions of who they actually are and who they would ideally like to be are important determinants of depression.

Although Higgins and his colleagues have provided impressive empirical evidence for the various theoretical predictions revolving around the importance of self-discrepancies, the apparent instability of subjects' self-reported attributes
raises serious questions about the nature and accessibility of these self-discrepancies. One of the goals of the present study was to help answer some of these questions by examining the effect of mood on self-reports of actual and ideal attributes.

Another goal of the present study was to test Ogilvie’s (1987) claim that Higgins’ emphasis on the discrepancy between the actual-self and ideal-self in understanding depression is misplaced. Although some preliminary evidence suggests that the discrepancy between the actual-self and the undesired-self is a more potent predictor of vulnerability to depression than Higgins’ proposed discrepancy between the actual-self and the ideal-self, further tests of Ogilvie’s undesired-self hypothesis are needed.

The self-discrepancy theory and relevant empirical work will be reviewed in the following section, followed by a review of Ogilvie’s undesired-self theory.

**Self-Discrepancy Theory**

**Overview of the Self-Discrepancy Theory**

Higgins’ self-discrepancy theory (1987; 1989b) which proposes links between people’s discrepant self-beliefs and emotional discomfort has three main propositions. First, Higgins proposes that particular types of self-discrepancies are associated with specific emotional problems and that the greater the magnitude of the discrepancy, the greater the resulting emotional distress will be. Second, Higgins postulates that a self-discrepancy is a cognitive structure (like a schema) and the likelihood that it will produce emotional distress
depends on its level of accessibility. Third, Higgins argues that self-
discrepancies, as cognitive structures, are stable across time. These theoretical
propositions and other integral components of the theory will be reviewed in
more detail in the following subsections.

**Domains and Standpoints on the Self**

The self-discrepancy theory postulates that emotional vulnerabilities are produced by the relations among individuals’ representations of different types of self-states (Higgins, 1987; Higgins, 1989b; Higgins, 1990). To distinguish among different types of self-state representations, self-discrepancy theory proposes two underlying psychological dimensions: domains of the self and standpoints on the self. In the original version of the theory (Higgins, 1987), three types of self-domains were identified: (1) the actual self, which is a person's representation of the attributes that someone (self or other) believes the person actually possesses; (2) the ideal self, which is the person's representation of the attributes that someone (self or other) would ideally like the person to possess; and (3) the ought self, which is a person's representation of the attributes that someone (self or other) believes the person has a duty or obligation to possess. Two types of standpoints on the self were also identified: (1) a person’s own personal standpoint; and (2) the standpoint of some significant other (e.g., parent, spouse, close friend).

Self-discrepancy theory proposes that combining each of the different types of self-domains with each of the different types of standpoints on the self
yields six basic types of self-state representations: actual/own, actual/other, ideal/own, ideal/other, ought/own, and ought/other. According to Higgins, the first two self-state representations, comprise what is typically discussed in the psychological literature as a person’s self-concept, while the latter representations are self-guides. Self-guides are standards by which the actual self is evaluated.

**Proposition 1: Types of Self-Discrepancies and Quality of Discomfort**

The self-discrepancy theory postulates that people are motivated to reach a place where their self-concept matches their self-guides (Higgins, 1987; Higgins, 1989b). Consequently, the theory assumes that each type of self-discrepancy (or self-concept: self-guide mismatch) reflects a particular type of negative psychological situation that is associated with specific emotional problems. Higgins' and colleagues' early work distinguished between actual:ideal (AI) discrepancies and actual:ought (AO) discrepancies (Higgins, 1987; 1989b; Higgins, Bond, Klein, & Strauman, 1985; Higgins, Klein, & Strauman, 1985; Strauman, 1989; Strauman & Higgins, 1987; 1988). According to Higgins, the AI discrepancy involves a condition in which the current state of an individual's attributes do not match the ideal state that someone (self or other) wishes that individual to attain. Therefore, an AI discrepancy represents the negative psychological situation of the absence of positive outcomes (i.e., not actualizing one's hopes or wishes). Consequently, the individual is predicted to be vulnerable to dejection-related emotions such as sadness and
disappointment. Whereas, an AO discrepancy involves a condition in which the current state of the individual's actual attributes does not meet the state that someone (self or other) believes is the individual's duty or obligation to fulfil. Higgins (1987; 1989b) suggests that because violation of proscribed duties and obligations is associated with sanctions or punishment, this discrepancy represents the negative psychological situation of the presence of negative outcomes. Consequently, the individual is predicted to be vulnerable to agitation-related emotions such as fear and anxiety.

Evidence for Proposition 1. Both correlational (Avants, Singer, & Margolin, 1993-94; Higgins, Klein, & Strauman, 1987; Scott & O'Hara, 1993; Strauman, 1989; Strauman & Higgins, 1988) and experimental (Higgins, Bond, Klein, & Strauman, 1986; Strauman, 1992; Strauman & Higgins, 1987) studies in analog and clinical samples support the contention that AI and AO discrepancies are causally linked with dysphoric and anxious states, respectively. The experimental studies are not reviewed here but are included in the next subsection.

In an initial test of the theory, Higgins, Klein, & Strauman (1985) examined the correlations between AI versus AO discrepancy and questionnaire items concerning negative emotions. Undergraduates filled out the Selves Questionnaire, which was developed by the researchers to measure the intensity and quality of self-discrepancies, as well as a variety of questionnaires that measure various kinds of emotional problems (i.e., Beck Depression Inventory,
Blatt Depressive Experiences Questionnaire, Hopkins Symptom Checklist, and the Emotions Questionnaire, which is a modified version of the Multiple Affect Adjective Checklist). After defining the actual, ideal, and ought self-states, the Selfes Questionnaire asked participants to spontaneously list up to 10 words to describe the attributes they believe they actually, ideally, and ought to possess. The questionnaire was administered in two sections, the first involving the respondent's own standpoint and the second involving the standpoint of the respondent's significant others. This idiographic approach was used, as opposed to a forced choice checklist, to increase the likelihood that personally important and accessible attributes would be obtained.

Discrepancy scores were then calculated for each self-guide. To calculate a self-discrepancy score, the attributes that the individual listed to describe his or her actual self were compared with the attributes describing the self-guides to determine which attributes were synonyms and which were antonyms, according to Roget's thesaurus. The total number of attribute pairs that matched (i.e., synonyms) were subtracted from the total number of attribute pairs that mismatched (i.e., antonyms). Zero-order and partial correlations were then performed to examine the relation between various emotional symptoms and the different kinds of AI discrepancies and AO discrepancies. The results indicated that the various self-discrepancies were highly intercorrelated (.53 to .76). The results also indicated that the magnitude of the overall AI discrepancy (created by combining subjects' actual/own-ideal/own discrepancy and
actual/own-ideal/other discrepancy) was uniquely related to items involving dejection-related emotions and symptoms (e.g., dissatisfied, ashamed, helpless). Additionally, the magnitude of the overall AO discrepancy (created by combining subjects' actual/own-ought/own discrepancy and actual/own-ought/other discrepancy) was uniquely related to questionnaire items tapping agitation-related emotions and symptoms (e.g., guilty, irritated, suddenly scared for no reason).

In sum, the results of this correlational study supported the proposition that different kinds of emotions and symptoms are associated with different kinds of self-discrepancies. Specifically, dejection-related emotions were shown to be associated more strongly with AI discrepancies than with AO discrepancies, whereas agitation-related emotions were demonstrated to be associated more strongly with AO discrepancies than with AI discrepancies.

With further correlational work, Strauman and Higgins (1988) examined two types of self-discrepancies differing in both domain and standpoint of self-guide as predictors of vulnerability to chronic emotional syndromes. Study 1 examined the difference between AI discrepancies and AO discrepancies in predicting syndromes of dejection, agitation, and anger. Two modifications of Higgins et al. (1985) study were included in this study. First, the study assessed subjects' chronic emotional status two months after evaluating subjects' self-discrepancies. Strauman and Higgins argue that this procedure allowed a test of the stability of the predicted associations over time. Second, they derived
empirically based subscales reflecting distinctive kinds of emotional distress to use as multi-item measures to replace the item-by-item analyses performed by Higgins et al. (1985). In order to obtain homogeneous measures of the two emotional syndromes, they chose to select items from among four emotions/symptoms questionnaires (the BDI, Blatt, HSCL, and the Emotions Questionnaire), to form a priori emotional cluster scales. Each author independently selected items from the four scales that represented a "disappointment/dissatisfaction" or "fear/restlessness" emotional syndrome. Two distinct sets of five items were identified in this manner.

The administration and scoring of the Selves Questionnaire was also modified in this study on the basis of both theoretical precedent (Higgins, 1987) and empirical validation (Higgins, Bond, Klein, & Strauman, 1986). In addition to listing attributes for various self-state representations, participants were also asked to rate the extent to which they or their most relevant other believed they actually possessed, ideally possessed, or ought to possess each attribute they listed. The four-point rating scale ranged from 1 (slightly) to 4 (extremely). The addition of this rating scale to the Selves Questionnaire allowed distinctions to be made when calculating discrepancies. True matches were seen as synonymous attributes that have a rating that varies by no more than one point scale. Synonymous mismatches existed where synonymous attributes vary by two or more scale points (e.g., actual/own: slightly intelligent vs. ideal/own: extremely intelligent) whereas a true mismatch contained antonyms (e.g., actual/own:
stupid vs. ideal/own: extremely intelligent). In order to reflect the degree of mismatch, synonymous mismatches were given a weight of 1 whereas antonymous mismatches were given a weight of 2. Synonymous matches were given a weight of -1.

The results demonstrated that AI was related to dejection, frustration, and anger at self as measured two months later, while, AO was related to agitation and to anger at others and resentment. Study 2 used structural equation modelling to test the relations between AI and AO discrepancy and social anxiety versus depression as measured weeks later. A model in which AO was more strongly associated with social anxiety and AI was more strongly associated with depressive symptoms provided the best fit.

In sum, once again, the results of this correlational study supported the proposition that different kinds of discrepancies between the actual self and relevant self-guides for self-evaluation render individuals vulnerable to different negative emotional states. Again, AI was associated with dejection-related emotions and symptoms whereas AO was associated with anxiety-related emotions and symptoms.

Most of the studies reviewed so far used university students to test Higgins’ self-discrepancy theory. To determine whether self-discrepancies are linked to extreme levels of chronic emotional problems, Strauman (1989) administered measures of depression, social anxiety, and self-discrepancy to samples of normal undergraduates, clinically diagnosed depressed patients, and
clinically diagnosed social phobic patients. The critical prediction of the study was that depressed patients should manifest greater magnitude of AI discrepancy than social phobics or controls while social phobics should manifest greater magnitude of AO discrepancy than depressed patients or controls. These predictions were confirmed. Consequently, Strauman argued that the hypothesized relations between self-beliefs and emotional/motivational vulnerabilities hold for clinical populations as well.

Most of the evidence for the first proposition of the self-discrepancy theory has been produced from Higgins' and his colleagues' research laboratories. Confidence in the validity of self-discrepancy theory would be bolstered in important ways if independent investigators were to find support for the theory in their own research. Some such independent investigations have been completed. Scott and O'Hara (1993) examined self-discrepancies in four groups of university students who were identified by the following disorders: depression, anxiety, both anxiety and depression, and normal. Subjects were recruited by the use of diagnostic interviews. All subjects completed the Selves Questionnaire at the time of their diagnostic interview and then returned approximately one month later to complete the Selves Questionnaire a second time. As predicted, depressed subjects (depressed and depressed-anxious) groups had higher levels of AI discrepancies than nondepressed subjects (anxious and normal groups). Anxious subjects (with and without depressive disorders) had higher levels of AO discrepancies than nonanxious groups
(normal and depressed-only groups). Overall, these results provide additional support for the proposition that different patterns of self-beliefs are related to particular emotional vulnerabilities.

The self-discrepancy theory has also recently been applied to the research area of addictions (Avants, Singer, & Margolin, 1993-94). The current study applied Higgins' theory to a clinical population of cocaine dependent patients. According to these researchers, depression appears to be frequently found in cocaine abusers. Given the predominance of dejection-related emotions experienced by cocaine users, these researchers predicted that, in line with self-discrepancy theory, cocaine users would have higher AI discrepancies than methadone-maintained patients and that they would have higher AI discrepancies than AO discrepancies. Both of these hypotheses were supported providing further support for the proposition that different patterns of self-beliefs are related to particular emotional vulnerabilities.

To summarize, the correlational studies reviewed in this subsection appear to support the first proposition of Higgins' theory that particular self-discrepancies are related to specific qualities of emotional distress. More specifically, research has demonstrated, both in Higgins' and his colleagues laboratories and in other independent laboratories, that dejection-related problems are associated more strongly with AI discrepancies than with AO discrepancies. Whereas, agitation-related emotions are associated more with AO discrepancies than with AI discrepancies. These patterns appear to hold for
both non-clinical and clinical samples. Some of the experimental studies reviewed in the next subsection, which were designed to test the second proposition of Higgins’ theory, also provide strong evidence that specific self-discrepancies are not only associated with particular emotional states but that AI and AO discrepancies are contributing causes to dysphoric and anxious states, respectively.

This paper will now examine another fundamental proposition of self-discrepancy theory concerning the structural interconnectedness of self-discrepancies.

**Proposition 2: Self-Discrepancies as Cognitive Structures**

Self-discrepancy theory (Higgins, 1987; 1989b) posits that a discrepancy between an individual’s actual-self and self-guide (ideal-self or ought-self) forms a schematic structure which, when primed or otherwise made accessible to the individual, can produce emotional distress. Thus, self-discrepancies are viewed as stable cognitive structures that are always “available” but not necessarily “accessible.” In elaborating on the process by which self-discrepancies become schematic structures, Higgins, Van Hook, and Dorfman (1988) argue that it is reasonable to assume that individuals are likely to pay attention to and mull over the self-attributes which are causing them emotional discomfort (that is, the self-attributes which comprise their self-discrepancies). They argue that people would attend to such problematic self-attributes in an effort to resolve the evaluative inconsistency. Consistent rumination on these problematic self-
attributes would, in time, lead to structural interrelationships. Higgins (1987; 1989b; 1989c) also argues that this available structure, when activated or made more accessible, leads to the emergence of a specific emotional response tied in an associative network to these discrepancies. According to Higgins' developmental theory (Higgins, 1989a; Higgins, Strauman, & Klein, 1986), these structural interconnections arise from particular caretaker-child interactions. Higgins proposes then, that the greater the accessibility of an available self-discrepancy, the more the individual will suffer the kind of discomfort associated with that type of self-discrepancy. Higgins and his colleagues have provided various empirical evidence to support the premises of structural interconnectedness and accessibility, which will be examined in the following subsection.

**Evidence in support of Proposition 2.** To test whether actual/own self attributes themselves form a cognitive structure similar to that of underlying semantic memory, Higgins, Van Hook, & Dorfman (1987) conducted three related studies. In each study, alleged to be examining the Stroop interference effect, undergraduates were presented with a series of slides of target words printed in different coloured inks and were asked to name the colour of each word as quickly as possible. Prior to each slide, subjects were given a memory-load word that they repeated back after naming the colour of the target word. The critical experimental manipulation was the relation between the memory-load word, which functioned as a prime, and the target word. In each study, self-
related targets were primed either by self-related traits or by self-unrelated traits, and object category targets were primed either by semantically related categories or by semantically unrelated categories. According to Higgins and his colleagues, in this modified Stroop paradigm, structural interconnectedness among category attributes, where self-attributes would form one category, should produce slower response times for prime-target category pairs. This response pattern should occur because when the prime word and the target word are interconnected members of the same category, exposure to the prime word should automatically increase the accessibility of the target's word's meaning, which would make it difficult for subjects to attend to only the colour of the target word and ignore its meaning.

In all three studies, the colour-naming response times were slower for semantically related object category pairs than for semantically unrelated pairs, but response times did not generally differ for self-related versus self-unrelated pairs thus providing no evidence of general interconnectedness among self-attributes. In Study 3, however, they found evidence of structural organization around subjects' self-discrepancies. Specifically, colour-naming response times were significantly slower for self-attributes pairs involving a mismatching attribute (i.e., an actual/own attribute that was discrepant from one of the individual's self-guides) than for self-attribute pairs without a mismatching self-attribute. Thus, this study demonstrated, in line with Higgins' proposition, that the attributes which comprise self-discrepancies appear to be structurally interconnected.
In another test of the structural nature of self-discrepancies, Strauman (1992) examined the information-processing effects of self-guides. Strauman argued that self-guides provide a framework for organizing and obtaining access to autobiographical knowledge because they are linked in memory with representations of childhood experiences. Anxious, dysphoric, anxious/dysphoric and control subjects participated in three procedures over a four month period: screening, assessment of self-guides and self-discrepancies, and an autobiographical memory task. In the latter task subjects were presented with different types of retrieval cues and then asked to report childhood memories as they came to mind. A set of cues was prepared in advance for each subject, which were based, in part, on the subject's responses during the assessment phase. Four classes of cues were included: self-guide cues, checklist cues, yoked-control cues, and affect cues. In accordance with self-discrepancy theory, predicted group differences for each type of discrepancy was obtained. The two high-dysphoric groups manifested significantly more AI discrepancy than did the low-dysphoric groups whereas the two high-anxious groups showed significantly more AO discrepancy than did the two low-anxious groups. The results also demonstrated that self-guide cues led to more efficient retrieval of childhood memories and greater unintended negative emotional content than the three types of control cues. According to Strauman, the most notable finding was that the groups were reliably distinguished only by their responses to self-guide cues. The emotionally distressed subjects did not
manifest a general tendency to recall memories with more negative content. Differences in the anxious and dysphoric content of the memories were observed only in response to self-guide cues. Strauman argues that these results are consistent with the notion that self-discrepancies are cognitive structures.

According to Higgins (Higgins & Tykocinski, 1992), a stronger case could be made for self-discrepancy as a cognitive structure if it could be demonstrated that it influences the processing of all incoming information - not only information related to one's own hopes and obligations. Consequently, to determine whether the possession of different types of self-discrepancies makes one sensitive to different types of situations as is evident in memory for another person's experience, Higgins and Tykocinski (1992) had participants read about a target person who experienced events reflecting different types of psychological situations (e.g., the presence of positive outcomes or the absence of negative outcome). The target person's experiences were circumstantial and not personality related (e.g., finding money on the street or escaping an unpleasant school day because of an election). Participants were divided into two groups: predominant AI discrepancy (high AI discrepancy and low AO discrepancy) and predominant AO discrepancy (high AO discrepancy and low AI discrepancy). Higgins and Tykocinski predicted that events that reflected the presence and absence of positive outcomes should be remembered better by predominant AI than by predominant AO persons, whereas the reverse should be true for events that reflect the absence and presence of negative outcomes. These predictions
were confirmed. The results of this study support the proposal of self-discrepancy theory that the pattern of interrelations among individual's actual-self attributes and self-guide attributes (i.e., their self-discrepancies) create a cognitive structure that influences the processing of incoming information - even when that information is related to another person's experience.

Higgins (1987; 1989b) also predicted that if a self-discrepancy is a cognitive structure composed of the relations between self-state representations, then it may be sufficient to activate a single attribute in the structure to produce a particular emotional state. Moreover, given that the attributes in people's self-guides (ideal-self, ought-self) are inherently positive, activating even a positive attribute should induce discomfort if the attribute is a component of a person's self-guide and the person's actual/own value on the attribute is discrepant from his or her self-guide value on the attribute. Additionally, Higgins predicted that it should not be necessary for the self-guide attribute to be primed in a self-relevant way. Strauman & Higgins (1987) used an idiographic, unobtrusive priming technique to investigate these premises. The technique involved a sentence-completion task in which subjects were given phrases of the form, "An X person is ...." (where X would be a trait adjective such as friendly or intelligent) and were asked to complete each sentence as quickly as possible. For each sentence, each subject's total verbalization time and skin conductance amplitude were recorded. The subjects also completed mood measures at both the beginning and the end of the session. The subjects were preselected on the
basis of their responses to the Selves Questionnaire obtained weeks before the experimental session. Subjects were selected who were either high in AI discrepancy and low in AO discrepancy or high in AO discrepancy and low in AI discrepancy.

In Study 1, the subjects were primed either with positive self-guide attributes from which the subjects' actual self-attributes were discrepant or with positive yoked attributes (another subjects' self-relevant attributes). As predicted, it was found that priming subjects' self-discrepancies with self-relevant self-guide attributes produced a dejection syndrome in participants with an AI discrepancy and an agitation syndrome for the AO discrepant subjects. In Study 2, subjects were randomized to either self-relevant/nondiscrepant, self-discrepant, or yoked priming. The findings of Study 1 were replicated for the self-discrepant priming condition alone. These basic findings were replicated by Strauman (1989) in a study using depressed and social phobic clinical samples as well as a normal undergraduate sample. The results support the idea that mismatches constitute cognitive structures. They also indicate that increasing the accessibility of self-discrepancies via contextual priming induces distinct types of emotional discomfort.

To further demonstrate the relationship between the accessibility of different types of self-discrepancies and differences in emotional change, Higgins, Bond, Klein, and Strauman (1986) conducted a study with individuals with more than one type of self-discrepancy. These researchers predicted that if
an individual possesses more than one type of discrepancy, she or he should experience the emotional state associated with whichever self-discrepancy is temporarily more accessible. Researchers recruited two groups of subjects for this experiment: those who were relatively high on both AI discrepancy and AO discrepancy and subjects who were relatively low on both discrepancies. Subjects were either randomly assigned to an ideal priming condition (asked to describe the kind of person that they and their parents would ideally like them to be) or to an ought priming condition (asked to describe the kind of person that they and their parents believed they ought to be). Subjects were asked to fill out a mood questionnaire measuring dejection-related and agitation-related emotions both before and after the priming manipulation. The results indicated that for high-discrepancy subjects, but not low-discrepancy subjects, ideal priming increased their dejection whereas ought priming increased their agitation. Thus, this study demonstrated that increasing the accessibility of the different kinds of self-discrepancies increased different kinds of discomfort.

In summary, the studies in this section clearly demonstrate that a self-discrepancy has the characteristics of a cognitive structure. Evidence exists for the structural interconnectedness amongst attributes that comprise self-discrepancies. Such interconnectedness has been demonstrated to increase the efficiency of processing information whether that information be autobiographical or biographical. Additionally, the above studies clearly indicate that activating self-discrepancies by having people think about negative events or their own
personal guides will induce a type of emotional discomfort that is uniquely associated with their particular self-discrepancies thus providing support for the contention that AI and AO discrepancies are causally linked with dysphoric and anxious states, respectively. Moreover, also consistent with the premise of self-discrepancies as cognitive structures, the above results demonstrate that it is possible to activate a discrepancy by simply activating a single component of the discrepancy. As is evident, Higgins spends much time discussing the importance of activating or increasing the accessibility of the self-discrepancy in order to induce the related emotional distress. Would it not then follow that one must prime the attributes importantly related to an individual’s self-discrepancies, in order for someone to be able to report them? Higgins appears to assume that simply asking people to report on their relevant self-attributes is an adequate prime that makes pertinent self-information available. As a brief afterthought to their study, Higgins, Klein, & Strauman (1985) argued that they would not be surprised if a manipulation of mood influenced the accessibility of an established self-discrepancy or even changed its magnitude by changing the evaluative content of the actual/own self-concept. In fact, much research exists to support this premise, as will be reviewed later in this paper. Unfortunately, Higgins has never examined the relationship between mood and the accessibility of people’s reported attributes.

This paper will now examine the third assumption of Higgins’ self-discrepancy theory concerning the stability of self-discrepancies.
Proposition 3: The Stability of Self-Discrepancies

Higgins (1987; 1989b) argues that self-discrepancies are not only a
cognitive structure, but they are a stable cognitive structure, that is, they endure
over time. According to Higgins, when people are asked to report the attributes
that constitute these structures, they are able to do so in a consistent manner
across time. Consequently, he would expect an individual with self-discrepancy
X to consistently reflect such a discrepancy in his or her responses to the Selves
Questionnaire whenever asked.

The Evidence for Proposition 3. In a study of the stability of reported self-
discrepancies, Moretti and Higgins (1990) administered the Selves
Questionnaire to the same participants twice over a four to six week period. It
was argued that because AI and AO discrepancies are stable cognitive
structures, they would demonstrate good test-retest reliabilities. The test-retest
reliability score for the AI discrepancy was .39, p<.05, whereas it was .53, p<.01
for the AO discrepancy. These numbers do not provide convincing evidence of
the stability of Higgins' self-discrepancies.

Strauman (1996) recently re-examined the issue of stability in self-
discrepancies in a more refined manner. He predicted much variability at the
level of specific self-beliefs (attributes which comprise the self-discrepancies) but
hypothesized that despite this variability that the magnitude of AI and AO self-
discrepancies would be significantly correlated across time. Forty-seven
participants of an earlier self-discrepancy study were contacted three years later
and agreed to participate in a follow-up study. An interview version of the Selves Questionnaire was used in this study (no justification provided for the change in format). As predicted, participants' self-descriptions varied (i.e., participants generated approximately 25% of the self-belief attributes at retest that they generated during the original study). Strauman argued that, despite the aforementioned variability in self-descriptions, correlational data demonstrated the stability of the magnitude of AI and AO discrepancies \( (AI, r = .42, p < .01, \text{ and } AO, r = .44, p < .01) \). His interpretation of this data may be questionable. For instance, in the previously cited research study, Scott and O'Hara (1993) predicted that the Selves Questionnaire would show adequate test-retest reliability thus reflecting the stability of self-discrepancies. In their study, test-retest reliability for the AI discrepancy scores was .58 \( (p < .001) \) and .22 \( (p < .08) \) for the AO discrepancy. These researchers argue that these numbers, especially for the AO discrepancy, appear to be unacceptably low for what should be a stable construct.

As the research cited in this subsection demonstrates, self-discrepancy theory's proposition that the self-discrepancies are stable cognitive structures lacks solid supportive evidence. In fact, some of the above empirical investigations appear to challenge this proposition. However, such evidence is seen as a challenge to this stability proposition only if one accepts the assumption that the attributes that comprise these structures are readily accessible to the reporting individual. Another possible explanation is that mood
may be influencing the self-discrepancy score by influencing accessibility to the underlying structures. For example, evidence presented by Miranda and her colleagues, which will be reviewed later in this paper, suggests that these cognitive structures are, in fact, stable vulnerability factors, but that an individual's ability to report them depends on current mood state. As mentioned previously, Higgins himself suggests that the manipulation of mood would likely affect the reporting of the evaluative content of the actual/own attributes thus affecting the quality and intensity of the reported self-discrepancy. This line of investigation has never been pursued.

**Summary Remarks Regarding Self-Discrepancy Theory**

As is evidenced in this review, Higgins and his colleagues have been relatively prolific in their descriptions and empirical investigations of the self-discrepancy theory. The data produced by these researchers appears to support the first two propositions of the theory, that is, that particular types of self-discrepancies are associated with specific emotional problems and that these self-discrepancies are cognitive structures.

The above review demonstrates, however, that the support for Higgins' proposition regarding the stable and enduring nature of self-discrepancies is less than impressive. Evidence from both Higgins' labs and independent labs demonstrates that people have difficulty reliably reporting their discrepancies over time. Two possible reasons could exist to explain why people are not able to reliably report their discrepancies: 1) self-discrepancies may not be stable
structures, or 2) these discrepancies may, in fact, be stable cognitive structures, but people's ability to report them may be dependent on other factors.

One possible factor that has been demonstrated to affect people's ability to report self-attributes is current mood state. As mentioned previously, Higgins himself suggested that manipulation of mood would likely affect people's reporting of self-attributes consequently affecting the quality and intensity of reported self-discrepancies. For the current study, it was decided that an interesting line of investigation would be to examine the impact of mood on people's reporting of their self-discrepancies. Research like this needs to be pursued in order to investigate the parameters of both the self-discrepancy theory and the Selves Questionnaire.

In the following section, a body of research will be reviewed which has demonstrated the importance of mood state on people's reporting of their self-beliefs related to depression.

**The Impact of Mood**

Much evidence exists to suggest that moods are capable of influencing a wide variety of judgements and behaviours (for reviews see Clark, 1982; Isen, 1984). To take just a few examples, when people are feeling good, the evidence indicates that people tend to view others and their interpersonal behaviours more positively than when they are in a negative mood (Forgas & Bower, 1987; Forgas, Bower, & Krantz, 1984), to give more favourable reports about products they have purchased (Isen, Shaler, Clark, & Karp, 1978), to have more positive
expectations for the future (Feather, 1966; Masters & Furman, 1976) and to be more likely to accept positive interpersonal feedback (Esses, 1989). In other words, when people are in a positive mood they tend to behave in a more positive fashion and perceive the world more favourably than when they are in a negative mood. This conclusion has important implications for understanding people's reports of their own beliefs and attributes which in turn has important implications for clarifying some current theories of depression.

In the creation of cognitive theories of depression, emphasis has been placed on the reported beliefs about oneself, the world, and the future. Cognitive theories of depression propose that stable beliefs predispose vulnerable individuals to depression (Abramson, Seligman, & Teasdale, 1978; Beck, Rush, Shaw, & Emery, 1979). However, empirical evidence has not supported this proposition. First, longitudinal studies following depressives over the course of their illness show that, as depressive symptoms remit, underlying dysfunctional beliefs and attributions wane as well (Dobson & Shaw, 1987; Eaves & Rush, 1984; Hamilton & Abramson, 1983; Hammen, Miklowitz & Dyck, 1986; Persons & Rao, 1985; Silverman, Silverman & Eardley, 1984). Second, comparisons of normal and recovered depressives find that these groups do not differ in dysfunctional attitudes or attributions (Dobson & Shaw, 1986; Silverman, Silverman & Eardley, 1984). Third, a prospective longitudinal study (Lewinsohn, Steinmetz, Larson, & Franklin, 1981) demonstrated that individuals who later developed a clinical depression were no more likely to have previously exhibited
dysfunctional thinking than those who did not become depressed. As explained by Persons and Miranda (1992), many of the above investigators have concluded that dysfunctional beliefs are not vulnerability factors, but are consequences of depression or part of the depressive syndrome itself. Miranda and her colleagues (Miranda & Persons, 1988; Miranda, Persons & Byers, 1990; Persons & Miranda, 1992) have created the mood-state hypothesis, which is an interaction effects model, as an alternative explanation to a problem encountered by cognitive theories of depression.

The mood-state hypothesis (Miranda & Persons, 1988; Miranda, Persons, & Byers, 1990; Persons & Miranda, 1992) proposes that dysfunctional beliefs are vulnerability factors for depression but that the accessibility of these beliefs for reporting varies with current mood state. Specifically, a vulnerable individual will be more able to access and report his/her dysfunctional beliefs when he/she is in a negative mood. According to Miranda and her colleagues, this proposition that negative mood facilitates reporting of dysfunctional beliefs comes directly from Bower’s (1981) associative network model of mood and memory. In this model, a persons' ideas, beliefs, memories of events, and views about the self, world, and future are encoded in an interconnected network that also includes nodes for affective states. The model proposes that when one node, ideal, concept, cognition, or mood is activated, other nodes that are directly or indirectly linked are activated as well. Consequently, an individual may hold a belief but not be aware of it unless it is activated in some way. If the belief is associated with a
given mood state, the individual may not be able to report the belief unless the mood state to which it is linked has been activated.

Miranda and her colleagues have directly tested the mood-state hypothesis in two studies. Miranda and Persons (1988) asked a volunteer sample of 43 nondepressed women to rate their mood and complete a measure of dysfunctional attitudes before and after either a positive or negative mood induction. A variation of Velten's (1968) procedure was used to induce a sad or elated mood. Additionally, these women completed a questionnaire which assessed their history of depression. As predicted, an interaction effect was found. For previously depressed subjects, the endorsement of dysfunctional beliefs was positively related to negative mood. For subjects without a history of depression, the endorsement of dysfunctional beliefs was low, regardless of current mood.

Miranda, Persons, and Byers (1990) reported results of two experiments. In the first, 47 depressed psychiatric patients (both male and female) showed changes in dysfunctional attitudes as a function of spontaneous diurnal fluctuations in mood. The results demonstrated that dysfunctional thinking increased when mood was worst and decreased when mood was best. This finding extended the previous demonstration of the mood-state-dependent effect to men and to clinically depressed subjects, and showed that the effect occurred when mood fluctuations were spontaneous rather than induced.
In the second experiment, nondepressed individuals who had a history of previous depressive episodes showed elevated scores on a measure of dysfunctional attitudes if they were in a negative mood at the time of their assessment. Nonvulnerable individuals (those with no history of depression) did not show elevated dysfunctional attitudes, even when they were in a negative mood. Miranda and her colleagues argue that the above studies support the cognitive theory of depression which proposes that dysfunctional beliefs are vulnerability factors for depression but also that reporting of dysfunctional beliefs depends on current mood state.

To examine the interaction between depression proneness and mood in the activation of depressogenic processes, Teasdale and Dent (1987) assessed cognitive functioning in never depressed and previously depressed women following a negative mood induction. They used a measure developed by Kuiper and his colleagues (Derry & Kuiper, 1981; Kuiper & Derry, 1982; MacDonald, Kuiper, & Olinger, 1985) called the self-referent encoding task to assess depressive schema and they used sad music to induce a negative mood. Following the mood induction, subjects read negative and positive traits and indicated which ones were self-descriptive. Then subjects were unexpectedly asked to recall as many of the adjectives as they could in any order. In an induced negative mood, recovered depressives, compared to never depressed subjects, showed better recall of self-referred negative words. Teasdale and Dent argue that they results provide evidence that induced negative mood can
activate depressogenic processes in vulnerable individuals. These results are consistent with the mood-state hypothesis.

The above research has implications for the self-discrepancy theory. As Miranda and her colleagues and Teasdale and Dent have demonstrated, vulnerable individuals will be more likely to report negative beliefs when they are in a negative mood. Given that the self-discrepancy theory is not unlike other cognitive theories of emotional distress in that it also deals with the role of negative self-beliefs, one could reasonably predict a similar interaction effect when examining the reporting of self-discrepancies. Specifically, the above research findings would support the hypothesis that if self-discrepancies are stable structures that become more accessible for reporting when primed by the appropriate mood, then vulnerable individuals (people with a history of depression or anxiety) would report greater discrepancy scores when in an appropriate negative mood than when in a positive mood.

The research in this subsection illustrates that the absence of attention to mood effects on people's reporting of their self-discrepancies is a possible shortcoming of Higgins' self-discrepancy theory. In the following section, a different kind of self-discrepancy will be examined.

Undesired-Self Theory

Ogilvie (1987, Ogilvie & Clark, 1992) argues that the undesired-self might be a more significant and important factor in the prediction of life satisfaction than the ideal-self. He asserts that the undesired-self, when compared with the
ideal-self, is a better anchor for people to evaluate their life satisfaction and well-being because it is grounded in individuals’ experiential histories and consequently is more concrete. Ogilvie argues that the ideal-self, on the other hand, is a composite of unrealized (but hoped for) future states and is therefore more abstract. Ogilvie (1987) tested his prediction that actual-undesired self-discrepancy scores correlate more strongly with life satisfaction rating than do actual-ideal discrepancies. He used a complex matrix analysis to measure and calculate the distance between the actual-self and the ideal-self and the distance between the actual-self and the undesired-self. Correlational analyses revealed that both the actual-undesired (AU) self-discrepancy and the AI discrepancy were significantly related to life satisfaction ($r = -.72$, $p < .001$ and $r = .37$, $p = .013$, respectively). Multiple regression analyses revealed that AU self-discrepancy accounted for more of the variance in life satisfaction than did the AI self-discrepancy thus supporting Ogilvie’s prediction.

As an addendum to the above study, Ogilvie (1987) also tested his theoretical notion that the ideal-self is more conceptual and abstract than the undesired-self. All the characterological features which participants generated and used to describe their various selves were rated by 32 independent raters on a concrete-abstract scale. The results of correlational analyses indicated that the ideal-self features were judged to be more abstract than the undesired features. Ogilvie argued that these results are consistent with his hypothesis that the undesired-self is primarily grounded in people’s actual experiences, as
opposed to the ideal-self which appears to consist of less tangible ideas regarding one’s potential. Thus, Ogilvie concluded that the undesired-self is a more potent anchor for making self-evaluations.

Further support for the undesired-self theory comes from Ogilvie and Clarke’s (1992) report of two unpublished honours’ theses from their research lab (Paporter, 1988, Fuzzi, 1989). Paporter (1988) examined the relationship between the two types of discrepancy scores (the AU self-discrepancy and the AI self-discrepancy) and depressive affect. She used two lab-generated likert-type scales to measure self-discrepancies and the Centre for Epidemiologic Studies Depression Scale (CES-D Scale) to measure depressive affect. The results demonstrated that, as predicted, the AI self-discrepancy scores were positively correlated with depression, while AU self-discrepancy scores were negatively correlated with depression. Additionally, as predicted, regression analyses demonstrated that the AU self-discrepancy accounted for substantially more of the variance on depression than the AI self-discrepancy.

In a follow-up study, Fuzzi (1989) demonstrated the same pattern of results using a modified version of Higgins’ Selves Questionnaire. In this study, Fuzzi asked participants to create three lists of ten attributes describing their actual-, ideal-, and undesired-selves. Actual-ideal and actual-undesired self-discrepancy scores were determined using Higgins’ method of measurement and calculation. Participants were administered the modified Selves Questionnaire as well as the CES-D. As in Paporter’s study, the results revealed a significant
relationship between the AI self-discrepancy scores and depression scores and between the AU discrepancy scores and depression scores, with the latter relationship being stronger. These studies support the claim that AU self-discrepancy is a better predictor of depression than AI self-discrepancy.

Preliminary support appears to exist for the undesired-self theory's proposition that a discrepancy between the actual-self and the undesired-self is negatively correlated with depressive affect. Consequently, an individual who possesses an AU self-discrepancy should be less vulnerable to depression than those who do not possess such a discrepancy. Support also appears to exist for Ogilvie's claim that the AU self-discrepancy is a better predictor of such constructs than the AI self-discrepancy. The evidence for the undesired-self theory has been produced by Ogilvie and his students. Confidence in the claims of the theory would be increased by an independent investigation. As with Higgins's self-discrepancy theory, the impact of mood on people's reports of their AU self-discrepancies has not been examined. If, according to Ogilvie's theory, AU discrepancies are a causal factor in depressive symptoms rather than simply a consequence of depressed mood, then one would expect the relationship between depressive vulnerability and AU discrepancies to be independent of mood. This hypothesis has never been tested.

**Rationale for Current Study**

As mentioned earlier, Higgins and his colleagues have produced much research which appears to support the first main proposition of the self-
discrepancy theory, that is, that particular types of self-discrepancies are
associated with specific emotional problems. The few independent
investigations which have been completed also demonstrate support for this
proposition. One of the purposes of this current study was to offer another
independent examination of Higgins's first proposition as a way of further
bolstering confidence in the theory.

The above review demonstrates that research evidence for Higgins'
second and third propositions that self-discrepancies are stable cognitive
structures is more mixed. While good evidence appears to exist regarding the
structural nature of self-discrepancies, evidence is less strong regarding the
stability of these cognitive structures. Poor test-retest reliabilities of discrepancy
scores do not provide convincing evidence of the stability of self-discrepancies.
The above review suggests that although Higgins and his colleagues have found
support for the theory's predicted relationships between accessible self-
discrepancies and particular emotional vulnerabilities, the strength of the
associations may be limited by not taking into account the effects of mood on
accessibility of available self-beliefs. For example, Higgins and his colleagues
may have missed an entire subsection of vulnerable people whose available self-
discrepancies were latent and not made accessible by simply asking them to
record their relevant self-attributes. Consequently, a second purpose of the
present study was to examine the impact of mood on the reporting of people's
self-discrepancies. In particular, given that most of the literature regarding the
impact of mood on the reporting of self-beliefs and attributes is related to depression, this study focused on the interaction of depressive vulnerability (availability of AI self-discrepancies) and current mood state on the reporting of AI self-discrepancies.

A third purpose of the current study was to examine Ogilvie’s challenge to Higgins’ theory regarding depressive vulnerability, namely, that he is examining the wrong self-discrepancy. Investigating Ogilvie’s challenge of Higgins’s theory also allowed for another examination of the assumptions of the undesired-self theory.

Given the above review and rationale, the following hypotheses were tested in the current study:

1) If, according to Higgins’s self-discrepancy theory, actual-ideal discrepancies are cognitive structures that increase vulnerability to depression, then these discrepancies should be related to depression proneness and current depressive symptoms.

2) If Higgins’s theory is accurate and self-discrepancies are stable, then one would expect adequate test-retest reliabilities.

3) If, according to Higgins’s theory, actual-ideal discrepancies can increase vulnerability to depressive symptoms rather than simply being a consequence of depressed mood, then the relationship between actual-ideal self-discrepancies and depression proneness should remain significant after controlling for mood.
4) If mood state affects the accessibility of actual-ideal discrepancies, then a relationship should be found between current mood and reported actual-ideal discrepancies.

5) If, consistent with Miranda and Person’s mood-state hypothesis, accessibility of actual-ideal self-discrepancies is a joint function of the availability of these discrepancies (depressive vulnerability) and the degree of depressed mood then a significant interaction effect of depression proneness and depressed mood on accessibility of reported AI discrepancies should be found.

6) If Ogilvie’s Undesired Self Theory is correct and actual-undesired discrepancies decrease vulnerability to depression, then these discrepancies should be related to depression proneness and depressive symptoms.

7) If, according to Ogilvie’s theory, actual-undesired discrepancies can decrease vulnerability to depressive symptoms rather than simply being a consequence of depressed mood, then the relationship between actual-undesired discrepancies and depression proneness should remain significant after controlling for the effects of mood.

8) If Ogilvie is correct and the actual-undesired self-discrepancy is a better predictor of depression than the actual-ideal self-discrepancy, then the actual-undesired self-discrepancy should account for more of the variance on depression than the actual-ideal self-discrepancy.
METHOD

Participants

Participants were undergraduate students from the University of Saskatchewan who were asked to complete a two-part study (Time 1, Time 2). One hundred and ninety participants completed Time 1 of the study. One hundred and forty-seven of these students went on to complete Time 2 of the study. Of these participants, 46 were male and 101 were female. Of the 43 who did not complete Time 2 of the study, 23 were screened out because of significant depressive symptomatology (as measured by a score of greater than 19 on the BDI) and 20 did not arrive for their second appointment.

Participants were recruited through two methods depending on which time of year participation occurred. First, undergraduate psychology classes during summer school were recruited by telephone through a voluntary participant pool. Approximately 50 of the 147 individuals who completed both parts of the study were recruited through this method. Second, the rest of the participants were recruited during the regular school year through a course credit program offered through the introductory psychology courses. Individuals in this group received course credit upon completion of both parts of the study. Participation was voluntary and informed consent was obtained prior to participant involvement (Appendix A).
Measures

**Depression Adjective Check Lists (DACL).** In the current study the DACL (Appendix B), developed by Lubin (1965), was used as a measure of the current mood. To ensure that all items were read and considered, participants were asked to give a rating of 0 to the items that did not describe how they were feelings at the time and a rating of 1 to the items that did describe how they were feeling.

The DACL consists of 32 adjectives, 22 depression and 10 elation adjectives. Participants were asked to endorse those adjectives on the list that were congruent with how they currently felt. A high score on the DACL indicates a high level of current depressed mood, where respondents receive one point for each depressive adjective that is checked and one point for each elated adjective that is not checked. The brevity and the acceptable reliability and validity has led to frequent use of the DACL in psychological research (Lubin & Whitlock, 1993). Fogel, Curtis, Kordasz and Smith (1966) found that when the DACL was administered to 73 psychiatric patients that it correlated with clinical ratings of depressed mood. The DACL has also been found to be sensitive to mood changes among both university students (Lubin, Dupre, & Lubin, 1967) and psychiatric populations (Lubin, Hornstra, & Love, 1974). More recently, the reliability and validity of the DACL was tested in a university counselling centre (Lubin, Whitlock, Schemmel, & Swearngin, 1993). The researchers concluded
that reliability (internal consistency, split half, and alternate form) and validity (convergent and discriminant) were sufficiently high for use in research.

The Selves Questionnaire. In the present study, the Selves Questionnaire (Appendix C) was modified to assess each participant's actual-self, ideal-self, and undesired-self. Participants were asked to list up to 10 traits or attributes they believe they actually possess, ideally like to possess, or believe would be undesirable to possess. They were also asked to rate the extent to which they possess each attribute from 1 ("slightly") to 4 ("extremely").

A two-stage process as described by Strauman and Higgins (1988) was used to calculate the magnitude of the discrepancy. First, each attribute of the actual-self was compared to the attributes of the ideal-self and undesired-self to determine which attributes were synonyms and which were antonyms, according to a thesaurus. Four types of attribute pair relationships were formed: 1) a match, in which the actual attribute and the ideal or undesired attribute are synonymous and differed in their extent ratings by no more than 1; 2) a mismatch of extent, in which attributes are synonymous but differ in their extent ratings by greater than 1; 3) a mismatch, in which attributes are antonyms; and 4) a nonmatch, in which the attribute pairs are neither synonyms nor antonyms. Nonmatches were not included in calculating self-discrepancy scores.

Second, the magnitude of the discrepancies were quantified by assigning weights to the different categories. Matches and mismatches of extent were given weights of -1 and +1, respectively, and antonymous mismatches were
given a weight of +2. The discrepancy scores were obtained by summing the weights for all matches and mismatches. Higher self-discrepancy scores indicate a larger discrepancy between the actual-self and the ideal- or undesired-self.

In the present study, all the Selves Questionnaires were scored by the primary researcher. Another rater was used to score randomly selected questionnaires in order to be able calculate an inter-rater reliability score. Given the hypotheses, AI discrepancies were scored for questionnaires taken at both Time 1 and Time 2 whereas AU discrepancies were calculated only for Time 1.

**Depression Proneness Rating Scale (DPRS).** The DPRS (Appendix D), as it was developed by Zemore (1983; Zemore & Bretell, 1983), was used to assess an individual's vulnerability to depression. Depression proneness refers to the tendency to experience relatively frequent, long-lasting and severe depressions (Zemore, Fischer, Garratt, & Miller, 1990). In the current study, the DPRS served as a measure of the participants' history of depression which, if self-discrepancy theory is correct, should indicate the availability of AI discrepancies (but not, necessarily, the accessibility of such discrepancies).

The DPRS lists 13 of the most commonly reported symptoms of depression and asks subjects to rate how often, compared to others, they experienced these symptoms over the past two years. Each item on the questionnaire is accompanied by a nine-point scale, anchored at one end by the
descriptor much less often, and at the other end by the descriptor much more often. Higher scores indicate greater vulnerability to depression.

Factor analysis with a sample of 1101 university students indicated that the DPRS is a unidimensional scale, with 44 percent of the variance in DPRS scores accounted for by a single factor (Zemore, Fischer, Garratt, & Miller, 1990). With respect to validity, respondents’ scores on the DPRS correlated with three personality measures which had been previously found to discriminate between remitted, formerly depressed women, and women with no psychiatric history (Zemore & Bretell, 1983), with depression proneness ratings given to them by their peers and parents (Zemore, 1983), and with self-reports of past episodes of clinical depression (Zemore et al, 1990). Further, DPRS scores predicted subsequent symptoms of depression nine weeks later, even after adjusting for initial levels of depression (Zemore et al., 1990).

Beck Depression Inventory (BDI). The BDI (Beck, 1970) (Appendix E) was used in the present study to assess people’s current depressive symptomatology. It consists of 21 questions which were selected to represent the symptoms and attitudes of depression. Each of these questions contains 4 items and individuals are asked to indicate the item which is most applicable to them. A score of 0 to 3 is assigned to each item and the total BDI score is calculated by summing the score of each question. A higher score represents a more severe level of depression.
Velten Mood Induction Procedure

In the present study, the Velten procedure (Velten, 1968) (Appendix F) was used to induce a depressed or elated mood. Fifty self-referent mood-statements of the relevant type (depressed or elated) were read silently and then aloud by the subject, who was encouraged to try to feel the mood suggested by the statements. Increasing interest in the role that mood plays in various psychological and cognitive processes has led to the development of a range of laboratory methods for inducing temporary mood states. The procedure developed by Velten (1968) is the most widely used of the mood induction techniques (Martin, 1990). The induction into either a depressed or elated mood involves the use of 50 self-referent mood-statements of the relevant type (or 50 neutral sentences for neutral mood). The relevant set is read silently and then aloud by the subject, who is urged to try to feel the mood suggested by the statements. Both the depressed and elated batteries of items have been shown to induce behaviour compatible with the desired state (Isen, 1984).

Procedure

Students were recruited (as described above) to participate in a Time 1/Time 2 study concerning "Self-beliefs and Depression." At Time 1 participants met in groups of two to six and after completion of the informed consent procedure were asked to complete a questionnaire package which included: Selves Questionnaire, DACL, BDI, and the DPRS. After they completed their questionnaires, participants were asked to pick a time three or four weeks later
to complete Time 2 of the study. The mean number of days between Time 1 and Time 2 was 23 and ranged from 17 to 38. In order to protect confidentiality, participants were assigned numbers.

Procedures at Time 2 were conducted individually. If participants' BDI scores were below 19, indicating mild to moderate depressive symptomatology, they were randomly assigned to one of three experimental groups: positive mood induction, negative mood induction, and no mood induction (control group). Following the mood induction, participants were instructed to complete the DACL and the Selves Questionnaire again. Following these questionnaires, participants were thanked for their participation and thoroughly debriefed (Appendix G). Participants who were screened out because of high BDI scores were simply debriefed during a second session and thanked for their participation (Appendix H).
RESULTS

Preliminary Analyses

All variables were examined for accuracy of data entry, missing values, and normality. Approximately normal distributions were found for all variables except for the DACL taken at both Time 1 and Time 2. To produce a more normal distribution of DACL scores, a percentile to z-score transformation was conducted as described by Cohen and Cohen (1983; pp. 270-271). Analyses were then run with both the transformed and non-transformed data. No substantive differences in the statistical outcomes were found between the two different data sets, consequently, the original DACL data were used for subsequent analyses.

Means, standard deviations, and ranges for the major variables for the entire sample of participants are presented in Table 1. Table 2 divides this sample into those who participated at Time 2, those who were screened from participation at Time 2, and those who failed to show at Time 2. Examination of these data revealed that participants who were screened from participating at Time 2 because of high BDI, (Beck Depression Inventory at Time 1) scores also had significantly higher Al, (Actual-Ideal Self-Discrepancy at Time 1) scores ($t(168) = -2.42, p = .017$), lower AU, (Actual-Undesired discrepancy at Time 1) scores ($t(162) = 3.27, p = .001$), higher DACL, (Depression Adjective Checklist at Time 1) scores ($t(168) = -5.54, p <.001$), and higher DPRS, (Depression Proneness Rating Scale at Time 1) scores ($t(168) = -6.56, p <.001$).
Table 1

Means, Standard Deviations, Ranges, and Coefficient Alpha Estimates for Major Variables for Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>Range</th>
<th>Coef. Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al₁</td>
<td>-.47</td>
<td>3.07</td>
<td>-7 - 8</td>
<td>*</td>
</tr>
<tr>
<td>(n=190)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al₂</td>
<td>-1.05</td>
<td>3.35</td>
<td>-9 - 9</td>
<td>*</td>
</tr>
<tr>
<td>(n=147)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU₁</td>
<td>3.17</td>
<td>2.46</td>
<td>-4 - 10</td>
<td>*</td>
</tr>
<tr>
<td>(n=184)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI₁</td>
<td>10.58</td>
<td>7.19</td>
<td>0 - 38</td>
<td>.83</td>
</tr>
<tr>
<td>(n=190)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS₁</td>
<td>62.23</td>
<td>19.80</td>
<td>13 - 107</td>
<td>.93</td>
</tr>
<tr>
<td>(n=190)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACL₁</td>
<td>8.40</td>
<td>5.93</td>
<td>0 - 28</td>
<td>.88</td>
</tr>
<tr>
<td>(n=190)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACL₂</td>
<td>9.07</td>
<td>8.33</td>
<td>0 - 32</td>
<td>.95</td>
</tr>
<tr>
<td>(n=147)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* It was not possible to calculate alpha values for single-item measures.

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. AI = Actual-ideal self-discrepancy; AU = Actual-undesirable self-discrepancy; BDI = Beck Depression Inventory; DPRS = Depression Proneness Rating Scale; DACL = Depression Adjective Checklist.
Table 2

Mean Scores on Time 1 Measures for Those Who Participated at Time 2, Those Who Were Screened From Participating at Time 2, and Those Who Failed to Show at Time 2.

<table>
<thead>
<tr>
<th></th>
<th>Completed Time 2 (n=147)</th>
<th>Screened Out (n=23)</th>
<th>No Shows (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$AI_1$</td>
<td>-.75</td>
<td>.91</td>
<td>-.05</td>
</tr>
<tr>
<td>$AU_1$</td>
<td>3.43</td>
<td>1.65</td>
<td>3.10</td>
</tr>
<tr>
<td>$BDI_1$</td>
<td>8.68</td>
<td>25.13</td>
<td>7.80</td>
</tr>
<tr>
<td>$DPRS_1$</td>
<td>58.74</td>
<td>85.39</td>
<td>61.25</td>
</tr>
<tr>
<td>$DACL_1$</td>
<td>7.5</td>
<td>14.45</td>
<td>7.95</td>
</tr>
</tbody>
</table>

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. $AI = $ Actual-ideal self-discrepancy; $AU = $ Actual-undesirable self-discrepancy; $BDI = $ Beck Depression Inventory; $DPRS = $ Depression Proneness Rating Scale; $DACL = $ Depression Adjective Checklist.
Participants who did not arrive for Time 2 did not differ significantly on any of the major variables from those participants who completed Time 1 and Time 2.

In order to make clear conclusions regarding the impact of the experimental manipulation (mood induction), it was important to demonstrate that no pre-manipulation differences existed among the experimental groups. Analyses revealed that no differences existed among the three experimental groups (negative mood induction, no mood induction, and positive mood induction) on DACL₁, BDI₁, DPRS₁, Al₁ or AU₁ scores prior to the mood manipulation.

Although no hypotheses were generated regarding the possible impact of gender on the relationships between variables, enough male and female participants completed the study to allow for some initial analyses. The moderating effects of gender on the relationships between Al and AU self-discrepancies and the various measures of depression (DACL₁, BDI₁, DPRS₁) and the relationship between induced mood and Al self-discrepancies were assessed. Results revealed no significant interactions involving gender.

**Reliability checks.** All measures for which it was possible to calculate a coefficient alpha demonstrated acceptable reliability (Table 1). Inter-rater reliability was calculated for self-discrepancy ratings by having two raters independently score 25 Selves Questionnaires selected at random. Reliabilities of .95 and .82 were achieved for Al and AU scores, respectively. These
correlations correspond with Higgins' et al.'s (1986) inter-rater reliabilities of .80 - .90.

**Manipulation check.** A manipulation check was done in order to ensure the effectiveness of the mood induction. Because a linear relationship was expected between the three mood induction conditions and subsequent mood, with the negative mood induction producing the most negative mood and the positive mood induction producing the least negative mood, the positive-induction, no-induction, and negative induction conditions were coded as -1, 0, and 1, respectively, and then regressed on subsequent mood (DACL₂). A significant regression coefficient was found, \( t(145) = 8.44, p < .001 \). Additional analyses demonstrated that participants in the negative mood induction group rated themselves as feelings more depressed (DACL₂ mean = 15.82) than participants in the positive mood induction group (DACL₂ mean = 4.10; \( t(95) = 7.99, p < .001 \)) and than participants in the no-induction control group (DACL₂ mean = 7.24; \( t(97) = 5.64, p < .001 \)). Participants in the positive mood induction group also had a significantly lower DACL₂ mean that those in the control group, \( (t(96) = 2.99, p = .003) \). Consequently, it was concluded that the mood induction was successful.

**Testing Hypotheses**

**Hypothesis 1.** If, according to Higgins's Self-Discrepancy Theory, actual-ideal discrepancies are cognitive structures that increase vulnerability to depression, then these discrepancies should be related to depression proneness
and to current symptoms of depression. This hypothesis was tested using
data from Time 1. It was believed that using data collected prior to the mood
manipulation would most closely replicate previous examinations of these
predictions. Additionally, because Time 1 included persons who were screened
from participating at Time 2 and those participants who were “no-shows” at Time
2, the range within variables was wider. As shown in Table 3, the relationship
between actual-ideal discrepancies at Time 1 (AI₁) and current severity of
depression (BDI₁) was statistically significant, \( r(188) = .19, p = .008 \) with greater
AI discrepancies associated with greater depression. Table 3 also shows a
significant relationship between AI₁ and current depressed mood (DACL₁), \( r
(188) = .24, p < .001 \) with greater AI discrepancies associated with greater
depressed mood. Additionally, Table 3 also demonstrates a significant
relationship between AI₁ and depression proneness (DPRS₁), \( r(188) = .28, p < .001 \) with greater AI discrepancies associated with a greater history of
depressive symptoms. Thus, Hypothesis 1 was confirmed, providing support for
Higgins’s self-discrepancy theory.

**Hypothesis 2.** If Higgins’s theory is correct and self-discrepancies are
stable, then AI discrepancies should demonstrate adequate test-retest
reliabilities. Because there was reason to believe that mood would affect the
reporting of self-discrepancies, only those subjects in the no mood induction
condition were used to assess the test-retest reliability of self-discrepancy
scores. The test-retest reliability score (AI₁ - AI₂ correlation) for the actual-ideal
### Table 3

**Intercorrelations Among Major Variables**

<table>
<thead>
<tr>
<th></th>
<th>Al₂</th>
<th>AU₁</th>
<th>Mood₂</th>
<th>BDI₁</th>
<th>DPRS₁</th>
<th>DACL₁</th>
<th>DACL₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al₁</td>
<td>.49**</td>
<td>-.36**</td>
<td>-.15</td>
<td>.19*</td>
<td>.28**</td>
<td>.24**</td>
<td>.05</td>
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<td>(184)</td>
<td>(147)</td>
<td>(190)</td>
<td>(190)</td>
<td>(190)</td>
<td>(147)</td>
</tr>
<tr>
<td>Al₂</td>
<td></td>
<td>-.25*</td>
<td>.14</td>
<td>.11</td>
<td>.12</td>
<td>.23*</td>
<td>.24**</td>
</tr>
<tr>
<td></td>
<td>(141)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
</tr>
<tr>
<td>AU₁</td>
<td>.15</td>
<td></td>
<td>-.25**</td>
<td>-.22*</td>
<td>-.25**</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(141)</td>
<td>(184)</td>
<td>(184)</td>
<td>(184)</td>
<td>(184)</td>
<td>(141)</td>
<td></td>
</tr>
<tr>
<td>Mood₂</td>
<td>-.09</td>
<td>-.02</td>
<td>.08</td>
<td></td>
<td>.57**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td>(147)</td>
<td></td>
</tr>
<tr>
<td>BDI₁</td>
<td></td>
<td></td>
<td></td>
<td>.59**</td>
<td>.62**</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(190)</td>
<td>(190)</td>
<td>(147)</td>
<td></td>
</tr>
<tr>
<td>DPRS₁</td>
<td></td>
<td></td>
<td></td>
<td>.48**</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(190)</td>
<td>(147)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACL₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.17*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(147)</td>
<td></td>
</tr>
</tbody>
</table>

*(number of cases)*

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. Al = Actual-ideal self-discrepancy; AU = Actual-undesirable self-discrepancy; Mood = Type of mood induction with -1 = positive mood induction, 0 = no mood induction, 1 = negative mood induction; BDI = Beck Depression Inventory; DPRS = Depression Proneness Rating Scale; DACL = Depression Adjective Checklist.

* *p < .05
**p ≤ .00
discrepancy was $r (48) = .27, p = .05$. Interestingly, this score is considerably lower than the correlation between AI$_1$ and AI$_2$ for participants in all three mood induction groups combined as seen in Table 3 ($r (145) = .49, p < .001$). Consequently, the AI$_1$-AI$_2$ correlation for the positive and negative mood induction groups were examined separately. The results demonstrated that the AI$_1$-AI$_2$ correlations for the positive and negative mood induction groups were $r (46) = .63, p < .01$ and $r (47) = .61, p < .01$, respectively. The average within mood condition correlation across all experimental conditions was .52 (which was calculated by first transforming each $r$ to a $z$ score, taking the mean of the three $z$ scores, and then transforming this back to an $r$). These results suggest that the control group results are likely underestimating the stability of the AI discrepancy scores, particularly when past research has found higher coefficients.

**Hypothesis 3.** If, according to Higgins's theory, AI discrepancies can increase vulnerability to depressive symptoms rather than simply being a consequence of depressed mood, then the relationship between AI self-discrepancies and depression proneness should remain significant after controlling for the effects of mood. This hypothesis was tested using data from Time 1 because it was believed that using data collected prior to the mood manipulation would most fairly test this prediction based on assumptions from Higgins's theory. It is not clear from the literature if Higgins would expect his predicted relationships between self-discrepancies and emotional distress to
remain unchanged after a mood manipulation. Additionally, as mentioned before, because Time 1 data included all participants, the range within variables was wider and the sample size was larger. The results demonstrated that the relationship between AI discrepancies and depression proneness did remain significant after controlling for mood. The partial correlation between AI₁ self-discrepancies and DPRS₁ after controlling for DACL₁ was \( r(187) = .19, p = .008 \). Consequently, this hypothesis was supported.

**Hypothesis 4.** If mood state affects the accessibility of AI discrepancies, then a relationship should be found between current mood and reported AI self-discrepancies. Table 4 shows mean AI discrepancy scores at Time 1 and Time 2 for each of the three mood induction conditions. A linear relationship was expected between the three mood induction conditions and AI₂ discrepancy, with the negative mood induction producing the most discrepancies and the positive mood induction producing the least. To test this relationship, AI₂ discrepancy scores were regressed on the positive-induction, no-induction, and negative inductive conditions which, as mentioned before, were coded as -1, 0, and 1, respectively. A significant regression coefficient was not found at the .05 level (\( t(145) = 1.68, p = .095 \)).

As another test of this hypothesis, the linear relationship between AI₂ and mood induction was again examined, but this time AI₁ was statistically controlled for using a hierarchical regression. By controlling for AI₁ score, it was possible
<table>
<thead>
<tr>
<th></th>
<th>$\text{AI}_1$</th>
<th>$\text{AI}_2$</th>
<th>$\text{AI}_1 - \text{AI}_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Negative Mood Induction</strong>&lt;br&gt;(n=49)</td>
<td>-1.31</td>
<td>-.41</td>
<td>+.90</td>
</tr>
<tr>
<td><strong>No Mood Induction</strong>&lt;br&gt;(n=50)</td>
<td>-.74</td>
<td>-1.2</td>
<td>-.46</td>
</tr>
<tr>
<td><strong>Positive Mood Induction</strong>&lt;br&gt;(n=48)</td>
<td>-.19</td>
<td>-1.5</td>
<td>-1.31</td>
</tr>
</tbody>
</table>

**Note:** Higher, more positive scores denote greater AI discrepancies
to examine the impact that the type of mood induction had on the change in reported AI discrepancy score between Time 1 and Time 2. It was predicted that if mood does affect the accessibility of AI discrepancies then participants induced into a negative mood should demonstrate a greater increase in AI discrepancies reported and participants in the positive induction group should show the least increase. To test this hypothesis, AI₂ discrepancy scores were regressed on AI₁ scores and then on mood induction. Table 5 displays the unstandardized regression coefficients (B), the standardized regression coefficients, and R² after the entry of all independent variables on that step and all preceding steps. As presented in Table 5, induced mood showed a significant relationship with AI₂ score, independent of AI₁ score. In other words, actual-ideal discrepancy at Time 2, adjusted for actual-ideal discrepancy at Time 1, was linearly related to induced mood, so that negative mood induction produced the greatest increase in reported AI discrepancies while positive mood induction produced the least. These results suggest that mood can affect the accessibility of AI discrepancies.

**Hypothesis 5.** If, consistent with Miranda and Person's mood-state hypothesis, accessibility of AI discrepancies is a joint function of depressive vulnerability (availability of AI discrepancies) and the degree of depressed mood then a significant interaction effect of depression proneness and depressed mood on accessibility of reported AI discrepancies should be found. The original conceptualization of this hypothesis was if negative mood does
Table 5

Hierarchical Regression Testing for the Effects of Induced Mood on Al₂ Discrepancies, Controlling for Al₁ Discrepancies (n=147)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al₁</td>
<td>.24</td>
<td>.52</td>
<td>.08</td>
<td>.49**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mood₂</td>
<td>.28</td>
<td>.88</td>
<td>.29</td>
<td>.21*</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. Al = Actual-ideal self-discrepancy; Mood = Type of mood induction with -1 = positive mood induction, 0=no mood induction, 1 = negative mood induction.

*p<.005  
**p<.0005
affect accessibility by priming available AI discrepancies, then a stronger relationship should be found between availability of AI discrepancies (DPRS) and the magnitude of reported AI self-discrepancies when participants are induced into a negative mood than when they are not (See Figure 1). However, the conceptualization of hypothesis 5 was altered slightly to accommodate the results found when testing hypothesis 4. So, rather than the focus being on the magnitude of reported AI self-discrepancies, the focus became the increase in reported AI discrepancies between Time 1 and Time 2.

To test this newly conceptualized hypothesis, the effect of the interaction of availability of AI discrepancies (DPRS) and mood induction on the increase in AI discrepancies reported at Time 2 was examined. Using hierarchical regression analysis, AI₁ discrepancy scores, the type of mood induced and DPRS₁ scores were entered as the first step. Next, the interaction of the type of mood induced and DPRS₁ scores was entered as the final step. Table 6 displays the unstandardized coefficients, standardized coefficients, and the R squared after entry of all the independent variables on that step and all preceding steps. As presented in Table 6, induced mood showed a significant relationship with AI₂ score, independent of AI₁ and DPRS₁ scores. So, as previously mentioned, the more negative the mood induction, the greater the increase in reported AI discrepancies between the participants' self-reported actual and ideal attributes. Table 6 also demonstrates that, contrary to the
Figure 1

Predicted Results for Hypothesis 5

![Graph showing predicted results for different mood induction scenarios.](image-url)
Table 6

Hierarchical Regression Testing for the Effects of Induced Mood and Depression Proneness on Al₂ Discrepancies, Controlling for Al₁ Discrepancies (n=147)

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI₁</td>
<td>.28</td>
<td>.55</td>
<td>.08</td>
<td>.52**</td>
</tr>
<tr>
<td>DPRS₁₂</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Mood</td>
<td></td>
<td>.88</td>
<td>.29</td>
<td>.21*</td>
</tr>
</tbody>
</table>

**Step 2**

| DPRS₁₂ x Mood | .29| .02 | .02  | .33   |

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. AI = actual-ideal self-discrepancy at Time 1; DPRS = Depression Proneness Rating Scale at Time 1; Mood = Type of mood induction with -1 = positive mood induction, 0 = no mood induction, 1 = negative mood induction.

* p<.05
**p<.005
hypothesis, the interaction between induced mood and depression proneness was not linearly related to a greater increase in AI discrepancies reported at Time 2. Consequently, the interaction hypothesis was not supported by these analyses. Instead, these results indicate that negative mood increases the reporting of AI discrepancies independently of the presumed availability of these discrepancies (DPRS). Table 7 demonstrates these changes in AI to Al2 self-discrepancy scores as a function of type of mood induction and depression proneness (a median split was used to create high and low DPRS groups).

In light of the fact that the interaction hypothesis was not supported using Time 2 data (which, as previously mentioned, includes a restricted range of variables), an analysis investigating the interaction of history of depressive symptoms (availability of AI discrepancies) and current (naturally occurring) mood state (DACCL) on AI discrepancies was conducted using Time 1 data. Using hierarchical regression analysis, DPRS1 and DACCL1 scores were regressed on AI1 discrepancy scores as the first step. Then the interaction of DPRS1 scores and DACCL1 scores was entered as the next step. Table 8 displays the unstandardized coefficients, standardized coefficients, and the R squared after entry of all the independent variables on that step and all preceding steps. As presented in Table 8, history of depression (DPRS) showed a significant relationship with AI1 discrepancy scores which means that people with a greater history of depressive symptoms produced greater discrepancies. However, Table 8 also demonstrates that when history of depression is
Table 7

$A_{i1}$ to $A_{i2}$ Change Scores Across Experimental Conditions for Low and High DPRS Scores

<table>
<thead>
<tr>
<th></th>
<th>Low DPRS Scores</th>
<th>High DPRS Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Mood Induction</td>
<td>-1.65</td>
<td>-1.14</td>
</tr>
<tr>
<td></td>
<td>(20)</td>
<td>(28)</td>
</tr>
<tr>
<td>No Mood Induction</td>
<td>.35</td>
<td>-1.33</td>
</tr>
<tr>
<td></td>
<td>(26)</td>
<td>(24)</td>
</tr>
<tr>
<td>Negative Mood Induction</td>
<td>.11</td>
<td>1.86</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(22)</td>
</tr>
</tbody>
</table>

(number of cases)

*positive change scores denote increased self-discrepancy scores
Table 8

Hierarchical Regression Testing for the Effects of Assessed Mood and Depression Proneness on AI Discrepancies (n=190)

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACL₁</td>
<td></td>
<td>.07</td>
<td>.04</td>
<td>.13</td>
</tr>
<tr>
<td>DPRS₁</td>
<td></td>
<td>.03</td>
<td>.01</td>
<td>.21*</td>
</tr>
<tr>
<td>Step 2</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACL₁ x DPRS₁</td>
<td></td>
<td>.00</td>
<td>.00</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2.; DACL = Depression Adjective Checklist; DPRS = Depression Proneness Rating Scale.

*p < .005
statistically controlled, current mood and the interaction between mood and history of depressive symptoms were not linearly related to AI discrepancy at Time 1. Consequently, the interaction hypothesis was not supported using Time 1 data either.

Although a significant interaction was not found using hierarchical regression on either Time 1 or Time 2 data, examination of the data in Table 7 revealed trends which were promising enough to proceed with additional tests of this hypothesis. The regression analysis which was used tested only for the linear effects of mood induction because a linear coding for mood was used (-1, 0, 1). Since analysis of variance tests for any effects (linear and non-linear), it was decided to analyze the same data with a 2 x 3 (DPRS x Mood Induction) analysis of covariance, with AI₁ as the covariate and AI₂ as the dependent variable. A significant interaction was found, $F(145) = 3.88, p = .023$. The results are presented in Table 9 and Figure 2.

To determine which particular variables and levels of variables created the interaction, one must examine the effects of a particular variable separately within each level of the other variable (Keywords, 1993). In this case, the effects of the DPRS must be examined within each level of the experimental condition. Cohen and Cohen (1983) suggest that such analyses be conducted by regression analyses.

Regression analyses demonstrated that in the negative mood condition, high DPRS participants showed a significantly greater increase in reported AI₁,
Table 9

Analysis of Covariance for Al₂ Self-Discrepancy

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPRSMED</td>
<td>1</td>
<td>9.77</td>
<td>1.24</td>
</tr>
<tr>
<td>Mood₂</td>
<td>2</td>
<td>44.19</td>
<td>5.60**</td>
</tr>
<tr>
<td>Interaction</td>
<td>2</td>
<td>30.60</td>
<td>3.88*</td>
</tr>
</tbody>
</table>

Al₁ is the covariate

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. DPRSMED = median split for DPRS scores; Mood = type of mood induction.

* p=.02
** p=.005
Figure 2

AI Change Scores Across Experimental Conditions for High and Low DPRS Scores

![Graph showing AI change scores across different mood induction types: Positive, None, Negative. The graph compares high depression proneness with low depression proneness.](image-url)

- **Positive** mood induction:
  - High Depression Proneness: 1.86
  - Low Depression Proneness: -1.14

- **None** mood induction:
  - High Depression Proneness: 1.35
  - Low Depression Proneness: -1.33

- **Negative** mood induction:
  - High Depression Proneness: 1.11
  - Low Depression Proneness: -1.65

Axis:
- Change in AI Discrepancy Score
- Type of Mood Induction: Positive, None, Negative
- High Depression Proneness
- Low Depression Proneness
discrepancies, when AI were statistically controlled, than did low DPRS participants (Table 10). In the positive mood condition low DPRS participants did not show a significantly greater decrease in reported AI discrepancies than did high DPRS participants (Table 11). Identical analyses were also conducted for the no mood induction control group. In this experimental condition high DPRS participants showed a significantly greater decrease in reported AI discrepancies than did low DPRS participants (Table 12). These results for the no mood induction group are likely due to regression toward the mean. Given that AI is a less than perfectly reliable measure, high and low scores at Time 1 will regress toward the mean at Time 2. Table 13 demonstrates this trend for the no mood induction group.

Although the results in the preceding paragraph provide some preliminary support for the idea that negative mood can prime available self-discrepancies, they do not provide a direct test of whether the relationship between reported AI self-discrepancies and depression proneness is conditional on mood. Consequently, further analyses were conducted to provide a stronger test of the nature of the interaction between mood and depression proneness on an increase in reported AI discrepancies. The effects of the negative mood induction relative to the no-mood induction were examined. Hierarchical regression analysis, only using data from these two experimental groups, revealed a significant mood by depression proneness interaction (Table 14). These results offer support to the interaction hypothesis by demonstrating that
Table 10

Hierarchical Regression Testing for the Effects of Depression Proneness on AI_2 Discrepancies Following Negative Mood Induction (n=49)

<table>
<thead>
<tr>
<th>Variables</th>
<th>R^2</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI_1</td>
<td>.37</td>
<td>.65</td>
<td>.12</td>
<td>.61**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS_1</td>
<td>.46</td>
<td>.00</td>
<td>.02</td>
<td>.29*</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. AI = actual-ideal discrepancy; DPRS = Depression Proneness Rating Scale.

*p=.01
**p<.0001
### Table 11

Hierarchical Regression Testing for the Effects of Depression Proneness on AL₂ Discrepancies Following Positive Mood Induction (n=48)

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI₁</td>
<td>.40</td>
<td>.57</td>
<td>.10</td>
<td>.63**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS₁</td>
<td>.40</td>
<td>.00</td>
<td>.02</td>
<td>.08</td>
</tr>
</tbody>
</table>

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. AI = actual-ideal discrepancy; DPRS = Depression Proneness Rating Scale.

**p<.0001**
Table 12

Hierarchical Regression Testing for the Effects of Depression Proneness on $A_{i2}$ Discrepancies Following No Mood Induction (n=50)

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$A_{i1}$</td>
<td>.08</td>
<td>.39</td>
<td>.18</td>
<td>.27*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS$_1$</td>
<td>.18</td>
<td>.00</td>
<td>.02</td>
<td>-.32**</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. $A_{i}$ = actual-ideal discrepancy; DPRS = Depression Proneness Rating Scale.

* $p$=.05  
** $p$=.02
Table 13

Mean AI Self-Discrepancy Scores for Low and High DPRS scores in the No Mood Induction Condition

<table>
<thead>
<tr>
<th></th>
<th>$A_{i1}$</th>
<th>$A_{i2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low DPRS Scores</td>
<td>-1.27</td>
<td>-.92</td>
</tr>
<tr>
<td>High DPRS Scores</td>
<td>-.17</td>
<td>-1.50</td>
</tr>
</tbody>
</table>
Table 14

Hierarchical Regression Testing for the Effects of Negative Mood and Depression Proneness on $A_{12}$ Discrepancies (n=99)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$A_{11}$</td>
<td>.49</td>
<td>.53</td>
<td>.10</td>
<td>.49**</td>
</tr>
<tr>
<td>DPRS$_{1}$</td>
<td>.00</td>
<td>.02</td>
<td></td>
<td>-.14</td>
</tr>
<tr>
<td>Mood$_{2}$</td>
<td>.59</td>
<td>.58</td>
<td></td>
<td>.09</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS$<em>{1}$xMood$</em>{2}$</td>
<td>.53</td>
<td>.00</td>
<td>.03</td>
<td>-.72*</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. $A_{1}$ = actual-ideal discrepancy; DPRS = Depression Proneness Rating Scale. Mood = Type of mood induction with positive mood induction coded as -1 and no mood induction coded as 0.

* $p<.01$
** $p<.0001$
the effect of the negative mood induction, relative to the no mood induction, was moderated by the participant’s level of depression proneness, with negative mood producing a greater increase in AI self-discrepancies in those participants who scored high on the DPRS, and who presumably possessed more AI discrepancies, than in those participants who scored low on the DPRS, and who presumably had fewer AI discrepancies that could be primed by negative mood. Similarly, the effects of the positive mood induction group relative to the no-mood induction group were examined. Again, hierarchical regression analysis demonstrated a significant mood by depression proneness interaction (Table 15). These results suggest that the effect of the positive mood induction, relative to the no-mood control, was moderated by the participant’s level of depression proneness, with positive mood producing a greater decrease in reported AI self-discrepancies in those participants who scored low on the DPRS, and who presumably possessed fewer AI discrepancies, than in those participants who scored high on the DPRS, and who presumably had more AI discrepancies.

**Hypothesis 6.** If Ogilvie’s Undesired Self Theory is correct and actual-undesired discrepancies decrease vulnerability to depression, then these discrepancies should be negatively related to depression proneness and depressive symptoms. As shown in Table 3, the correlation between AU1 at Time 1 and BDI1 was statistically significant ($r (182) = -.25$, $p = .001$). The greater the discrepancy between the participant’s perceptions of their actual attributes and their undesired attributes, the less likely they were to report
Table 15

Hierarchical Regression Testing for the Effects of Positive Mood and Depression Proneness on Al₂ Discrepancies (n=98)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Al_1$</td>
<td>.23</td>
<td>.55</td>
<td>.11</td>
<td>.47**</td>
</tr>
<tr>
<td>DPRS$_1$</td>
<td></td>
<td>.00</td>
<td>.02</td>
<td>-.33</td>
</tr>
<tr>
<td>Mood$_2$</td>
<td></td>
<td>1.10</td>
<td>.62</td>
<td>.16</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRS$_1$xMood$_2$</td>
<td>.33</td>
<td>.12</td>
<td>.03</td>
<td>1.10**</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. Al = actual-ideal discrepancy; DPRS = Depression Proneness Rating Scale. Mood = Type of mood induction with negative mood induction coded as 1 and no mood induction coded as 0.

**p<.0001
current symptoms of depression. Additionally, Table 3 shows a significant relationship between AU, discrepancies and current depressed mood (DACL\(_1\)), \(r (182) = -.25, p = .001\), with high AU scores being related to an absence of depressed mood. Table 3 also shows a significant negative relationship between AU\(_1\) and DPRS\(_1\), \(r (182) = -.22, p = .002\) with high AU discrepancies associated with the absence of past depressive episodes. These results confirm the predictions from Ogilvie's theory.

**Hypothesis 7.** If, according to Ogilvie's theory, actual-undesired discrepancies decrease vulnerability to depressive symptoms rather than simply being a consequence of depressed mood, then the relationship between AU discrepancies and depression proneness should remain significant after controlling for the effects of mood. Only weak support was found for this hypothesis. The partial correlation between AU\(_1\) and DPRS\(_1\), scores when controlling for DACL\(_1\), was \(r (181) = -.12, p = .10\).

**Hypothesis 8.** If Ogilvie is correct and the actual-undesired self-discrepancy is a better predictor of depression than the actual-ideal self-discrepancy, then the actual-undesired self-discrepancy should account for more of the variance on depression symptoms and depression proneness than the actual-ideal self-discrepancy. As shown in Table 3, BDI\(_1\) scores correlated more strongly with AI\(_1\) than with AU\(_1\), DPRS\(_1\) scores correlated more strongly with AU\(_1\) than AI\(_1\). However, none of these differences between correlation coefficients were statistically significant. Consequently, this hypothesis was not supported.
The particular test of this hypothesis is a direct replication of work previously done in Ogilvie's lab. Although the above analyses address the quantity of variance in the relevant relationships, they do not highlight the unique contributions that each self-discrepancy makes in understanding depressive symptoms and depressive vulnerability. This information is likely important in understanding what factors contribute to these constructs. Consequently, to test for the differential contributions of each of the self-discrepancies on depressive symptoms (as measured by the BDI), hierarchical regression was used to regress BDI, scores on AI, and then AU, self-discrepancy scores. As presented in Table 16, AU, self-discrepancy score showed a significant relationship with BDI, score, independent of AI, score. In other words, these results demonstrate that AI, and AU, self-discrepancy scores were both significantly related but in different ways to depressive symptoms.

Another regression analysis was run to test for the differential contribution of each of the self-discrepancies on depressive vulnerability (as measured by the DPRS). Hierarchical regression was used to regress DPRS, scores on AI, and AU, self-discrepancy scores. As presented in Table 17, AU, self-discrepancy scores did not show a significant relationship with DPRS, scores, independent of AI, scores (no unique contribution).
Table 16

Hierarchical Regression Testing for the Effects of AI\textsubscript{1}, Discrepancies and AU\textsubscript{1}, Discrepancies on BDI\textsubscript{1}, Scores (n=190)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI\textsubscript{1}</td>
<td>.04</td>
<td>.44</td>
<td>.17</td>
<td>.19*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU\textsubscript{1}</td>
<td>.07</td>
<td>-.60</td>
<td>.23</td>
<td>-.20**</td>
</tr>
</tbody>
</table>

Note: Subscripts denote whether scale was administered at Time 1 or Time 2. AI = actual-ideal discrepancy; AU = actual-undesired discrepancy; BDI = Beck Depression Inventory.

*p = .01

**p<0.001
Table 17

Hierarchical Regression Testing for the Effects of Al, Discrepancies and AU, Discrepancies on DPRS, Scores (n=190)

<table>
<thead>
<tr>
<th>Variable</th>
<th>R²</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al₁</td>
<td>.07</td>
<td>1.71</td>
<td>.45</td>
<td>.27*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU₁</td>
<td>.09</td>
<td>-1.06</td>
<td>.61</td>
<td>-.13</td>
</tr>
</tbody>
</table>

**Note:** Subscripts denote whether scale was administered at Time 1 or Time 2. Al = actual-ideal discrepancy; AU = actual-undesired discrepancy; DPRS = Depression Proneness Rating Scale.

*p < .0001*
DISCUSSION

Higgins' Self-Discrepancy Theory

Higgins proposes that AI self-discrepancies are stable cognitive structures which predispose individuals to depression. Although his theory is similar in form to other cognitive theories, he simply places a different emphasis on the nature of the cognitive structure. Rather than focusing on dysfunctional attitudes or attributions, Higgins focuses on people's patterns of self-beliefs. Part of the purpose of this study was to examine Higgins' theoretical propositions and to explore an alternate explanation to empirical evidence which is inconsistent with his theory.

Support for Higgins' First Theoretical Proposition

The results of the current study replicated previous research evidence in support of Higgins' (1987; 1989b) first theoretical proposition which proposes that AI self-discrepancies are associated with depression. Similar to previous research, both from Higgins' labs and independent labs, the present study demonstrated that AI self-discrepancies are positively correlated with depressive symptoms. Higgins and his colleagues have argued (Higgins, 1987; 1989b; Strauman, 1995) and provided some experimental evidence (Higgins, Bond, Klein, & Strauman, 19886; Strauman, 1992; Strauman & Higgins, 1987) that these variables are not only related but that AI self-discrepancies are contributory causal factors in the development and maintenance of depression. The present study provided further support of this claim by demonstrating a
relationship between a person’s proneness to depression and AI discrepancies. Additionally, it was argued that if AI discrepancies are a vulnerability factor in depression then the relationship between depression proneness and AI discrepancies should not be dependent on current mood state. When this relationship was tested prior to the loss of several subjects due to attrition and screening, it remained significant after statistically controlling for current depressed mood. Past research that correlated AI discrepancies with current symptoms of depression could not rule out the rival hypothesis that depression caused discrepancies, rather than the discrepancies caused depression. However, by controlling for mood in the current study, it can be argued that the relationship found between discrepancies and depression proneness cannot be attributed to the effects of depressed mood. Although these initial analyses looked promising for Higgins’ theory, further analyses raised questions regarding the meaning of these results.

**Higgins’ Stability Proposition**

Stability of the magnitude of AI self-discrepancies is an important issue for Higgins’ theory since the crux of his theory (that particular self-discrepancies act as vulnerability factors to specific emotional difficulties) depends on the enduring nature of self-discrepancies. In the current study, stability of AI discrepancies was conceptualized as consistency in the magnitude of reported AI discrepancies between Time 1 and Time 2. No attempt was made to evaluate the stability of the reported self-attributes that comprise the self-discrepancies.
Consistent with previous research regarding the self-discrepancy theory (Moretti & Higgins, 1990; Scott & O'Hara, 1993; Strauman, 1996), AI self-discrepancies showed considerable instability. In the current study, the test-retest reliability coefficient (AI₁ - AI₂ correlation) of the AI self-discrepancy scores for the no-mood induction control group over a three to six week period was low¹.

This evidence of poor stability is also consistent with previous researchers' examination of the stability hypothesis in other cognitive theories of vulnerability to depression (for reviews see Barnett & Gotlib, 1988; Persons & Miranda, 1992).

This past research suggests that the cognitive structures theorized to predispose people to depression change over time.

As was highlighted in the introduction of this paper, the low stability found in the magnitude of reported self-discrepancies across time does not necessarily need to be viewed as discrediting Higgins' theory. In an attempt to explain why the stability hypothesis has received little empirical support for any of the cognitive theories of depression, Miranda and Persons (Miranda & Persons, 1988; Miranda, Persons, & Byers, 1990; Persons & Miranda, 1992) created and tested the mood-state hypothesis which proposes that particular cognitive structures are stable vulnerability factors for depression but an individual's ability to access and report the relevant structure is mood-state dependent.

¹ As noted in the results section, the reliability score for the control group, when compared to the negative and positive mood induction groups, likely underestimates the stability of the AI discrepancy scores. This pattern of results is peculiar and inconsistent with Higgins' theory and perhaps, suggests some undetected oddities in the no mood induction group.
Consequently, based on the propositions of the mood-state hypothesis and the empirical work done to lend support to these propositions, it was argued, in the present study, that current mood might affect the reporting of AI self-discrepancies by making available discrepancies more accessible. More specifically, an interaction between mood and depression proneness (available AI discrepancies) was predicted such that people who were prone to depression and were in a negative mood would be more likely to increase their reporting of AI discrepancies than all other participants. This interaction between depressive vulnerability and mood on increase in reported AI self-discrepancies was tested and the results are described in the following subsection.

**The Interaction Hypothesis**

The initial test (hierarchical regression using data from participants who completed Time 2 of the study) of the interaction hypothesis did not provide support for Miranda and Person's mood-state hypothesis. It was expected that depression proneness would moderate the relationship between induced mood and measures of AI discrepancy, with high depression prone participants showing a greater increase in reported discrepancies than low depression prone participants as induced mood was varied from positive to negative. Instead, results of the testing of this hypothesis demonstrated that the negative mood induction increased the likelihood of AI discrepancies being reported independent of depression proneness. These results do not support the
argument that negative mood primes (or increases the accessibility to) available AI self-discrepancies.

Because the initial test of the interaction included participants who only completed both parts of the study (and therefore, did not include individuals who were screened out because of more significant psychopathology), it was argued that the narrower range of variables may have impacted the results. Specifically, as Table 2 demonstrates, screening out participants with high BDI scores, decreased the range of scores on the DPRS (measure of depressive vulnerability) at Time 2. Questions regarding the possible limitations of the restricted sample on post-manipulation analyses led to post-hoc analyses being done to test the interaction hypothesis using Time 1 data (which included the wider range of participants). This analysis also failed to demonstrated that current mood interacts with depression proneness to influence the reporting of actual-ideal discrepancies. Failure to find a mood by depression proneness interaction with this analysis may have been the result of a restricted range on the DACL scores at Time 1. It appears from examining the DACL₁ and DACL₂ data in Table 1 that the mood manipulation at Time 2 produced more extreme moods than those naturally occurring at Time 1 (larger range at Time 2). Consequently, the restricted range of DACL scores at Time 1 may have attenuated the size of any interaction and consequently made it difficult to detect.

Despite these nonsignificant findings for the interaction hypothesis, data in Table 7 indicated promising trends. Consequently, further analyses were
conducted. Interestingly, in contrast to the regression analyses, an ANCOVA revealed a significant interaction. This discrepancy in findings between the different types of analyses is due to the nature of the relationships between variables. As Figure 2 demonstrates the relationship between mood and increase in reported AI discrepancies was not particularly linear for either the high or low DPRS participants. The regression analysis tested only for the linear effects of mood induction because a linear coding was used for mood. The nonsignificant finding using the regression analysis indicated that the linear component of the mood-AI relationship for the low DPRS participants did not differ from the linear component of the mood-AI relationship for the high DPRS participants. The ANCOVA tested for any effects (linear and non-linear). The significant mood by DPRS finding demonstrated that the effects of mood on increased reporting of AI discrepancies were different for high DPRS participants than for low DPRS participants. However, this analysis did not reveal whether or not the two relationships differed in their linear components. Regression was the better test of the linear relationships that were predicted because it is a more powerful test than analysis of variance in detecting a specific relationship when the relationship exists and when the appropriate code is used in regression. However, once a nonsignificant result was found, ANCOVA became a useful tool in exploring for nonlinear effects.

Further regression analyses demonstrated that high DPRS participants in the negative mood condition group showed a significantly greater increase in
reported AI discrepancies than lower DPRS participants in the same group. This finding seems to provide some support for proposition which grew out of Miranda and Person’s mood-state hypothesis that negative mood can prime relevant available AI self-discrepancies. Additional analyses looking at the effects of the negative mood induction group relative to the no mood induction group provided even stronger support for this idea. Results demonstrated an interaction, with a stronger relationship found between depression proneness and an increase in reported AI self-discrepancies when participants are induced into a negative mood than when they are in a no-mood induction group. These results provide further support for the argument that negative mood makes available, but latent, AI discrepancies accessible for reporting.

Some initial evidence also exists, although it is less strong, that positive mood possibly primes a more “positive” cognitive structure. Results of regression analyses suggest that a stronger relationship is found between availability of AI discrepancies (depression proneness) and a decrease in reported AI discrepancies when participants are induced into a positive mood than when they are in a no-mood induction group. More specifically, participants who were less prone to depression demonstrated a greater decrease in reported AI discrepancies when they were in the positive mood induction group than when they were in the no-mood induction group. The results suggest that in trying to understand the etiology and maintenance of depression, it may be important to
not only examine what makes people vulnerable to depressive episodes but to also examine what protects people from depressive episodes.

Summary Remarks Regarding the Tests of Higgins' Self-Discrepancy Theory

A recent review of the literature revealed that after a flurry of research activity in the late 80's and early 90's regarding the self-discrepancy theory, direct examinations of the theory have subsided. However, interest and intrigue with the application of the theory appear to be strong as it is being used to study a number of different issues including women's emotional reactions to infertility (Kikendall, 1994), death anxiety (Tomer & Eliason, 1996), persecutory delusions (Kinderman & Bentall, 1996), natural killer cell activity (Strauman, Lemieux, & Coe, 1993), bulimic symptomatology (Forston & Stanton, 1992), body image (Jacobi & Cash, 1994), jealousy and envy (Salovey & Rodin, 1991), psychological interventions in oncology settings (Avants, Margolin, & Singer, 1993), and the development of empathy (Houston, 1990). Given that interest in the application of the self-discrepancy theory is strong, studies like the present one which further develop and expand the theory are important. Understanding the strengths and limitations of the theory is vital as researchers incorporate it into their examination of other issues.

Higgins' self-discrepancy theory proposes that AI discrepancies, which are stable cognitive structures, predispose individuals to depression. This study yielded supportive evidence for Higgins' theoretical proposition regarding the relationship between AI self-discrepancies and depression. Indeed, the positive
association between symptoms of depression and AI self-discrepancies appears to be a robust finding which has been demonstrated empirically again and again. The results of this study also lend preliminary support to the notion that AI self-discrepancies are causal contributing factors to depression by demonstrating that the relationship between depressive vulnerability and AI discrepancies is not mediated by depressed mood.

Despite these positive findings, similar to previous research, the results of this study did not demonstrate strong evidence for Higgins' claim regarding the stability of AI self-discrepancies. Based on Miranda and Person's mood-state hypothesis, it was argued that perhaps AI discrepancies are stable (chronically available) in vulnerable persons but they are accessible only during negative mood states. Initial tests of the interaction hypothesis that depression proneness would moderate the relationship between induced mood and measures of AI self-discrepancy did not yield significant results. However, further analyses demonstrated preliminary support for the interaction hypothesis suggesting that vulnerable persons (persons who are prone to depression), who are experiencing a negative mood, are more likely to demonstrate an increase in reported AI self-discrepancies than nonvulnerable persons in a negative mood or vulnerable and nonvulnerable persons in a less negative mood.

These results, if found to be robust, have significant theoretical and applied implications. If it is the case that available AI self-discrepancies remain latent until activated by a negative mood state, then the low stability coefficients
found in reported A1 self-discrepancies across time in the present study and in past research need not discredit Higgins' theory. The preliminary support found for the interaction hypothesis in this study provides an alternate explanation to the existing empirical evidence which is inconsistent with Higgins' stability proposition. The results suggest that A1 self-discrepancies could be stable structures chronically available in vulnerable persons but that these discrepancies may not always be accessible for reporting. Negative mood appears to be a possible important factor in priming available but latent self-discrepancies. This finding does not threaten Higgins' theoretical propositions but simply enhances the complexity of the self-discrepancy theory.

This preliminary support for the interaction hypothesis suggests that changes in the design of studies testing Higgins' self-discrepancy theory might need to be considered. Attempts to assess A1 self-discrepancies will likely need to involve some procedure to prime them or make them more accessible. Unless such a procedure is included in these types of studies, not demonstrating the presence of A1 self-discrepancies may be due to a failure to prime a structure which is present but latent and therefore not reported.

The preliminary support for the interaction hypothesis could also have implications for the treatment of depression. This study, like others, demonstrated that A1 self-discrepancies are associated with depression and provided initial support that they are contributory causal factors in depression. Higgins (1987) argued that if A1 self-discrepancies are vulnerability factors in the
development and maintenance of depression, then alternatives to reducing emotional distress revolve around changing the Al discrepancy. He proposed two possible changes to the Al discrepancy that could be implemented in therapy. First, a therapist could help a client to change his or her actual/own self-concept to be less discrepant from the ideal/own self. Second, attempts could be made to decrease the relevance of the ideal/own self. Results of this study could have significant implications for these treatment suggestions. In order to effectively change troublesome self-attributes that comprise the Al discrepancy and thus reduce the magnitude of the discrepancy, the attributes must be made accessible. It is not possible to begin the work of changing the Al discrepancy until the self-beliefs which comprise this discrepancy have been elicited. Thus, given this study provides some evidence that mood may be a vital factor in people being able to report their available Al self-discrepancies, it implies that effective treatment of the underlying problematic self-beliefs requires activation of these cognitive structures. It might be important for a therapist to elicit the relevant and important self-attributes early in therapy when a client is depressed. If a therapist waited until a client's depression had lifted before eliciting this information, these problematic self-beliefs might not be uncovered.

Ogilvie's Undesired-Self Theory

According to Ogilvie's (1987) undesired-self theory the actual-undesired (AU) self-discrepancy is a more important determinant of people's depression than the Al self-discrepancy. The present study replicated Ogilvie's previous
findings that the AU self-discrepancy is associated with depression. However, it was argued, that if Ogilvie's theory is correct, and AU self-discrepancy is a determinant of depression proneness, then this relationship should remain intact independent of current mood. Only weak support was found for this hypothesis. These findings do not strongly eliminate the possibility that the relationship between AU self-discrepancy and depression proneness is mediated by mood. Consequently, it is possible that the AU self-discrepancy may not be a causal factor in depression but may simply be a consequence of depressed mood.

A replication of Ogilvie's test of the hypothesis that the AU self-discrepancy is a better predictor of depression than the AI self-discrepancy revealed that both types of self-discrepancies account for approximately the same variance on depressive symptoms and vulnerability to depression. Further analyses demonstrated that both the AI and AU self-discrepancies offered a unique contribution in the prediction of current depressive symptoms. However, it was found that the AU self-discrepancy did not provide a differential contribution on depressive vulnerability over and above the AI self-discrepancy. It is difficult to argue, then, based on the results of this study, that the AU self-discrepancy is a better predictor of depression than the AI self-discrepancy. At most, one might say that the AU self-discrepancy is an equally important predictor of depression as the AI self-discrepancy. However, the differences in results regarding how mood affects the relationship between the separate self-discrepancies and depression proneness suggests that the self-discrepancy
theory may be more important in understanding vulnerability to depression than the undesired-self theory.

**Limitations of the Study**

Even the most carefully designed and thoughtfully executed studies have limitations. Making the limitations explicit allows for a more effective evaluation of the project and the conclusions drawn by the researcher and assists to inform future research direction.

**Research Design**

One possible limiting factor of this study which must be addressed is the design of the research project. The quasi-experimental nature of parts of this study impede any statements with respect to the causal nature of the variables. Specifically, although AI discrepancies were found to be related to symptoms of depression, one cannot extrapolate that the former causes the latter from the correlational evidence produced during Time 1 of the study. Likewise, although the results indicate that the relationship between AI discrepancies and depressive vulnerability (depression proneness) cannot be attributed to the effects of mood, a causal relationship between AI discrepancies and depression proneness can still not be inferred. However, it should be noted that the mood manipulation to which participants' were randomly assigned at Time 2 does allow for causal inferences to be made regarding mood being one of the determinants of an increase in reported AI discrepancy scores.
Another possible limitation of the study related to research design was the exclusion of vulnerable participants prior to the experimental manipulation. As mentioned previously, this action narrowed the range of DPRS scores available which may have negatively impacted the analyses. This research action also served to reduce the generalizability of the results found for the interaction hypothesis. By screening out individuals with significant depressive symptomatology, the results for the interaction hypothesis can only be generalizable to a nondepressed sample.

There are also limitations to the generalizability of this study’s results given the nonrandom sample of undergraduate students used. Ideally, when studying a construct, such as depression, one should sample from clinical populations. However, using a sample of clinically depressed individuals in this study would have created ethical and practical difficulties. The tradeoff in using a student sample to study a phenomenon such as depression is the inability one has in generalizing the results of this study to the clinical population of interest. By using an analogue sample in this study, it cannot be stated with confidence that the relationships demonstrated among the variables are important or relevant for a clinically depressed population.

**Measurement of the Important Variables**

Another possible limitation of this study is related to the measurement of the self-discrepancies using Higgins’ Selves Questionnaire. Although it has been the instrument of choice in the last decade when examining self-
discrepancies, few queries or challenges have been made regarding the Selves Questionnaire which is likely a grave oversight. Although it was not the purpose of this study was to evaluate the Selves Questionnaire, some insights and observations bear reporting.

A concern which exists regarding the use of the idiographic Selves Questionnaire is the degree to which participants can provide adequate lists of attributes or traits, both quantitatively and qualitatively, to aid in the calculation of a self-discrepancy score. Regarding the quantity of traits, a descriptive analysis in the present study demonstrated that participants produced, on average, 8.57 actual attributes (range = 4-10), 7.89 ideal attributes (range = 2-10), and 7.87 undesired attributes (range = 2-10). It appears that the mean number of attributes listed is likely adequate for calculating a meaningful self-discrepancy score. However, it is not clear what the meaning is of the range of attributes listed. For example, one participant listed two attributes on both the actual and ideal lists. One pair of these attributes was an antonymous mismatch and the other pair was a nonmatch creating a score of two. Another participant listed 10 attributes on both the actual and ideal lists. A combination of matches and synonymous and antonymous mismatches also lead to a score of two. Although these scores are quantitatively identical, given the difference in ranges of attributes listed and consequently the difference in combination of matches and mismatches, it appears that the discrepancy scores might reflect different processes.
Some concern also exists regarding the qualitative nature of traits which participants list on the idiographic Selves Questionnaire. Intense exposure to all the attributes listed by all participants as a result of scoring the Selves revealed interesting findings. First, the consistency of certain attributes used across most questionnaires quickly became evident. Many participants used words like “kind,” “caring,” “thoughtful,” “nice,” “generous,” and “friendly” to describe their actual and ideal selves. The consistent use of such positive words calls into question people’s ability to provide accurate and self-discriminating self-descriptors. Second, some terms people used to describe their attributes were vague and hard to define and consequently, difficult to code. Without the opportunity to query and clarify, it was sometimes difficult to know what participants meant when they described themselves with words like “positive” or “strong.” Without knowing the precise meaning of the word for the participant it was then difficult to make a decision regarding the presence or absence of matches and mismatches. All of these concerns raise questions regarding the meaning of the self-discrepancy scores produced by the Selves Questionnaire. The validity of the Selves Questionnaire may need to be examined and alternate methods of measuring self-discrepancies may need to be explored.

Higgins (1987) asserted that it is critical to take an idiographic approach to the measurement of self-discrepancies. He emphasized the importance of using subject generated self-descriptors in order to tap dimensions that may be uniquely important to the individual participant. According to Higgins,
nonidiographic approaches, such as experimenter-provided adjective checklists, may contain attributes not important to the individual and may miss attributes which are centrally important. Higgins' reasoning has intuitive appeal but his idiographic approach to measuring self-discrepancies may have limitations. The idiographic method proposed by Higgins is nonefficient from a research perspective as scoring the Selves Questionnaire is extremely time-consuming. Tangney, Niedenthal, Covert, and Hill-Barlow (1996) compared the more economical nomothetic approach of using an adjective ratings list to the idiographic method suggested by Higgins in measuring self-discrepancies. Their results demonstrated that the variables resulting from the two methods yielded essentially the same pattern of results when considering their relationship to other variables of interest. These researchers argue, consequently, that there appears to be no compelling reason to adopt the more time-consuming idiographic method of assessing self-discrepancies when more efficient nomothetic measures appear to produce similar results.

The three depression measures used in this study, the BDI, DPRS, and DACL, are designed to measure different factors related to depression. The major purpose of the BDI is to measure the entire syndrome of depression as it taps into affective, somatic, psychomotor, psychological, and cognitive domains. The DACL is considered a state measure of depressed affect while the DPRS is a trait measure of depressive orientation. Although these measures are intended to reflect different constructs, examination of correlations in Table 3
computed from data gathered at Time 1 reveals significant correlations between these various measures indicating overlap between the constructs. Although one would expect some degree of interrelatedness among these measure (because of some overlap of variables), the degree of relationship amongst the measures raises questions regarding the extent to which the constructs they measure are distinct. Consequently, some caution should be exercised when interpreting the results which arise from the use of these measures.

**Mood Induction Procedure**

The Velten has been used frequently in psychological research when studying the impact of mood on other psychological processes, and its effectiveness and validity have been the subjects of a good deal of study. For example, in a recent meta-analytic study (Westermann, Spies, Stahl, & Hesse, 1996), the Velten was compared and contrasted with 10 other important mood induction procedures. The results of integrating 250 effects of the experimental induction of positive and negative mood in adult, non-clinical samples demonstrated that the effect sizes were generally larger for negative than for positive mood inductions. The results of the current study also reflect this finding that negative mood appears easier to induce than positive mood. In Westermann et al.'s (1996) study, the presentation of a film or story (with positively or negatively valenced content) turned out to be most effective in inducing both positive and negative mood states. The effects were especially
impressive when participants were explicitly instructed to enter the specified mood state. For elated mood, all other mood induction procedures, including the Velten, yielded considerably lower effectiveness scores. For the induction of negative mood states, Westermann et al. (1996) found that the Velten was as effective as the film or story mood induction procedure (without instruction). These researchers concluded that the Velten is an effective tool for inducing negative mood but not positive mood.

Another notable concern is whether or not the Velten mood induction procedure produces results because of a true mood shift or because of demand characteristics. Demand characteristics are the cues that communicate the implicit expectations of the experimental manipulation to the participant and therefore are assumed to confound the effects of independent variables. The possibility of the mood created by the Velten technique simply represents the participants’ compliance to demand characteristics has been investigated many times. In a comprehensive review (46 experiments examined) of the Velten mood induction procedure literature, Keanely (1986) argues that the reported findings relating to the contribution of demand characteristics to the procedure, are generally inconsistent and ambiguous. He argues that such results do not necessarily reflect a failure on the part of the Velten procedure but reflect a lack of experimental precision in testing the procedure. Finegan and Seligman (1995) recently offered a challenge to the view that the Velten mood induction procedure produces mood effects only through demand characteristics. In their
study, placebo conditions were created using the neutral Velten mood manipulation with instructions to subjects to feel either a positive or negative mood. The results demonstrated that the placebo conditions did not differ from each other or from the real neutral Velten condition. Only when the real Velten manipulations were used were significant differences found between positive and negative mood conditions.

There continue to be concerns about the effectiveness and the validity of the Velten procedure in inducing particular mood states. The current consensus appears to be that the Velten is a reasonable procedure for inducing a negative mood state but its ability to produce a positive mood state is less impressive. In retrospect, it appears that a film or story mood induction procedure would have been a better choice for effectively inducing both negative and positive mood in the current study.

**Statistical versus Clinical Significance**

It is important to differentiate between the statistical versus clinical significance of the results of this study. It is possible for a variable to be statistically significant, without achieving clinical significance. For example, even though a variable such as AI self-discrepancy accounts for approximately eight percent of the variance in depression proneness which is statistically significant, it is arguable whether or not such results have clinical significance. The fact that AI self-discrepancies account for so little of the variance suggests that other variables may be equally or more important in predicting depression proneness
and could potentially be clinically significant. In response to this issue, a trend is developing in the clinical literature towards the integration of different theoretical models in an attempt to develop a more complex understanding of the nature of depression. One such attempt is Champion and Power's (1995) social cognitive theory of depression in which they propose that a large proportion of episodes of depression result, in part, from the interaction between an individual's cognitive vulnerability and the social context in which he or she lives. Such efforts at synthesis are important clinically.

However, it is important not to confuse theoretical and clinical concerns. Although it might be the case that depression is determined by a multitude of variables (none of which have a major impact on depression) and that knowledge of any of these is of little use of the clinician, it does not mean that researcher should ignore them or discard the theory. Consequently, research like this current study remains an important enterprise.

**Future Research Directions**

The results and shortcomings of this study indicate a number of research possibilities. First, given the concern about the impact of the restricted variables on the analyses because of screening out vulnerable participants it would be interesting to conduct a similar study to the present one which included vulnerable participants. Second, given the concerns regarding generalizability of the results, because of the student sample used, replications with clinical samples are needed.
Third, a more systematic examination of the validity of the Selves Questionnaire needs to occur. Another possible reason for the lack of stability in people's reported self-discrepancies across time could be that the Selves Questionnaire does not validly measure people's relevant self-discrepancies. Further exploration of the use of a nomothetic instrument in measuring self-discrepancies as an alternate to the time-consuming idiographic Selves Questionnaire may be fruitful.

Fourth, as mentioned earlier, the quasi-experimental nature of parts of this study do not permit any conclusions about particular self-discrepancies as causal factors in the etiology of depression. A direct test of the hypothesis that self-discrepancies are vulnerability factors for depression would require a prospective, longitudinal study with repeated measurement of self-discrepancies (possibly when in a negative mood) and depressive symptoms.

Fifth, the results of this study provide some preliminary evidence that available self-discrepancies remain latent until activated by a negative mood state. This interaction hypothesis was tested using only AI discrepancies, however, it is possible that the same pattern of results could also be relevant for the actual-ought (AO) self-discrepancies. Actual-ought discrepancies may be stable vulnerability factors for anxiety disorders but an individual's ability to access and report them may be dependent on mood. An investigation of the relevance of the mood-state hypothesis for AO self-discrepancies would be interesting.
Sixth, it was argued in this study that the preliminary support found for the interactive relationship between depression proneness and mood on reported AI discrepancies might account for the demonstrated instability of AI self-discrepancies across time. Although this inference was made, no direct test was done to examine whether or not taking mood into account when examining the relationship between depression proneness and AI discrepancies actually increases the stability of the AI discrepancies. An interesting next empirical step would be to design a study which directly tests this proposition. A similar Time 1/Time 2 design could be used, but mood induction would need to occur at both Time 1 and Time 2 prior to the completion of measuring of the self-discrepancies.

Seventh, preliminary evidence was found that in addition to negative mood possibly priming a depressogenic structure (AI self-discrepancies), positive mood might prime a more "positive" cognitive structure (actual-ideal congruency?). Further investigations of the possible relationship between actual-ideal congruency and symptoms of depression might yield some interesting findings. As mentioned before, perhaps in trying to understand the nature and etiology of depression, it is important to not only examine what makes people vulnerable to depressive episodes but to also examine what protects people from depressive episodes.

Finally, this research project, like many others before it, attempts to contribute some insight and understanding to the question of why people differ in
their affective experiences. In the history of psychology, many factors that may initiate and maintain differing affective experiences have been examined, such early experiences, schemas, various cognitions, life events or stresses, and social roles. Often such mechanisms have been studied intensely as single factors in the etiology and maintenance of depression. Recently, researchers such as Larsen (1992; Larsen & Ketelaar, 1991) and Hewitt (Hewitt & Flett, 1991) have began to examine the broader person context in which such factors operate and are related. Research such as this, which attempts to highlight the relationship between self-discrepancies and personality styles, would add to the complexity of our understanding regarding vulnerability to depression.

**Concluding Remarks**

Higgins' self-discrepancy theory and Ogilvie's undesired-self theory, like other cognitive theories of emotional distress, emphasize the way in which cognitive structures produce negative emotions. As has been demonstrated in this study, this emphasis on the unidirectional influence of cognitions on affect may be incomplete. Affect also appears to influence cognitions. According to Persons and Miranda (1991) the causal influences probably flow in both directions. Their conclusion reflects a growing awareness among psychologists that emotion and thought are strongly interactive. According to Martin (1990), over the last decade, the study of the interdependent relations between cognition and emotion has become one of the most active areas in psychology. A number of psychologists who adhere to a cognitive model when examining emotional
distress have recently acknowledged the importance of examining bi-directional influences of cognition and affect (Hollon, Shelten, & Davis, 1993; Mahoney, 1993). As has been demonstrated in this study, not taking into account the impact of mood on reported self-beliefs has limited the complexity of Higgins' and Ogilvie's theories.
REFERENCES


APPENDIX A: CONSENT FORM
Appendix A

Consent Form

UNIVERSITY OF SASKATCHEWAN
Department of Psychology

Title: Self-discrepancies, depression proneness, and current mood: A test of Higgins' and Ogilvie's theories.

Research Activity #E19

Investigator: Shannon Baskerville (966-6682)

Supervisor: Dr. Robert Zemore (966-6681)

Objective: The purpose of this study is to investigate how mood influences our beliefs about ourselves and how such beliefs are related to a vulnerability to negative moods.

Rationale: Information obtained from this study should assist in evaluating the validity of some current theories of emotion.

Procedure: Participation in this study requires that students come in on two separate occasions. During part one of the study, students will be asked to report some beliefs about themselves as well as current mood. Students will then be asked to report on past attitudes and feelings that they may have experienced. This part of the procedure should take less than 30 minutes. Students will then be requested to return 4 to 6 weeks later. During part two of the study, students may be asked to read a group of negative self-statements or a group of positive self-statements and instructed to feel the mood suggested by the statements. Subsequently, students will be asked to report current mood and then, again, will be requested to report some beliefs about themselves. This part of the procedure should take between 30 and 45 minutes.

At no time will participants' names be used on the questionnaires or experimental material. When subjects submit their material after part one, they will be assigned a
code number which will be affixed to all their material, current and subsequent.

Benefits: By participating in this study, students will learn about one method of research in psychology. Students will also learn about some current trends in emotion and mood literature.

Risks: Reading and focusing on negative self-statements may cause some emotional distress. Such distress will be transitory. Otherwise, there are no known risks resulting from any of the procedures used in this study.

I understand that this research has been approved by the University of Saskatchewan Advisory Committee on Ethics in Human Experimentation and thus if I have any complaints I may submit them to that committee, or to the head of the psychology department, or to Dr. Zemore, who is the research supervisor for this project.

I, ____________________, have read the above protocol and agree to participate. The procedure and its possible risks have been explained to me by the experimenter and I understand them. I also understand that I am free to withdraw or refuse to participate in this study at any time without academic penalty, or loss of credit.

____________________  __________________
(signature)           (date)

____________________
(researcher)
APPENDIX B: DEPRESSION ADJECTIVE CHECKLIST
Appendix B

Depression Adjective Checklist

**DIRECTIONS:** Below you will find words which describe different kinds of moods and feelings. For each word, consider whether it describes **How You Feel Now—Today**. Some of the words may sound alike, but we want you to **check all the words that describe your feelings**. Work rapidly and record your responses on the blank lines in the following way:

0 if the word DOES NOT DESCRIBE how you feel now

1 if the word DESCRIBES how you feel now

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APPENDIX C: SELVES QUESTIONNAIRE
Appendix C

Selves Questionnaire

In this questionnaire you will be asked to list the attributes of the type of person that YOU believe you actually are, ideally would like to be, ought to be, and hope to never be (undesirable):

Your **actual** self: Your beliefs concerning the attributes or characteristics you think you actually possess now. (This might include positive attributes as well as not-so-positive attributes).

Your **ideal** self: Your beliefs concerning the attributes or characteristics you would ideally like to possess: the type of person you wish, desire, or hope to be.

Your **undesired self:** Your beliefs concerning the attributes or characteristics you believe would be undesirable to possess: the type of person you hope to never be.

You will also be asked about the **extent** to which each attribute is part of your particular self. You can make these ratings after you have listed the attribute. There is room in each section to list up to ten attributes for each "self." Try to list as many as you can, but don't worry if you can't think of ten attributes for each question.

Please take your time and consider each page thoughtfully. There are no right or wrong answers. In general, the first things that come to mind are the best answers. We are relying on your honesty in responding to each question, and we will maintain confidentiality of your answers.
Please list the attributes of the type of person you believe you actually are, using the blank lines:

1. __________ __
2. __________ __
3. __________ __
4. __________ __
5. __________ __
6. __________ __
7. __________ __
8. __________ __
9. __________ __
10. __________ __

For each of the attributes you listed, please rate the extent to which you believe you actually possess the attributes on the small blanks to the right of each word. Use the following scale:

1 - slightly 2 - moderately 3 - a great deal 4 - extremely
Please list the attributes of the type of person you ideally would like to be, using the blank lines:

1. __________ __
2. __________ __
3. __________ __
4. __________ __
5. __________ __
6. __________ __
7. __________ __
8. __________ __
9. __________ __
10. __________ __

For each of the attributes you listed, please rate the extent to which you would ideally like to possess the attribute on the small blanks to the right of each word. Use the following scale:

1 - slightly  2 - moderately  3 - a great deal  4 - extremely
Please list the attributes of the type of person you believe would be undesirable to be, using the blank lines:

1. ____________  
2. ____________  
3. ____________  
4. ____________  
5. ____________  
6. ____________  
7. ____________  
8. ____________  
9. ____________  
10. ____________  

For each of the attributes you listed, please rate the extent to which the attribute would be undesirable to possess on the small blanks to the right of each word. Use the following scale:

1 - slightly  2 - moderately  3 - a great deal  4 - extremely
APPENDIX D: DEPRESSION PRONENESS RATING SCALE
Appendix D

Depression Proneness Rating Scale

INSTRUCTIONS: This questionnaire is concerned with your feelings and attitudes over the past two years. Answer each question by circling the appropriate number on the scale below that question. For example, the first question asks how often you became depressed. If, during the past two years, you were depressed about as often as most people, then circle the 5. On the other hand, if you were depressed more often than most people, but not extremely often, then circle one of the numbers between 5 and 9, etc. Sometimes it is very difficult to know how one's feelings compare with the feelings of others. Just do the best you can. Remember, you are being asked to summarize your feelings and attitudes over the past two years, not just the past few days. Try to avoid being overly influenced by your present mood.

1. Compared to others, how often did you get depressed?

1 2 3 4 5 6 7 8 9
Much less often About the same Much more often

2. Compared to others, how long did your depression last?

1 2 3 4 5 6 7 8 9
Much shorter About the same Much longer

3. Compared to others, how deeply depressed did you become?

1 2 3 4 5 6 7 8 9
Much less deeply About the same Much more deeply

4. Compared to others, how often did you feel discouraged about the future?

1 2 3 4 5 6 7 8 9
Much less often About the same Much more often
5. Compared to others, how often did you feel distant and isolated from people?

   1 2 3 4 5 6 7 8 9
   Much less often About the same Much more often

6. Compared to others, how often did you see yourself as a failure?

   1 2 3 4 5 6 7 8 9
   Much less often About the same Much more often

7. Compared to others, how often did you feel guilty or unworthy?

   1 2 3 4 5 6 7 8 9
   Much less often About the same Much more often

8. Compared to others, how often did you have difficulty concentrating or making decisions?

   1 2 3 4 5 6 7 8 9
   Much less often About the same Much more often

9. Compared to others, how often did you feel tired and lacking energy?

   1 2 3 4 5 6 7 8 9
   Much less often About the same Much more often

10. Compared to others, how often did you feel disappointed in yourself?

      1 2 3 4 5 6 7 8 9
      Much less often About the same Much more often

11. Compared to others, how often did you feel sad or blue?

      1 2 3 4 5 6 7 8 9
      Much less often About the same Much more often
12. Compared to others, how often did you think seriously about suicide?

1  2  3  4  5  6  7  8  9
Much less often About the same Much more often

13. Compared to others, how often did you suffer from lack of appetite?

1  2  3  4  5  6  7  8  9
Much less often About the same Much more often
APPENDIX E: BECK DEPRESSION INVENTORY
Appendix E

Beck Depression Inventory

Instructions: This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
    1 I feel sad or blue.
    2 I am blue or 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.
7. 0 I don't feel disappointed in myself.
    1 I am disappointed in myself.
    2 I am disgusted with myself.
    3 I hate myself.

8. 0 I do not 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.

9. 0 I don't have any thoughts of harming 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 a chance.

10. 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.

11. 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.

12. 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 interest in other people.

13. 0 I can 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 any decisions at all anymore.

14. 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 that I look ugly.
15.  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.

16.  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.

17.  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.

18.  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.

19.  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 ___

20.  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 than I cannot think about anything else.

21.  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 F: VELTEN MOOD INDUCTION
Appendix F

Velten Mood Induction

(Page 1) Please read each of the following statements to yourself. Then read each of the statements out loud. Let's start with this page. But to avoid repetitiousness, begin with the statements below the line of dashes. After you have read what follows to yourself, read it aloud.

---------------------------------
I will read each of the following statements to myself. Then i will read each of the statements out loud, and I won't worry about the reading errors which often occur in unfamiliar situations.

(Page 2) In the first part of this study, I will be shown a series of pages with statements typed on them. These statements represent a certain mood. My success will be largely a question of my willingness to be receptive and responsive to the idea in each statement, and to allow each idea to act upon me without interference. These ideas are called suggestions.

(Page 3) First, as each statement is placed before me, I will simply read it to myself, and then I will read it once out loud in a manner appropriate to its intended seriousness. Then I'll go over each statement again and again in my head with the determination and willingness to really believe it. I will experience each idea. I will concentrate my full attention on it. And I will exclude other ideas which are unrelated to the mood —— like, "I'll see if this will work."

(Page 4) I will always attempt to respond to the feelings. Different people move into moods in different ways. Whatever induces the mood in me fastest and most deeply is the best way for me. Some people simply repeat the statements over and over again to themselves with the intention of experiencing them.

(Page 5) Some people find it natural and easy for them to visualize a scene in which they had or would have had such a feeling or thought. Or, perhaps some easy combination of repeating the statements and imagining scenes will come to me. Very likely, I will begin to feel the way I do when I'm in that mood. I will continue to concentrate my full consciousness on experiencing and retaining the mood as each suggestion is presented. I will continue to discipline and train myself by concentrating my full attention on the mood-statements during any time interval.

(Page 6) To sum up: The purpose of this part of the study is to see whether I can talk myself into a mood. Some of these mood-statements may have no
relation to anything I have ever thought, said, or done. Yet, I will find it quite easy to accept and feel these emotions. I will be concentrating on doing so, rather than comparing each single statement to my life experience and then deciding whether it applies to me. I will let and strive to let them apply to me. I can do this.

(Page 7) I will experience each statement as if it were especially written for me. At first I may feel the impulse to compare a single mood statement to my life experience, or to resist statements which seem to be or are contradictory to what I feel myself to be. But, most people feel this at first. It will become apparent to me that if I am able to talk myself into a mood, then obviously I know how to talk myself out of one. If I find I can do these things then I have learned something about myself: I can learn to control my moods to an extent.

(Page 8) If I feel the urge to laugh, it will probably be because humour is a good way to counteract unwanted feelings — or, it might be because I am surprised that I really am going into the mood. I will try to avoid these reactions, however, by keeping in mind that I have the chance of acquiring extremely useful information about myself and how to help myself out of undesirable mood that occur in everyday life. If for any reason I feel I cannot continue, I will so indicate.

(Page 9) The next page will begin the series of statements. I will read each to myself, then I will read it out loud. Then I will try to experience the mood as well as I can and continue to do so until the experimenter cues me to turn the page and I move further into the mood. After the statements will be a few questionnaires to complete.
Depressed Statements Used in the Study

1. Today is neither better nor worse than any other day.

2. However, I feel a little low today.

3. Sometimes I wonder whether school is all that worthwhile.

4. I feel rather sluggish now.

5. Every now and then I feel so tired and gloomy that I'd just rather sit than do anything.

6. It has occurred to me more than once that study is basically useless because you forget almost everything you learn anyway.

7. People annoy me; I wish I could be by myself.

8. I'd had important decisions to make in the past, and I've sometimes made the wrong ones.

9. I just don't seem to be able to get going as fast as I used to.

10. I can remember times when everybody but me seemed full of energy.

11. Too often I have found myself staring listlessly into the distance, my mind a blank, when I definitely should have been studying.

12. There have been days when I felt weak and confused and everything went miserably wrong.

13. Just a little bit of effort tires me out.

14. I've had daydreams in which my mistakes kept occurring to me ... sometimes I wish I could start over again.

15. Just to stand up would take a big effort.

16. I'm getting tired out. I can feel my body getting exhausted and heavy.

17. I feel terribly tired and indifferent to things today.

18. At times I've been so tired and discouraged that I went to sleep rather than face important problems.
19. My life is so tiresome ... the same old thing day after day depresses me.
20. I'm beginning to feel sleepy. My thoughts are drifting.
21. I couldn't remember things well right now if I had to.
22. I just can't make up my mind; its so hard to make simple decisions.
23. I'm not very alert. I feel listless and vaguely sad.
24. I've doubted that I'm a worthwhile person.
25. It often seems no matter how hard I try, things still go wrong.
26. I've noticed that no one seems to understand or care when I complain or feel unhappy.
27. I'm discouraged and unhappy about myself.
28. I've laid awake at night worrying so long that I hated myself.
29. The way I feel now, the future looks boring and hopeless.
30. Some very important decisions are almost impossible for me to make.
31. I feel tired and depressed; I don't feel like working on the things I know must get done.
32. I have the feeling that I just can't reach people.
33. Things are easier and better for other people than for me.
34. I feel like there's no use in trying again.
35. Often people make me very upset. I don't like to be around them.
36. I fail in communicating with people about my problems.
37. Its so discouraging the way people don't really listen to me.
38. I've felt so alone before, that I could have cried.
39. Sometimes I wish I could die.
40. My thoughts are so slow and downcast, I don’t want to think or talk.
41. I just don’t care about anything. Life just isn’t any fun.
42. Life seems too much for me now ... my efforts are wasted.
43. I’m so tired.
44. I don’t concentrate or move. I just want to forget about everything.
45. I have too many bad things in my life.
46. Everything seems utterly futile and empty.
47. I feel dizzy and faint. I need to put my head down and not move.
48. I don’t want to do anything.
49. All of the unhappiness of my past life is taking possession of me.
50. I want to go to sleep and never wake up.
Elation Statements Used in the Study

1. Today is neither better nor worse than any other day.
2. I do feel pretty good today, though.
3. This might turn out to have been one of my good days.
4. I feel light-hearted.
5. If your attitude is good, then things are good, and my attitude is good.
6. I've certainly got energy and self-confidence to spare.
7. I feel cheerful and lively.
8. On the whole, I have very little difficulty in thinking clearly.
9. I'm pleased that most people are so friendly to me.
10. My judgment about most things is sound.
11. I'm fully of energy and ambition. I feel like I could go along time without sleep.
12. My judgment is keen and precise today. Just let someone try to put something over one me.
13. If I set my mind to it, I can cam make things turn out fine.
15. There should be opportunity for a lot of good times coming along.
16. My favourite songs keep going through my head.
17. I feel talkative ... I feel like talking to almost anybody.
18. I'm able to do things accurately and efficiently.
19. I know good and well that I can achieve the goals I set.
20. Now that it occurs to me, most of the things that have depressed me wouldn’t have if I’d just had the right attitude.

21. I have a sense of power and vigour.

22. It would really take something to stop me now.

23. I know that in the future I won’t over-emphasize so called “problems.”

24. I’m optimistic that I can get along very well with most of the people I meet.

25. I’m too absorbed in things to have time for worry.

26. I’m feeling amazingly good today!!

27. I am particularly inventive and resourceful in this mood.

28. I feel superb! I think I can work to the best of my ability.

29. In the long run, its obvious that things have gotten better and better during my life.

30. Things look great!

31. I can find the good in almost anything.

32. I feel highly perceptive and refreshed.

33. My memory is in rare form today.

34. In a buoyant mood like this one, I can work fast and do it right the first time.

35. I can concentrate hard on anything I do.

36. I feel so happy and playful today. I feel life surprising someone by telling a silly joke.

37. My thinking is clear and rapid.

38. Life is so much fun, it seems to offer so many sources of fulfillment.

39. Things will be better and better today.
40. I can make decisions rapidly and correctly; and I can defend them against criticism easily.

41. I feel that many of my friendships will stick with me in the future.

42. I feel extremely industrious ... I want something to do!!

43. Life is firmly in my control.

44. I wish somebody would play some good loud music!

45. This is great ... I really do feel good. I am elated about things.

46. I'm really feeling sharp now.

47. This is just one of those days when I'm ready to go!

48. I feel like bursting with laughter ... I wish somebody would tell a good joke and give me an excuse!

49. I'm full of energy.

50. Wow, I feel great!!
APPENDIX G: GENERAL DEBRIEFING SCRIPT
Appendix G

General Debriefing Script

Self-Discrepancies, Depression Proneness
And Current Mood State:
A Test of Higgins' and Ogilvie's Theories

Researcher: Shannon Baskerville, M.A.
Research Activity #E19

People commonly experience unpleasant feelings produced by unpleasant thoughts. When the unpleasant thoughts are about oneself, the feelings can be especially distressing. Interest in the emotional consequences of people's beliefs about themselves has a long history in psychology and continues to play an important role in many current cognitive theories of depression. In the last decade, the self-discrepancy theory, a promising new cognitive theory of depression and other emotional difficulties such as anxiety, has emerged.

Higgins, the individual who formulated the self-discrepancy theory, argues that to understand different emotional vulnerabilities, such as depression or anxiety, experienced by different people, researchers must examine the patterns of people's beliefs about themselves. Higgins argues that distinct discrepancies amongst people's self-beliefs are associated with particular types of emotional distress. In particular, and of importance to the current study, Higgins hypothesized that the discrepancy between who a person believes he or she actually is and who he or she would ideally like to be (actual:ideal discrepancy), as measured by his Selves Questionnaire, is a cognitive structure that acts as a vulnerability factor in depression. According to Higgins' theory, then, people who are vulnerable to depression (that is, have a history of depression) would have available actual:ideal discrepancies and all that one needs to do in order to gain access to these discrepancies, is ask people to report the self-beliefs that comprise these discrepancies. So, Higgins argues that people's reported beliefs about themselves (that is, their personal cognitions) influence their affect (that is, how they feel emotionally).

Although support exists for Higgins' proposed theory, other researchers, such as Miranda and Persons, have demonstrated that when examining the relationship between self-beliefs and depression, it is critically important to study the influence that affect has on reported cognitions and not just the other way around. Their research suggests that people who have an available actual:ideal discrepancy may not be able to access the information that comprises that discrepancy unless they are in a negative mood. According to this line of
research then, to gain access to people's actual:ideal discrepancies, one has to do more than just ask people to report these self-beliefs. One must activate these discrepancies by having vulnerable persons experience a negative mood state.

One of the purposes of the current study is to follow Miranda and Person's line of research and examine the impact that current mood has on people's reported self-discrepancies. One of the hypotheses being tested in this study is that vulnerable people (that is, people with a history of depression and who consequently have available actual:ideal discrepancies) who are induced into a negative mood will report actual:ideal discrepancies of a greater magnitude than people with a history of depression who are induced into a positive mood. On the other hand, current mood should have no impact on the magnitude of reported actual:ideal self-discrepancies of non-vulnerable people (that is, people without a history of depression and who consequently have no available actual:ideal discrepancies). That is, non-vulnerable people should report the same low level of actual:ideal self-discrepancies when they are in either a negative or positive mood state.

According to another line of research (Ogilvie, 1987), the undesired self is a neglected variable in psychological research. Ogilvie defines the undesired self as the self that one would never like to become and he believes that the lack of a discrepancy between a person's actual and undesired self is a vulnerability factor for depression. Ogilvie hypothesizes, although people's actual:ideal discrepancies are related to vulnerability to depression, that the actual:undesired discrepancy is a better predictor. Consequently, another purpose of this study is to further examine the relationship between actual:undesired discrepancies and vulnerability to depression and to test Ogilvie's hypothesis.

The testing of these hypotheses required you to complete a number of different tasks. During the first part of the study, you were asked to complete the Depression Proneness Rating Scale, which serves as a measure of your history of depression and consequently should indicate your vulnerability to depression. At that time, you were also asked to complete Higgins' Selves Questionnaire, which will be used as a measure of the magnitude of your actual:ideal self-discrepancy and your actual:undesired discrepancy. Additionally, you were asked to complete the Depression Adjective Checklist, which will be used as a measure of the mood you were in during the first part of the study. The last questionnaire which you were asked to complete during this part of the study was the Beck Depression Inventory, which is a screening measure for depression.

During the second part of the study, your participation required you to be assigned to one of three experimental conditions: negative mood induction, positive mood induction, or no mood induction. Students in the negative mood
condition were asked to read and focus on 50 negative self-statements, while students in the positive mood induction were asked to do the same with 50 positive self-statements. This procedure, known as the Velten mood induction procedure, is a widely used and effective mood induction technique. Effects of the this mood induction procedure are very transitory and will likely have dissipated by the time students leave this room. Participants in the no mood induction group were not given any self-statements to read. Subsequent to the mood induction procedure being completed, all participants completed the same questionnaires, regardless of the experimental condition to which they were assigned. First, you were asked, again, to complete the Depression Adjective Checklist, which will be used to ensure that the mood induction procedure was successful. Second, you were asked, again, to complete the Selves Questionnaire. As you know by now, you were asked to complete the Selves Questionnaire one two separate occasions. Your responses on the Selves Questionnaire during the first part of the study will be used as a baseline in which to compare the changes in responses after the mood manipulation. Having established this baseline will simply allow me to speak more strongly regarding the changes that occurred to your responses on the Selves Questionnaire as a result of the mood manipulation.

Your participation in this study is greatly appreciated. This type of research has important implications for understanding and treating depressive disorders. If you have any questions or concerns after you leave today, please feel free to contact the researcher, Shannon Baskerville. If you are interested in obtaining the results for this study, please leave your name and address and a summary report will be sent to you.

**Recommended Readings**


APPENDIX H: DEBRIEFING SCRIPT FOR VULNERABLE PARTICIPANTS
Appendix H

Debriefing Script for Vulnerable Participants

Self-Discrepancies, Depression Proneness
And Current Mood State:
A Test of Higgins' and Ogilvie's Theories

Researcher: Shannon Baskerville, M.A.
Research Activity #E19

People commonly experience unpleasant feelings produced by unpleasant thoughts. When the unpleasant thoughts are about oneself, the feelings can be especially distressing. Interest in the emotional consequences of people's beliefs about themselves has a long history in psychology and continues to play an important role in many current cognitive theories of depression. In the last decade, the self-discrepancy theory, a promising new cognitive theory of depression and other emotional difficulties such as anxiety, has emerged.

Higgins, the individual who formulated the self-discrepancy theory, argues that to understand different emotional vulnerabilities, such as depression or anxiety, experienced by different people, researchers must examine the patterns of people's beliefs about themselves. Higgins argues that distinct discrepancies amongst people's self-beliefs are associated with particular types of emotional distress. In particular, and of importance to the current study, Higgins hypothesized that the discrepancy between who a person believes he or she actually is and who he or she would ideally like to be (actual:ideal discrepancy), as measured by his Selvess Questionnaire, is a cognitive structure that acts as a vulnerability factor in depression. According to Higgins' theory, then, people who are vulnerable to depression (that is, have a history of depression) would have available actual:ideal discrepancies and all that one needs to do in order to gain access to these discrepancies, is ask people to report the self-beliefs that comprise these discrepancies. So, Higgins argues that people's reported beliefs about themselves (that is, their personal cognitions) influence their affect (that is, how they feel emotionally).

Although support exists for Higgins' proposed theory, other researchers, such as Miranda and Persons, have demonstrated that when examining the relationship between self-beliefs and depression, it is critically important to study the influence that affect has on reported cognitions and not just the other way around. Their research suggests that people who have an available actual:ideal discrepancy may not be able to access the information that comprises that discrepancy unless they are in a negative mood. According to this line of
research then, to gain access to people's actual:ideal discrepancies, one has to do more than just ask people to report these self-beliefs. One must activate these discrepancies by having vulnerable persons experience a negative mood state.

One of the purposes of the current study is to follow Miranda and Person's line of research and examine the impact that current mood has on people's reported self-discrepancies. One of the hypotheses being tested in this study is that vulnerable people (that is, people with a history of depression and who consequently have available actual:ideal discrepancies) who are induced into a negative mood will report actual:ideal discrepancies of a greater magnitude than people with a history of depression who are induced into a positive mood. On the other hand, current mood should have no impact on the magnitude of reported actual:ideal self-discrepancies of non-vulnerable people (that is, people without a history of depression and who consequently have no available actual:ideal discrepancies). That is, non-vulnerable people should report the same low level of actual:ideal self-discrepancies when they are in either a negative or positive mood state.

According to another line of research (Ogilvie, 1987), the undesired self is a neglected variable in psychological research. Ogilvie defines the undesired self as the self that one would never like to become and he believes that the lack of a discrepancy between a person's actual and undesired self is a vulnerability factor for depression. Ogilvie hypothesizes, although people's actual:ideal discrepancies are related to vulnerability to depression, that the actual:undesired discrepancy is a better predictor. Consequently, another purpose of this study is to further examine the relationship between actual:undesired discrepancies and vulnerability to depression and to test Ogilvie's hypothesis.

The testing of these hypotheses will require participants to complete a number of different tasks. During the first part of the study, you were asked to complete the Depression Proneness Rating Scale, which serves as a measure of your history of depression and consequently should indicate the availability of an actual:ideal self-discrepancy. At that time, you were also asked to complete Higgins' Selves Questionnaire, which will be used as a measure of the magnitude of your actual:ideal self-discrepancy. Additionally, you were asked to complete the Depression Adjective Checklist, which will be used as a measure of the mood you were in during the first part of the study. However, as you already know, during this part of the study, your responses on the Beck Depression Inventory, which is a screening measure for depression, precluded your further involvement in the study.

During the second part of the study, your participation would have required you to be assigned to one of three experimental conditions: negative
mood induction, positive mood induction, or no mood induction. Students in
the negative mood condition will be asked to read and focus on 50 negative self-
statements, while students in the positive mood induction will be asked to do the
same with 50 positive self-statements. This procedure, known as the Velten
mood induction procedure, is a widely used and effective mood induction
technique. Effects of the this mood induction procedure, although transitory, can
cause some emotional distress for participants. Participants in the no mood
induction group will not be given any self-statements to read. Subsequent to the
mood induction procedure being completed, all participants will complete the
same questionnaires, regardless of the experimental condition to which they are
assigned. First, participants will be asked to complete the Depression Adjective
Checklist, which will be used to ensure that the mood induction procedure was
successful. Second, participants will be asked to, again, complete the Selves
Questionnaire. As you know by now, students who complete both parts of the
study will be asked to complete the Selves Questionnaire one two separate
occasions. Responses on the Selves Questionnaire during the first part of the
study will be used as a baseline in which to compare the changes in responses
after the mood manipulation. Having established this baseline will simply allow
me to speak more strongly regarding the changes that occurred to responses on
the Selves Questionnaire as a result of the mood manipulation.

Your participation in this study is greatly appreciated. This type of
research has important implications for understanding the treating depressive
disorders. If you have any questions or concerns after you leave today, please
feel free to contact the researcher, Shannon Baskerville. If you are interested in
obtaining the results for this study, please leave your name and address and a
summary report will be sent to you.

The Student Counselling Services Centre on campus (966 4920) has
counsellors available to meet with students who are struggling with personal,
academic, or career issues.

**Recommended Readings**


cause people to suffer? *Advances in Experimental Social Psychology, 22*,
90-136.

beliefs depends on current mood state. *Journal of Abnormal Psychology, 