# AN INVESTIGATION INTO THE STATIC AND DYNAMIC COMPONENTS OF SELF-REFERENT ATTITUDES

### By

### HERBERT J. BURAS

Bachelor of Science University of Southwestern Louisiana Lafayette, Louisiana 1978

> Master of Science Oklahoma State University Stillwater, Oklahoma 1989

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY May, 1994

# AN INVESTIGATION INTO THE STATIC AND DYNAMIC COMPONENTS OF SELF-REFERENT ATTITUDES

Thesis Approved:

Thesis dviser 0 An  $\sim$ <u>Dean of the Graduate College</u>

### TABLE OF CONTENTS

Section Page
Abstract
Introduction
Review of Self-esteem Theories3Static vs. Dynamic Self-esteem7Popular Self Concept Instruments10Preliminary Study One13Preliminary Study Two15Dynamic Component Results17Static Component Results20Dynamic vs. Static Results20Preliminary Study Two Summary21
Purpose and Hypotheses
Method
Subjects.28Materials28Procedure.28
Results
DataAnalysis
Discussion

# Section

References	63
Appendixes	71
Appendix AManipulations Used in Preliminary Study Two	71
Appendix BProcedure to Eliminate Test Items Used in Preliminary Study Two	73
Appendix CTest Items Used in the Current Study	74
Appendix DManipulations Used in the Current Study	

# LIST OF TABLES

Table Page	Tabl
1. Experimental Design16	1.
<ol> <li>Results of Preliminary Study Two Dynamic and Static Component Scores by Up and Down Manipulations</li></ol>	2.
<ol> <li>Results of Preliminary Study Two Dynamic and Static Component Scores by Manipulation</li></ol>	3.
4. ANOVA Summary	4.
5. Coefficient Alphas	5.
6. Group Means	6.
7. Hypothesis Two Means	7.
8. Hypothesis Three Means	8.
9. Hypothesis Four Means43	9.
10. Means for Experimental Conditions	10.
11. Gender Differences	11.

# LIST OF FIGURES

Figure		Page
1. Self-efficacy Scor	es	
2. Self-acceptance So	cores	
3. Self-evaluation	Scores	
4. Self-efficacy Mani	ipulation	
5. Self-acceptance	Manipulation	
6. Self-evaluation Ma	anipulation	

### Abstract

The purpose of this study was to clarify the construct of self-esteem. In a preliminary study, four existing self-esteem measures were administered at two points in time, separated by a three-week interval. The item scores were factor analyzed; three factors were retained which were labeled Self-efficacy, Self-acceptance, and Self-evaluation. Those items with low test-retest reliability were assumed to be measuring dynamic or situational aspects of self-esteem. The high test-retest reliability items were assumed to be measuring static or trait aspects of self-esteem. The dynamic components were labeled Assertive Self-efficacy, Self-worth, and Evaluation of Moral Values. The three static components were labeled Social Self-efficacy, Physical Self-acceptance, and Evaluation of Family Relationships. Three manipulations, employing hypothetical situations, were then used to create changes in the various components of self-esteem. The dynamic components showed greater change than the static components in two of the three conditions. In all conditions but one, the manipulation was successful at targeting a specific component of self-esteem.

### Introduction

Self-esteem is a widely used term and is often used interchangeably with the terms self-confidence, self-respect, self concept, self-acceptance, self-worth, or self-perception. Webster's New World Dictionary (Guralnik, 1984) defines it as belief in oneself; selfrespect; an undue pride in oneself; conceit. The concept of self-esteem is used in many disciplines. For the period from January 1989 through December 1990, the Dissertations Abstracts (1989-1990) contained 988 citations of dissertations that use the term selfesteem. The subject areas were varied and included communication and the arts, education, language, literature, linguistics, philosophy, religion, theology, the social sciences, environmental science, and psychology. For the period of January 1983 through December 1990, there were 3,734 abstracts in the Psychological Abstracts (1983-1990) that referenced self-esteem. The areas of research which use self-esteem as a variable are extensive. Although a comprehensive review would be beyond the scope of this paper, a listing of major areas of study in which self-esteem has been examined is as follows: conformity (Gergen & Bauer, 1967), responses to threat or stress (Schalon, 1968), dishonest behavior (Aronson & Mettee, 1968), social participation (Coombs, 1969), competitive behavior (Graf & Hearne, 1970), interpersonal attraction (Joshi & Rai, 1987), group attraction (Dittes, 1959), cognitive dissonance (Cooper & Duncan, 1971), equity-maintenance (Pepitone et al., 1967), attitude change and persuasibility (Silverman, Ford, & Morganti, 1966), helping and help-seeking behavior (McMillen & Reynolds, 1969), causal attribution (Fitch, 1970), substance abuse (Cox, 1979; Benson & Wilsnack, 1983), the aged (Lewis & Burler, 1971), racial identities (Heiss & Owens, 1972), ethnic stereotypes (Dworkin, 1964), educational achievements (Felice, 1973), social effects of physical defects (Meadow, 1969), marital relations (Luckey, 1961), gender differences (Bardwick & Douvan, 1977; Hensley, 1977; Mackie, 1983; Forzi, 1984), and delinquent behavior (Chapman, 1966).

2

### **Review of Self-esteem Theories**

The theories of self-esteem, what it is, how it develops, and how it is maintained are probably as varied as the subject areas that have made use of the self-esteem construct. Many theorists have expressed their views regarding the definition of self-esteem. Below is a brief history of the major theorists that have written on self-esteem. These theories begin with a diverse conceptualization of the self. Later theorists focused on unitary aspects of self-esteem such as social aspects, developmental origins, social learning theory, an existential view emphasizing a search of being and authenticity, and finally self-efficacy.

William James (1890) devoted a good deal of attention to the self and decided that there are three major constituents: the Material Me, the Social Me, and the Spiritual Me. The Material Me consists of our body, our clothes, our family, our home, and our financial wealth. James' reference to the Social Me is the recognition which we get from those we encounter. James says that a person has as many social selves as there are individuals who recognize him or her and carry an image of her or him in their minds. Also included in the Social Me is one's fame and honor, one's reputation. The Spiritual Me is the very core of oneself, the living substance of our soul. The Spiritual Me includes our intellectual, moral, and spiritual strivings. In addition to the three constituents of self, James discusses feelings and emotions of self. The feelings and emotions of selfappreciation are largely determined from one's actual successes or failures. Also there is an aspect of self regarding the acts which are prompted by the fundamental instinctive impulses of self-seeking and self-preservation. Self-seeking is composed of three components corresponding to the three constituents of Me: Bodily Self-seeking, Social Self-seeking, and Spiritual Self-seeking. James further recognized that self-esteem may have a general and a specific aspect. James said that while there are individual fluctuations of self-esteem, some of which are dependent upon daily encounters, there is an average "tone" that the person develops over time.

3

Cooley (1902) wrote from a more sociological perspective than James and confined himself to the Social Me aspect of self. Cooley said that it does not make sense to think of the self apart from the social milieu in which he or she lives or the other persons with whom she or he interacts. Cooley introduced the idea of "the looking-glass self" which postulates that an individual's conception of himself or herself is determined by the perception of other peoples' reactions to him or her. A sense of self always involves a sense of other people.

Mead (1934) was also heavily social in his views on the self. He views the development of the self as the process of an individual becoming an integrated part of a social group. Language and society are essential elements in the development of the self because it is through interaction that individuals come to see themselves the way others see them. Significant others in one's life have a determining influence on self-esteem. One gradually adopts and internalizes the attitudes of others by observing the actions of parents and significant others.

Cooley's and Mead's social views of the self are elaborations of James' Social Me. This exclusively social view excludes the other aspects of self which James described as Material Me and Spiritual Me. It is the social view of the self as developed by Cooley and Mead that has had a greater influence on later theorists than James' more multifaceted and articulated conception.

According to Allport (1961) the growth of the awareness of a self proceeds along developmental learning lines. In the first year of life there is an early recognition of what is <u>me</u> and <u>not me</u>, a sense of continuity of identity over time in the second year, to a sense of self-esteem in the beginning of the third year. From ages three to six a child begins to learn what is expected of him or her to be considered a good or a bad person. The ability to consolidate the aspects of self into an individual and cohesive sense of self is a major task of adolescence. The final task in the development of self is a goal-directedness, or propriate striving, a sense of purpose. Allport names the several elements of the self the

proprium, a label used to encompass all the aspects a person learns about the object my self. These are the parts that the individual knows about the self.

Social learning theory has also had an influence on the conceptualization of selfesteem. The social learning view is that human behavior is the product of a continuous reciprocal interaction of personal and environmental factors. Bandura (1977) has held that it is not actually necessary for people to perform responses in order to learn them. Most learning occurs indirectly by observing the behavior of others and learning through this observational process. This social learning view can be applied to self-esteem. Bandura (1986) suggested that individuals gradually acquire beliefs about themselves that are a reflection of the way they are treated by their social environment. People come to view and value themselves in much the same way they are viewed and valued by others. Wylie (1961) discussed social learning theory regarding parent-child interactions and the development of self concept. She explained that the self concept is a learned constellation of perceptions, cognitions, and values. An important part of this learning comes from observing the reactions one gets from other persons. The parents are the persons who are present earliest and most consistently. The parents have a unique opportunity to selectively reinforce the child's learning. Thus the parent can influence the development of such aspects of the self concept as the generalized level of self-regard. Bednar, Wells, and Peterson (1989) acknowledge the import role that social learning influence plays in shaping our self-image, particularly during early childhood when the organism is so teachable and the shaping power of the social environment is so obvious. However, Bednar and Wells warn that a theoretical position which emphasizes only learning factors, which are external to the individual, does not adequately account for the development of self-esteem. There are internal factors influencing the development of self-esteem as evidenced in the child development literature which discusses the power of functionally autonomous reinforcement (Bandura, 1986). Functionally autonomous reinforcement occurs when a child will be pleased intrinsically for accomplishments, such as taking

his/her first step, in addition to the external reinforcement from parents.

With a departure from the exclusively social view of self, Rollo May (1983) minimized the importance of social validation in the development and maintenance of selfesteem. He believed that if self-esteem depended solely on social validation, then one does not have self-esteem but merely a sophisticated form of social conformity. May maintained that the conditions for self-esteem are embedded in the search for being (James' Spiritual Me). True self-esteem cannot be obtained without authenticity, a person's willingness to express individuality in spite of the fact that others will exert pressure to change or deny it.

Gecas and Schwalbe (1983) are in agreement with May in proposing that the self concept cannot be adequately defined by social validation alone. They advocate that the development of self concept is a combination of social and self-efficacy views. Efficacy is the power one has to produce a desired effect or intended result. Efficacy-based selfesteem is the feeling of self-worth that one derives from knowing that one is an able and effective agent of action. This is comparable to an aspect of self which James described as self-appreciation. Gecas and Schwalbe claim that the overly passive and overly socialized view of human beings' self-conceptions, as presented by Mead and Cooley, is inadequate. Self-conceptions are also based upon our actions in the world, especially efficacious actions. Efficacy-based self-esteem places greater emphasis upon selfdetermination in the process of self concept formation and underscores the reciprocity between self and social structure.

Recent theorists such as Bednar, Wells, and Peterson (1989) assert that selfesteem in the adult is an internal process that focuses upon the inherently self-affirming or self-negating evaluations that are obtained from observing oneself respond to psychological threat. While it is important to be approved, Bednar et al. (1989) suggest that fundamentally self-esteem is not dependent upon winning approval. They further assert that the essential construction of self-esteem occurs in the process of exercising coping or, conversely, avoidance responses, not in their outcome as judged by meeting goals.

### Static vs. Dynamic Self-esteem

As evidenced by the variety of theories on the self that are discussed above, selfesteem may be thought of as a combination of self-referent attitudes. It is not a single and sovereign construct; rather, it is many interrelated self-referent attitudes. Self-esteem is our opinion of how others view us in different contexts, predominantly social contexts. Self-esteem is our evaluation of our competency in various areas, our evaluation of our self-efficacy. Self-esteem is our acceptance of many facets of ourselves. The theories mentioned thus far consider the construct of self-esteem as a stable measure of a static aspect of personality that remains constant across situations. James was the first to make note of a situational aspect to self-esteem, but the idea lay dormant until later investigators (Korman, 1970; McIntire and Levine, 1984; Vealey, 1986; O'Brien, 1985; Savin-Williams and Demo, 1983; Watson, 1984) recognized that self-esteem may be a composite of both static or trait-like and situational or dynamic components. So the idea that self-esteem is more than a single stable construct is not new. But self-esteem theorists (Cooley, 1902; Mead, 1934; Allport, 1961; May, 1983; Gecas & Schwalbe, 1983; Bednar, Wells, & Peterson, 1989) tend to not include situational or dynamic variables in their conceptualizations of self-esteem. However, as noted by James, there is a fluctuation in how one feels about oneself which contributes to an overall sense of self. It is this writer's opinion that self-esteem is multifaceted and that there are aspects of one's self-esteem that remain fairly constant and other aspects of the self that vary. The following is a discussion of recent research that has incorporated static and dynamic aspects of the self.

Korman (1970, 1976) is one theorist who has advanced a state-trait distinction for self-esteem. He defined self-esteem as the extent to which an individual perceives himself or herself to be a competent and need-satisfying person. He divides the self concept into three components, one trait-like or ongoing facet and two situational facets. Korman labels the trait component "chronic self-esteem"; it is a person's enduring evaluation of himself or herself across situations. The situational components are "task-specific self-esteem," the degree of self-perceived competence on a specific task or "social self-esteem," the perception of what is expected by others in a situation.

McIntire and Levine (1984) investigated self-esteem as a composite construct of chronic self-esteem and situational components of self-esteem which consist of taskspecific self-esteem and social self-esteem. Their conceptualization of task-specific selfesteem is more accurately defined as academic self-efficacy and athletic self-efficacy. They used three measures of chronic self-esteem: the Self-assurance Scale of the Ghiselli Self-description Inventory, the Texas Social Behavior Inventory, and the Performance Self-esteem Scale. They also used two original measures of situational self-esteem which were a task-specific self-esteem measure and a social self-esteem measure. Their factor analyses of scores on all of the instruments yielded four factors which were labeled as Athletic Self-esteem, Task Relevance, Chronic Self-esteem, and Academic Self-esteem. They cite this as evidence for a composite construct of self-esteem and suggest that further research on the situational components of self-esteem are needed.

In another study using self-efficacy, Vealey (1986) developed an interactional, sport-specific model of self-confidence in which sport-confidence was conceptualized into trait and state components. Her model is based on an interactional paradigm in which one's trait self-confidence interacts with the situation to produce a state self-confidence. She developed the Trait Sport-Confidence Inventory to measure trait sport confidence and the State Sport-Confidence Inventory to measure state sport confidence. Vealey found that the instruments demonstrated adequate internal consistency, test-retest reliability, content validity, and concurrent validity which supported her sport-confidence model that was conceptualized into trait and state components.

O'Brien (1985) factor analyzed the self-referent attitudes that are measured by the

revision of the Eagly Scale of Feelings of Inadequacy (Eagly, 1967). The revised Eagly Scale contains nineteen items from the Feelings of Inadequacy Scale of the Janis-Field Self-esteem Scale (Janis & Field, 1959). O'Brien found that the scale contained two global factors and two situation-specific factors. The global factors were labeled (a) Feelings of Inadequacy and (b) Positive Self-esteem and Competence. The two situationspecific factors were labeled Self-confidence in Public Speaking and Self-confidence in Social Situations with Strangers.

Savin-Williams and Demo (1983), in working with adolescents, argue for a baseline conceptualization of self-conception from which fluctuations occur. Their study used regression analysis to assess the stability of self-feelings. Their data indicated that many self-feelings are neither predictably stable nor oscillatory, but just unpredictable. For 89% of their sample, there was fluctuation in reported self-feelings. For the sample as a whole, self-feelings were not influenced by the immediate context, although specific setting, activities, and others present within the contexts elicited various levels of self-feelings indicating that self-feelings are both dynamic and static.

Watson (1984) demonstrated the applicability of the state-trait distinction to the self-esteem construct. Her study was conducted in two phases. The first phase collected data from 152 male and female undergraduates on several personality questionnaires which was intended to validate a state self-esteem measure. This state self-esteem measure was a 25-item abbreviated form of the Coopersmith Self-esteem Inventory. The instructions were altered to convert the scale into a measure of state self-esteem by asking the subject to respond describing how they feel "right now." In the second phase of her study, 272 male and female undergraduates were assessed on state and trait self-esteem, social desirability, and performance satisfaction immediately after the receipt of an examination grade. Sixteen days later 155 of these subjects were retested. Watson found strong evidence for two aspects of global self-esteem, state and trait. Academic achievement and performance satisfaction were found to contribute significantly to the

9

prediction of state but not trait self-esteem. Social desirability did not contribute to the prediction of state self-esteem.

### Popular Self Concept Instruments

The work of Watson (1984) and McIntire and Levine (1984) and others mentioned above provides evidence for the instance of dynamic and static self-esteem. However, researchers have given little attention to this aspect of self-esteem. Studies continue to proliferate using a unitary construct of self-esteem. These studies utilize popular selfreferent attitude instruments which do not provide measures of dynamic and static components of self-referent attitudes. Ruth Wylie (1974) has been critical of self concept theorists for their lack of clear empirical evidence. She claims that this has resulted in a wide array of operational definitions, many of which have received no empirical exploration. Wylie posits that there is a need for development of an instrument that measures self concept more accurately than those that exist, an instrument that encompasses the variety of theories and measures already in use. Wylie, as well as others (Bingham, 1983; O'Brien, 1985), claims that the lack of a really well-developed instrument is due to the failure to incorporate the concepts of static and dynamic self concept variables. This implies that there are static aspects of self that are chronic and will remain constant through most situations. It also implies that there are dynamic aspects of the self, those self-referent attitudes that are variable and will change over time, possibly due to the situation.

Some widely used measures of self-referent attitudes are the Rosenberg Selfesteem Scale (RSE), the Tennessee Self Concept Scale (Tenn-SCS), and the Texas Social Behavior Inventory (Texas-SBI). In the period from January 1974 through December 1990, the <u>Psychological Abstracts</u> contained 185 abstracts of studies that used the RSE, 482 studies that used the Tenn-SCS, and 41 studies that used the Texas-SBI. The lower number of citations for the Texas-SBI is probably due to its more recent development. Development of the Texas-SBI did not begin until 1969 and was not put to widespread use until 1974. The Tenn-SCS and the RSE are both older; they were developed in 1965. Various components of these scales have been theoretically proposed or empirically derived.

The Tennessee Self Concept Scale (Tenn-SCS) (Fitts, 1965) consists of 100 selfdescription items, of which 90 assess the self concept and 10 assess self-criticism. Items for the scale were written according to a two-dimensional facet design. The items in the original pool were derived from surveys of the literature on self concept and from analysis of patient self-reports. The final items were selected by seven clinical psychologists who were asked to classify each item as to its fit with defined constructs. The final items included only those on which the judges showed perfect agreement and resulted in the following aspects of the self: Identity, Self-satisfaction, Behavior, Physical Self, Moral Self, Ethical Self, Personal Self, Family Self, and Social Self. In addition, major additional scores are derived: Total Positive Score, reflecting the overall level of selfesteem; Variability Scores, reflecting the amount of consistency from one area of selfperception to another; and a Distribution Score, a measure of extremity response style. Factor analytic studies (Gellen & Hoffman, 1984; Hoffman & Gellen, 1983) using the Tenn-SCS have not supported the validity of the model. However, several scores from the scale have high correlations with other measures of personality functioning. For example, the Taylor Anxiety Scale (Taylor, 1977) correlated -.70 with the Total Positive Scale score of the Tenn-SCS (Bentler, 1972). The Tenn-SCS was also found to have adequate construct validity. It correlates .82 with the Coopersmith Self-esteem Inventory, .75 with the RSE, .64 with the Semantic Differential Scale, and .63 with the Texas-SBI (Buras & Phillips, 1990). The Tenn-SCS has a satisfactory internal consistency reliability; coefficient alpha was found to be .93 (Buras & Phillips, 1990). Buras and Phillips found the test-retest reliability at a three-week interval to be .54.

The Texas Social Behavior Inventory (Texas-SBI) was developed at the University of Texas at Austin beginning in 1969 with the accumulation of a pool of items

11

that deal with aspects of personal worth and social interaction. The original scale was reduced to 32 items on the basis of an item factor analysis (Helmreich, Stapp, & Ervin, 1974). Helmreich et al. (1974) also reported a factor analysis of the 32-item scale which produced one large factor, although oblique rotation yielded four coherent, correlated factors. For males these four factors were confidence, dominance, social competence, and social withdrawal. For females they were confidence, dominance, social competence, and relations to authority figures. Helmreich and Stapp (1974) developed short forms of the Texas-SBI which were in the Buras and Phillips studies (1990, 1991). The Texas-SBI was found to have adequate construct validity; it correlates .63 with the Tenn-SCS, .69 with the RSE, .69 with the Semantic Differential Scale, and .72 with the Coopersmith Self-esteem Inventory (Buras & Phillips, 1990). The Texas-SBI has a satisfactory internal consistency reliability; coefficient alpha was found to be .90 (Buras & Phillips, 1990). Buras and Phillips found the test-retest reliability at a three-week interval to be .91.

The Rosenberg Self-esteem (RSE) Scale (Rosenberg, 1965; Rosenberg, 1979) is a widely used measure of global self-esteem (Silber & Tippett, 1965; Jones & Ratner, 1967; Schalon, 1968; Kaplan, 1975; Bachman & O'Malley, 1977; Rosenberg & Rosenberg, 1978; Swanson & Weary, 1982; Richards, 1983; Savin-Williams & Demo, 1984). The RSE is relatively short (ten items) and is easily scored. The RSE has a satisfactory internal consistency reliability; coefficient alphas have been consistently high: .89 (O'Brien, 1985), .92 (Goldsmith & Goldsmith, 1982), and .91 (Buras & Phillips, 1990). The test-retest reliability of the RSE also tends to be high. O'Malley and Bachman (1983) estimated the annual stability of the RSE at .75, and Buras and Phillips found the stability at a three-week interval to be .66. The RSE also seems to have good convergent validity. Demo (1985) found the RSE to correlate .55 with the Coopersmith Self-esteem Inventory for ninth graders and .65 for tenth graders. Buras and Phillips found the RSE to correlate, for a college student sample, .69 with the Texas-SBI, .75 with the Tenn-SCS, .81 with the Coopersmith Self-esteem Inventory, and .64 with the Semantic Differential Scale. Eight different studies over the period 1969-1986 have subjected the RSE to factor analyses (Kaplan & Pokorny, 1969; Hensley & Roberts, 1976; Hensley, 1977; Carmines & Zeller, 1979; Openshaw, Thomas, & Rollins, 1981; Goldsmith & Goldsmith, 1982; O'Brien, 1985; Goldsmith, 1986; Phillips, Spradlin, Cope, & Torres, 1989). Of these, only two (Hensley, 1977; O'Brien, 1985) have found a one-dimensional solution.

Osgood, Suci, and Tannenbaum (1957) advocated that the Semantic Differential method of test design is appropriately applicable to self concept measurement. Osgood et al. (1957) conducted reliability studies and factor analytic work to support the reliability and construct validity of the Semantic Differential as a self concept measure. The Semantic Differential Scale used by Buras and Phillips (1990) was a modified version as used by Franks and Marolla (1976). Franks and Marolla's factor analysis of their Semantic Differential Scale revealed two factors which fit their theory of self-esteem, an Inner self-esteem and an Outer self-esteem factor. Outer self-esteem refers to the moral/evaluative dimension of the self. The Inner self-esteem describes a competency- or potency-based self-esteem. The Semantic Differential Scale that was developed by Franks and Marolla was found to have adequate construct validity. It correlates .69 with the Texas-SBI, .64 with the Tenn-SCS, .62 with the RSE, and .57 with the Coopersmith Self-esteem Inventory (Buras & Phillips, 1990). The Semantic Differential Scale has a satisfactory internal consistency reliability; coefficient alpha was found to be .84 (Buras & Phillips, 1990). Buras and Phillips found the test-retest reliability at a three-week interval to be .71.

### Preliminary Study One

In an effort to determine which of the test items of the Tenn-SCS, the RSE, the Texas-SBI, and the Semantic Differential were measuring static vs. dynamic self-referent attitudes, Buras and Phillips (1990) administered the four instruments to 200

undergraduate students on two occasions, which were separated by a three-week interval. A principle components factor analysis with varimax rotation (SAS, 1986) using data from the time-one administration revealed four components which were labeled Selfefficacy, Self-acceptance, Self-evaluation, and Self-criticism. Only the first three factors were retained. The fourth was eliminated due to the insufficient number of items which loaded on that component. It was attempted to empirically clarify the various components by making a distinction between the questionnaire items that were measuring dynamic vs. those measuring static self-referent attitudes. Through the use of a test-retest paradigm, it was determined which test items had low test-retest reliability coefficients. Since the subjects responded to these items in an inconsistent manner, it could be concluded that these items were measuring dynamic, variable, or situational self-referent attitudes. The items with high test-retest reliability coefficients were assumed to be measuring the more static or chronic aspects of self-referent constructs. Thus this study resulted in three main components--Self-efficacy, Self-acceptance, and Self-evaluation--each of which contained a set of items thought to be measuring dynamic aspects of self-referent attitudes and a set of items considered to measure static aspects of self-referent attitudes. Thus there were six sets of items, one set of dynamic items for the three main components and one set of static items for the three main components. The dynamic components were labeled Assertive Self-efficacy, Self-worth, and Evaluation of Moral Values. The three static components were labeled Social Self-efficacy, Physical Self-acceptance, and Evaluation of Family Relationships.

These six components coincide well with the conceptualization of self as outlined by James (1890). The components of Assertive Self-efficacy and Social Self-efficacy correspond to James' components of Social Me and Social Self-seeking. This includes both the aspect of how others see us socially and how socially efficacious we are. The Self-worth component is comparable to James' feelings and emotions of Selfappreciation. The Physical Self-acceptance and Evaluation of Family Relationships are components of James' Material Me. And the final component of Evaluation of Moral Values relates to James' Spiritual Me. Given that James' early discussions of the self are considered definitive (Wells & Marwell, 1976), the compatibility of James' writings to the factors produced by the current study provides sound theoretical support for the six components described above. James did not divide the above components into dynamic and static aspects of the self; however, he did say that he believed that there were fluctuations in how one feels about oneself.

### Preliminary Study Two

Buras and Phillips (1991) conducted a follow-up study which provided evidence for the reliability of the factor analysis of their previous work (1990). This study supported the hypothesis that there is a distinction between dynamic and static components of self-referent attitudes. In this study subjects were randomly exposed to one of three manipulations, or they were randomly assigned to a control group. The three manipulations were designed to target each of the three factors--Self-efficacy, Selfacceptance, or Self-evaluation--that were found in the earlier study. The design is diagrammed in Table 1.

The manipulations consisted of hypothetical situations that were presented to the subjects as brief stories in which they were asked to place themselves. Half of the subjects exposed to each manipulation received a story designed to raise self-esteem (up manipulation), while the other half received a story designed to lower self-esteem (down manipulation) (see Appendix A). Thus, each subject received one manipulation but completed all test items, which resulted in six scores for each subject. The six scores correspond to the six components, three dynamic components and three static components. The dynamic components consist of an Assertive Self-efficacy score, a Self-worth score, and an Evaluation of Moral Values score. The static components consist of a Social Self-efficacy score, a Physical Self-acceptance score, and an Evaluation of Family Relationships score. The results of this study are depicted in Tables

# Table 1

# Experimental Design

	Self-efficacy Manipulation		Self-acceptance Manipulation		Self-evaluation Manipulation	
	Up	Down	Up	Down	Up	Down
Premanipulation:	t- i _ i					1.1.0==1
Self-efficacy Score:						
Dynamic						
Static						
Self-acceptance Score:		•				
Dynamic						
Static						
Self-evaluation Score:						
Dynamic						
Static						
Postmanipulation:						
Self-efficacy Score:						
Dynamic						
Static						
Self-acceptance Score:						
Dynamic						
Static						
Self-evaluation Score:						
Dynamic						
Static						

2 and 3. Table 2 shows the difference between the premanipulation scores and the postmanipulation scores for the six components and for the six manipulations. Table 3 shows the difference between the up-manipulation and down-manipulation scores for the manipulations of Self-efficacy, Self-acceptance, and Self-evaluation for the dynamic and static component scores.

### **Dynamic Component Results**

For the up Self-efficacy manipulation, the scores for the dynamic component of Self-efficacy changed more than the scores for the dynamic component of Self-acceptance,  $\underline{t}(25) = 10.98$ ,  $\underline{p} < .01$ , and the scores for the dynamic component of Self-evaluation,  $\underline{t}(25) = 14.32$ ,  $\underline{p} < .01$ . For the down Self-efficacy manipulation, the dynamic Self-efficacy score changed less than the dynamic Self-acceptance score,  $\underline{t}(25) = 18.78$ ,  $\underline{p} < .01$ , and the dynamic Self-evaluation score,  $\underline{t}(25) = 17.48$ ,  $\underline{p} < .01$ . The Self-efficacy down manipulation was more effective in lowering the dynamic Self-acceptance and dynamic Self-evaluation scores than the targeted dynamic Self-efficacy score.

For the up Self-acceptance manipulation, the scores for the dynamic component of Self-acceptance were not greater than the scores for the dynamic component of Self-efficacy,  $\underline{t}(25) = .78$ , n.s., or the dynamic component of Self-evaluation,  $\underline{t}(25) = 1.89$ , n.s. For the down Self-acceptance manipulation, the change in the dynamic Self-acceptance scores was greater than the change in the dynamic Self-assertive scores,  $\underline{t}(25) = 22.35$ ,  $\underline{p} < .01$ , and the dynamic Self-evaluation scores,  $\underline{t}(25) = 4.26$ ,  $\underline{p} < .01$ .

For the up Self-evaluation manipulation, the scores for the dynamic component of Self-evaluation did not change significantly more than the scores for the dynamic component of Self-efficacy,  $\underline{t}(25) = .02$ , n.s., or the scores for the dynamic component of Self-acceptance,  $\underline{t}(25) = 1.51$ , n.s. For the down Self-evaluation manipulation, the dynamic Self-evaluation scores changed more than the dynamic Self-efficacy scores,

### Table 2

# Results of Preliminary Study Two Dynamic and Static Component Scores by Up and Down Manipulations

	Dynamic Component			Static Component			
Manipulation	Self-efficacy Score	Self-acceptance Score	Self-evaluation Score	Self-efficacy Score	Self-acceptance Score	Self-evaluation Score	
Up Self-efficacy	.59	.20	.08	.67	.29	.12	
Down Self-efficacy	40	-1.08	-1.03	23	-1.07	90	
Up Self-acceptance	.34	.30	.22	.33	.50	.10	
Down Self-acceptance	47	-1.47	-1.28	10	-1.30	73	
Up Self-evaluation	.12	03	.12	.02	09	.12	
Down Self-evaluation	44	-1.09	-1.65	21	44	-1.15	

Note. Difference between premanipulation and postmanipulation.

# Table 3

# Results of Preliminary Study Two Dynamic and Static Component Scores by

### **Manipulation**

Manipulation	Self-efficacy Score	Self-acceptance Score	Self-evaluation Score
Self-efficacy:			
Dynamic	1.00	1.27	1.11
Static	.90	1.36	1.00
Self-acceptance:			
Dynamic	.80	1.77	1.49
Static	.43	1.79	.83
Self-evaluation:	• •		
Dynamic	.56	1.06	1.77
Static	.23	.35	1.27

Note. Difference between premanipulation and postmanipulation.

 $\underline{t}(25) = 21.73$ ,  $\underline{p} < .01$ , and the dynamic Self-evaluation scores,  $\underline{t}(25) = 10.06$ ,  $\underline{p} < .01$ .

### Static Component Results

For the up Self-efficacy manipulation, the static Self-efficacy scores changed more than the static Self-acceptance scores,  $\underline{t}(25) = 10.47$ ,  $\underline{p} < .01$ , and the static Selfevaluation scores,  $\underline{t}(25) = 15.51$ ,  $\underline{p} < .01$ . However, for the down Self-efficacy manipulation, the expected result did not occur. The scores for the static Self-efficacy component changed less than the scores for the static Self-acceptance component,  $\underline{t}(25) = 23.23$ ,  $\underline{p} < .01$ , and the scores for the static Self-evaluation component,  $\underline{t}(25) = 18.42$ ,  $\underline{p} < .01$ .

For the up Self-acceptance manipulation, the scores for the static component of Self-acceptance changed more than the scores for the static component of Self-efficacy,  $\underline{t}(25) = 3.61$ ,  $\underline{p} < .01$ , and the scores for the static component of Self-evaluation,  $\underline{t}(25) = 8.92$ ,  $\underline{p} < .01$ . For the down Self-acceptance manipulation, the static Self-acceptance scores changed more than the static Self-efficacy scores,  $\underline{t}(25) = 26.61$ ,  $\underline{p} < .01$ , and the static Self-evaluation scores,  $\underline{t}(25) = 12.49$ ,  $\underline{p} < .01$ .

For the up Self-evaluation manipulation, the scores for the static component of Self-evaluation did not change significantly more than the scores for the static component of Self-efficacy,  $\underline{t}(25) = 1.69$ , n.s., or for the static component of Self-acceptance,  $\underline{t}(25) = .38$ , n.s. For the down Self-evaluation manipulation, the static Self-evaluation scores changed more for the dynamic Self-evaluation scores than the static Self-efficacy scores,  $\underline{t}(25) = 16.88$ ,  $\underline{p} < .01$ , and the static Self-acceptance scores,  $\underline{t}(25) = 12.75$ ,  $\underline{p} < .01$ .

### Dynamic vs. Static Results

Table 3 shows the difference between the up manipulation and the down manipulation scores for the manipulations of Self-efficacy, Self-acceptance, and Self-evaluation for the dynamic and static component scores. It was expected that the dynamic

scores would show more change than the static scores. This did indeed happen for the scores targeted by the Self-efficacy manipulation; the dynamic Self-efficacy scores changed more than the static scores,  $\underline{t}(25) = 2.58$ ,  $\underline{p} < .01$ . However, the static scores showed more change than the dynamic scores for the Self-acceptance component,  $\underline{t}(25) = 2.33$ ,  $\underline{p} < .025$ . The difference in the dynamic Self-evaluation scores was greater than the difference in the static scores,  $\underline{t}(25) = 2.86$ ,  $\underline{p} < .01$ .

For the scores targeted by the Self-acceptance manipulation, the dynamic Selfefficacy scores changed more than the static Self-efficacy scores,  $\underline{t}(25) = 8.70$ ,  $\underline{p} < .01$ . However, the dynamic Self-acceptance scores did not show any more change than the static Self-acceptance scores,  $\underline{t}(25) = .33$ , n.s. The dynamic Self-evaluation scores did change more than the static Self-evaluation scores,  $\underline{t}(25) = 14.92$ ,  $\underline{p} < .01$ .

For the scores targeted by the Self-evaluation manipulation, the dynamic Selfefficacy scores changed more than the static Self-efficacy scores,  $\underline{t}(25) = 5.91$ ,  $\underline{p} < .01$ . The dynamic Self-acceptance scores changed more than the static Self-acceptance scores,  $\underline{t}(25) = 12.79$ ,  $\underline{p} < .01$ , and the dynamic Self-evaluation scores changed more than the static Self-evaluation scores,  $\underline{t}(25) = 8.96$ ,  $\underline{p} < .01$ .

### Preliminary Study Two Summary

As shown in Table 2, it was found that the up manipulations consistently resulted in higher self-esteem scores than the down manipulations. As shown in Table 3, for most manipulations the static items resulted in less change than the dynamic items. The only exception, where the static items resulted in more or equal change than the dynamic items, was for the Self-acceptance scores for the manipulation of Self-efficacy and the manipulation of Self-acceptance. This supports the hypothesis that the dynamic items would be more responsive to the manipulations than the static items. The manipulations were somewhat successful in inducing change in the targeted component scores. The up Self-efficacy manipulation created more change in the dynamic and static Self-efficacy scores than the other scores. The up Self-acceptance manipulation created more change in the static Self-acceptance scores than the other static scores. The down Self-acceptance manipulation created more change in the dynamic and static Self-acceptance scores than the other scores. The down Self-evaluation manipulation created more change in the dynamic and static Self-evaluation scores than the other scores.

This study showed that a hypothetical situation is adequate in effecting either an increase or decrease in reported self-referent attitude scores. It also showed that the manipulations were effective in creating a greater change in the dynamic test item scores than in static test item scores. The manipulations were only mildly effective at targeting a specific component (Self-efficacy score, Self-acceptance score, or Self-evaluation score).

### Purpose and Hypotheses

The current study revised the Buras and Phillips (1991) study by further refining the set of test items intending to result in an instrument that could more accurately target the hypothesized dynamic and static constructs of self-referent attitudes. The test items used in the 1991 study were reduced in number based on their responsiveness to the manipulations. The responsiveness was determined through an item analysis (see Appendix B). The resulting items are listed in Appendix C. The manipulations used in Preliminary Study Two were refined intending to produce a greater effect, especially the Self-efficacy manipulations and the Self-acceptance manipulations. This was done by designing the brief stories so that they more selectively targeted the attitudes that were reflected by the reduced number of test items (see Appendix D). The Self-evaluation manipulation produced results close to the expected results (Buras & Phillips, 1991), so this manipulation was not changed.

The following hypotheses were tested:

- 1. It was hypothesized that the difference between the premanipulation and postmanipulation control group scores would be nonsignificant.
- 2. Hypothesis two is a manipulation check. It was hypothesized that the premanipulation effects would be different than the postmanipulation effects--

that is, that there would be different values for the up and down manipulations. This would be found with a significant Time (premanipulation vs. postmanipulation) by Direction of Manipulation (up vs. down) interaction.

- a. For the up manipulations, the difference between the premanipulation and postmanipulation scores would be greater than the difference between the down manipulation premanipulation and postmanipulation scores.
- b. For the up manipulations, the difference between the premanipulation and postmanipulation scores would be greater than the difference between the time-one and time-two control condition scores.
- c. For the down manipulations, the difference between the premanipulation and postmanipulation scores would be greater than the difference between the time-one and time-two control condition scores.
- 3. It was hypothesized that the up and down manipulations would produce the greatest effect on the components to which they were targeted. This would be found by a significant Time (premanipulation vs. postmanipulation) by Direction of Manipulation (up vs. down) by Component Score Type (Self-efficacy vs. Self-acceptance vs. Self-evaluation) by Manipulation (Self-efficacy vs. Self-acceptance vs. Self-evaluation) interaction.
  - a. It was hypothesized that the difference between the premanipulation and the postmanipulation Self-efficacy scores would be greater for the Selfefficacy up manipulation condition, which was targeted to the Self-efficacy component, than for the Self-acceptance and the Self-evaluation up manipulations. For the Self-efficacy up manipulation, the difference between the post- and premanipulation Self-efficacy scores would be greater than the Self-acceptance and Self-evaluation scores.
  - b. It was hypothesized that the difference between the premanipulation and the postmanipulation Self-acceptance scores would be greater for the Self-

acceptance up manipulation condition, which was targeted to the Selfacceptance component, than for the Self-efficacy and Self-evaluation up manipulations. For the Self-acceptance up manipulation, the difference between the post- and premanipulation Self-acceptance scores would be greater than the Self-efficacy and Self-evaluation scores.

- c. It was hypothesized that the difference between the premanipulation and the postmanipulation Self-evaluation scores would be greater for the Selfevaluation up manipulation condition, which was targeted to the Selfevaluation component, than for the Self-efficacy and Self-acceptance up manipulations. For the Self-evaluation up manipulations, the difference between the post- and premanipulation Self-evaluation scores would be greater than the Self-efficacy and Self-acceptance scores.
- d. It was hypothesized that the difference between the premanipulation and the postmanipulation Self-efficacy scores would be less for the Selfefficacy down manipulation condition, which was targeted to the Selfefficacy component, than for the Self-acceptance and Self-evaluation down manipulations. For the Self-efficacy down manipulation, the difference between the post- and premanipulation Self-efficacy scores would be less than the Self-acceptance and Self-evaluation scores.
- e. It was hypothesized that the difference between the premanipulation and the postmanipulation Self-acceptance scores would be less for the Selfacceptance down manipulation condition, which was targeted to the Selfacceptance component, than for the Self-efficacy and Self-evaluation down manipulations. For the Self-acceptance down manipulation, the difference between the post- and premanipulation Self-acceptance scores would be less than the Self-efficacy and Self-evaluation scores.

f. It was hypothesized that the difference between the premanipulation and

24

the postmanipulation Self-evaluation scores would be less for the Selfevaluation down manipulation condition, which was targeted to the Selfevaluation component, than for the Self-efficacy and Self-acceptance down manipulations. For the Self-evaluation down manipulation, the difference between the post- and premanipulation Self-evaluation scores would be less than the Self-efficacy and Self-acceptance scores.

- 4. It was hypothesized that the test items of the dynamic components would have a greater change from premanipulation to postmanipulation than the static component test items. This result would be found with a significant Time (premanipulation vs. postmanipulation) by Direction of Manipulation (up vs. down) by Dynamic vs. Static interaction.
  - a. For the up manipulation conditions, it was hypothesized that the difference between the premanipulation scores and the postmanipulation scores would be greater for the dynamic component scores than for the static component scores.
  - b. For the down manipulation conditions, it was hypothesized that the difference between the premanipulation scores and the postmanipulation scores would be less for the dynamic component scores than for the static component scores.
- 5. It was hypothesized that the up and down manipulations would produce a greater change from premanipulation to postmanipulation in the dynamic and static components for which they were targeted than for the other dynamic and static components. That is, a manipulation was targeted at a certain component of self-esteem or group of test items, and the difference between that component's dynamic and static scores would change more from premanipulation to postmanipulation than the nontargeted components. This would be found with a significant Component Score Type (Self-efficacy vs.

Self-acceptance vs. Self-evaluation) by Direction of Manipulation (up vs. down) by Time (premanipulation vs. postmanipulation) by Dynamic vs. Static by Manipulation (Self-efficacy vs. Self-acceptance vs. Self-evaluation) interaction. The comparisons would be made by looking at the difference between the postmanipulation and the premanipulation scores between the up manipulations and the down manipulations. This difference between the up and down conditions for the static component scores would be taken from the difference between the up and down conditions for the dynamic component scores.

- a. The dynamic and static Self-efficacy scores will show a greater change from premanipulation to postmanipulation for the Self-efficacy up and down manipulations than the Self-acceptance manipulations and the Selfevaluation manipulations.
- b. The dynamic and static Self-acceptance scores will show a greater change from premanipulation to postmanipulation for the Self-acceptance up and down manipulations than the Self-efficacy manipulations and the Selfevaluation manipulations.
- c. The dynamic and static Self-evaluation scores will show a greater change from premanipulation to postmanipulation for the Self-evaluation up and down manipulations than the Self-efficacy manipulations and the Selfacceptance manipulations.
- d. The Self-efficacy up and down manipulations will produce a greater change from premanipulation to postmanipulation in the targeted dynamic and static Self-efficacy component scores than in the Self-acceptance scores and the Self-evaluation scores.
- e. The Self-acceptance up and down manipulations will produce a greater change from premanipulation to postmanipulation in the targeted dynamic

and static Self-acceptance component scores than in the Self-efficacy scores and the Self-evaluation scores.

 f. The Self-evaluation up and down manipulations will produce a greater change from premanipulation to postmanipulation in the targeted dynamic and static Self-evaluation component scores than in the Self-efficacy scores and the Self-acceptance scores.

### Method

### Subjects

Subjects were 280 male and female undergraduate students enrolled in introductory psychology classes. There were 146 females and 134 males. They ranged in age from 18 to 50, with 250 of the subjects between the ages of 18 and 21. Their participation was voluntary, and they received course extra-credit points for their participation.

### Materials

An IBM-compatible personal computer was used to run subjects individually. The test items were selected, as described in the Introduction and Appendix A, from the Rosenberg Self-esteem Scale (Rosenberg, 1965; Rosenberg, 1979), the Tennessee Self Concept Scale (Fitts, 1965), the Texas Social Behavior Inventory (Helmreich, Stapp, & Ervin, 1974), and an original semantic differential scale. The manipulations consisted of three short stories that were created for this study (see Appendix D). Three of the manipulations (up manipulations) were designed to result in a raising of the self-referent attitude responses, and three (down manipulations) were intended to lower the responses. Thus, there were three up and three down conditions. The three types of manipulations were aimed at the components of Self-efficacy, Self-acceptance, and Self-evaluation.

### Procedure **Procedure**

Subjects completed the experiment by using an IBM-compatible personal computer. The computer first asked for their age and gender and then presented the experiment. The subjects answered the premanipulation self-referent attitude questions. The premanipulation self-referent test items were presented on the computer terminal individually (see Appendix C). After all premanipulation test items were answered, instructions were displayed which asked the subjects to read the story that followed and to place themselves in the story. They were asked to imagine that the story was about them, and they were told that they will answer some more questions after the story feeling as they would if they had just lived through the hypothetical story. The subjects were randomly assigned to one of the six manipulation conditions or to one control condition and received one of the stories (or no story in the control condition). After the manipulation, which involved reading a brief story, the subjects responded to the postmanipulation self-referent attitude test items as in the premanipulation administration. They were again reminded that they are to answer the questions feeling as they would if the events in the story had actually happened to them.

### Results

#### Data Analysis

The data were analyzed initially as a univariate analysis of variance followed by the appropriate univariate tests. The results of this analysis are depicted in the ANOVA Summary (see Table 4). The design was a five-way analysis of variance. The betweensubjects independent variables were (see Table 1): (1) Manipulation (Self-efficacy vs. Self-acceptance vs. Self-evaluation) and (2) Direction of Manipulation (up vs. down). The within-subjects independent variables were: (3) Component Score Type (Selfefficacy vs. Self-acceptance vs. Self-evaluation), (4) Dynamic vs. Static, and (5) Time (premanipulation vs. postmanipulation). The dependent variable consisted of scores for the three components of Self-efficacy, Self-acceptance, and Self-evaluation. These three component types were further divided into dynamic components which were labeled Assertive Self-efficacy, Self-worth, and Evaluation of Moral Values and three static components which were labeled Social Self-efficacy, Physical Self-acceptance, and Evaluation of Family Relationships. The dependent variable was calculated by totaling the test item responses that comprised the component (see Appendix C). The six components were shown to have satisfactory internal consistency reliability. The coefficient alphas for the premanipulation and postmanipulation scores for the dynamic and static components of the three components of Self-efficacy, Self-acceptance, and Self-evaluation are shown in Table 5. Also shown in Table 5 are the coefficient alphas for the full scale scores for the premanipulation and postmanipulation conditions; that is, all of the test items were used to compute a composite self-esteem score.

### Hypothesized Results

#### Hypothesis One

It was hypothesized that there would be no effect for the control group. The difference between the premanipulation and postmanipulation control group dependent measures was found not to be significant, t(39) = -.06, n.s. Table 6 depicts the means
# ANOVA Summary

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Between:				
Up-Down Manipulation Up-Down x Manipulation Subjects(Up-Down x Manipulation)	1 2 2 234	415.20 25.23 40.87 341.70	415.20 12.61 20.44 1.46	284.33 8.64 13.99
Within:				
Time Time x Up-Down Time x Manipulation Time x Up-Down x Manipulation Subjects(Up-Down x Manipulation) x Time	1 1 2 2 234	$167.32 \\ 402.03 \\ 33.71 \\ 37.42 \\ 210.34$	$167.32 \\ 402.03 \\ 16.86 \\ 18.71 \\ 0.90$	186.14 447.26 18.75 20.81
Dynamic-Static Dynamic-Static x Up-Down Dynamic-Static x Manipulation Dynamic-Static x Up-Down x Manipulation Subjects(Up-Down x Manipulation) x Dynamic-Static	1 1 2 2 234	21.27 2.73 0.40 1.18 35.31	21.27 2.73 0.20 0.59 0.15	140.95 18.08 1.31 3.89

# Table 4 (Continued)

Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Within (Continued):	· · · · · · · · · · · · · · · · · · ·		<u></u>	
Factor Type	2	73.06	36.53	151.42
Factor Type x Un-Down	$\overline{2}$	3.12	1.56	6.47
Factor Type x Manipulation	4	1.44	0.36	1.49
Factor Type x Up-Down x Manipulation	4	27.29	6.82	28.28
Subjects(Up-Down x Manipulation) x Factor Type	468	112.91	0.24	
Dynamic-Static x Time	1	8.06	8.06	93.80
Dynamic-Static x Up-Down x Time	1	3.16	3.16	36.78
Dynamic-Static x Manipulation x Time	2	1.05	0.52	6.08
Dynamic-Static x Time x Up-Down x Manipulation	2	1.04	0.52	6.02
Subjects(Up-Down x Manipulation) x Dynamic-Static x Time	234	20.12	0.09	
Factor Type x Time	2	9.56	4.79	37.14
Factor Type x Time x Up-Down	2	2.79	1.40	10.86
Factor Type x Time x Manipulation	4	2.58	0.65	5.02
Factor Type x Time x Up-Down x Manipulation	4	21.43	5.36	41.64
Subjects(Up-Down x Manipulation) x Factor Time x Time	468	60.22	0.13	
Factor Type x Dynamic-Static	2	5.89	2.94	19.38
Factor Type x Dynamic-Static x Up-Down	$\overline{2}$	7.84	3.92	25.83
Factor Type x Dynamic-Static x Manipulation	4	0.68	0.17	1.12
Factor Type x Dynamic-Static x Up-Down x Manipulation	4	3.73	0.93	6.13
Subjects(Up-Down x Manipulation) x Factor Type x Dynamic-Static	468	71.08	0.15	

## Table 4 (Continued)

Source	df	<u>SS</u>	<u>MS</u>	<u>F</u>
Within (Continued):			······	
Factor Type x Dynamic-Static x Time Factor Type x Dynamic-Static x Up-Down x Time Factor Type x Dynamic-Static x Manipulation x Time Factor Type x Dynamic-Static x Time x Up-Down x Manipulation Subjects(Up-Down x Manipulation) x Factor Type x Time x Dynamic-Static	2 2 4 4 468	$     1.80 \\     6.67 \\     0.67 \\     1.56 \\     28.80   $	0.90 3.34 0.17 0.39 0.06	14.62 54.21 2.70 6.35
Total	2879	2211.26		

# Coefficient Alphas

	Dynamic (	Component	Static Component		
Factor	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation	
Self-efficacy	.77	.83	.87 .85	.96	
Self-acceptance	.93	.98		.95	
Self-evaluation	.86	.95	.89	.96	
· · · · · · · · · · · · · · · · · · ·	Premanipulation			stmanipulation	
Full Scale	.95			.98	

## Group Means

ļ

Group	Premanipulation Means	Postmanipulation Means	t	p
One: Self-efficacy Up	3.83	4.13	3.97	.01
Two: Self-efficacy Down	3.77	3.13	-6.33	.01
Three: Self-acceptance Up	3.92	4.31	5.54	.01
Four: Self-acceptance Down	3.83	2.18	-14.75	.01
Five: Self-evaluation Up	3.75	3.92	2.83	.01
Six: Self-evaluation Down	3.86	2.43	-4.51	.01
Control Group	3.73	3.73	0.06	n.s.

for the six manipulation groups and the control group.

#### Hypothesis Two

Hypothesis two was a manipulation check. It was found that the up manipulations resulted in a greater change in the positive direction from premanipulation to postmanipulation than the down manipulations, which resulted in a greater change in the negative direction from premanipulation to postmanipulation (see Table 7). This was shown by a significant Time (premanipulation vs. postmanipulation) by Direction of Manipulation (up vs. down) interaction,  $\underline{F}(1,234) = 447.26$ ,  $\underline{p} < .0001$ .

For the up manipulations, the difference between the premanipulation and postmanipulation scores was found to be significantly different from the down manipulation premanipulation and postmanipulation scores,  $\underline{t}(238) = -18.55$ ,  $\underline{p} < .001$ . For the up manipulations, the difference between the premanipulation and postmanipulation scores was found to be greater than the difference between the time-one and time-two control condition scores,  $\underline{t}(158) = -5.41$ ,  $\underline{p} < .001$ . For the down manipulations, the difference between the premanipulation and postmanipulation scores was found to be less than the difference between the time-one and time-two control condition scores,  $\underline{t}(158) = 15.64$ ,  $\underline{p} < .001$ .

#### Hypothesis Three

It was hypothesized that the up and down manipulations would produce their greatest effect on the components to which they were targeted by looking at the Time (premanipulation vs. postmanipulation) by Direction of Manipulation (up vs. down) by Component Score Type (Self-efficacy vs. Self-acceptance vs. Self-evaluation) by Manipulation (Self-efficacy vs. Self-acceptance vs. Self-evaluation) interaction. This effect was found to be significant,  $\underline{F}(4,468) = 41.64$ ,  $\underline{p} < .0001$  (see Table 8).

Two sets of comparisons were made. The first set compares the means for a component score type (Self-efficacy score, Self-acceptance score, or Self-evaluation score) across the type of manipulation. These comparisons are for the columns of Table

## Hypothesis Two Means

	Up Manipulations		Down Manipulations		Control Condition	
	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation
	3.83	4.12	3.82	2.59	3.73	3.73
Difference (Postmanipulation minus Premanipulation)	.29		-1.23		0.00	
Comparison of Differences			ţ			Ď
Up vs. Down			-18.55	······································		.001
Up vs. Control			-5.41			.001
Down vs. Control			15.64			.001

# Hypothesis Three Means

	Self-effic	Self-efficacy Means		Self-acceptance Means		Self-evaluation Means	
Manipulation	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation	
Up:		4-19-20-0-19-19-19-19-29-29-29-29-29-29-29-29-29-29-29-29-29				<u> </u>	
Self-efficacy	3.60	4.13	3.75	4.11	4.19	4.10	
Postmanipulation minus Premanipulation		.53		36		09	
Self-acceptance	3.76	4.17	3.85	4.44	4.19	4.29	
Postmanipulation minus Premanipulation		.41		59		10	
Self-evaluation	3.60	3.71	3.56	3.78	4.13	4.29	
Postmanipulation minus Premanipulation		.11		22		16	

Table 8 (Continued)

	Self-efficacy Means		Self-acceptance Means		Self-evaluation Means	
Manipulation	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation	Pre- manipulation	Post- manipulation
Down:						
Self-efficacy	3.63	2.95	3.66	3.01	4.05	3.53
Postmanipulation minus Premanipulation	68		65		52	
Self-acceptance	3.67	2.25	3.72	1.79	4.15	2.64
Postmanipulation minus Premanipulation	-1.	42	-1.	83	-1.	51
Self-evaluation	3.74	2.62	3.74	2.49	4.15	2.19
Postmanipulation minus Premanipulation	-1.	12	-1.	25	-1.	96

8. The second set compares scores across component score type for a single manipulation. These comparisons are for the rows of Table 8.

<u>Up Manipulations (Columns)</u>. For the up manipulation of the Self-efficacy Component Score, a nonsignificant difference was found between the premanipulation scores and the postmanipulation scores for the Self-efficacy condition, which was targeted to Self-efficacy, than for the Self-acceptance condition, t(78) = .91, n.s. There was a significant difference between the Self-efficacy condition and the Self-evaluation condition, t(78) = 3.45, p < .001.

For the Self-acceptance Component Score, a greater difference was found between the premanipulation scores and the postmanipulation scores for the Self-acceptance condition, which was targeted to Self-acceptance, than for the Self-efficacy condition,  $\underline{t}(78) = 1.75$ ,  $\underline{p} < .01$ , and the Self-evaluation condition,  $\underline{t}(78) = 2.90$ ,  $\underline{p} < .01$ .

For the Self-evaluation Component Score, a greater difference was found between the premanipulation scores and the postmanipulation scores for the Self-evaluation manipulation, which was targeted to Self-evaluation, than for the Self-efficacy condition,  $\underline{t}(78) = 2.39$ ,  $\underline{p} < .02$ , but not for the Self-acceptance condition,  $\underline{t}(78) = .81$ , n.s.

<u>Up Manipulations (Rows)</u>. The Self-efficacy up manipulation had a greater effect on the targeted Self-Efficacy Component Score than the Self-acceptance Component Score,  $\underline{t}(39) = 2.47$ ,  $\underline{p} < .025$ . It also had a greater effect on the Self-efficacy Component Score than the Self-Evaluation Component Score,  $\underline{t}(39) = 5.34$ ,  $\underline{p} < .0001$ .

The Self-acceptance up manipulation had a greater effect on the Self-acceptance Component Score than the Self-efficacy Component Score,  $\underline{t}(39) = 2.75$ ,  $\underline{p} < .01$ . It also had a greater effect on the Self-efficacy means than the Self-evaluation means,  $\underline{t}(39) = 6.01$ ,  $\underline{p} < .0001$ .

The Self-evaluation up manipulation did not have a significantly different effect on the targeted Self-evaluation means than the Self-efficacy means,  $\underline{t}(39) = 0.79$ , n.s., nor on the Self-acceptance means,  $\underline{t}(39) = 0.72$ , n.s.

<u>Down Manipulations (Columns)</u>. For the down manipulation of the Self-efficacy Component Score, it was found that the difference between the premanipulation scores and the postmanipulation scores was less for the Self-efficacy manipulation, which was targeted to Self-efficacy, than for Self-acceptance,  $\underline{t}(78) = 4.57$ ,  $\underline{p} < .001$ , and the Selfevaluation conditions,  $\underline{t}(78) = 3.00$ ,  $\underline{p} < .01$ . These results are contrary to the hypotheses.

For the down manipulation for the Self-acceptance Component Score, it was found that the difference between the premanipulation scores and the postmanipulation scores was less for the Self-acceptance manipulation, which was targeted to Selfacceptance, than for the Self-efficacy condition,  $\underline{t}(78) = 7.76$ ,  $\underline{p} < .001$ , and the Selfevaluation condition,  $\underline{t}(78) = 3.97$ ,  $\underline{p} < .001$ .

For the Self-evaluation Component Scores, it was found that the difference between the premanipulation scores and the postmanipulation scores was less for the Selfevaluation condition, which was targeted to Self-evaluation, than for the Self-efficacy down manipulation,  $\underline{t}(78) = 10.03$ ,  $\underline{p} < .001$ , and the Self-acceptance condition,  $\underline{t}(78) = 2.65$ ,  $\underline{p} < .01$ .

<u>Down Manipulations (Rows)</u>. The Self-efficacy down manipulation did not have a greater effect on the targeted Self-efficacy means than the Self-acceptance means,  $\underline{t}(39) = 0.49$ , n.s., but it did have a greater effect on the Self-efficacy means than the Self-evaluation means,  $\underline{t}(39) = 1.73$ ,  $\underline{p} < .025$ .

The Self-acceptance down manipulation had a greater effect on the Self-acceptance means than it did on the Self-efficacy means,  $\underline{t}(39) = 6.88$ ,  $\underline{p} < .0001$ . It also had a greater effect on the Self-acceptance means than the Self-evaluation Component Score means,  $\underline{t}(39) = 3.81$ ,  $\underline{p} < .001$ .

The Self-evaluation down manipulation had a greater effect on the targeted Selfevaluation means than it did on the Self-efficacy means,  $\underline{t}(39) = 10.93$ ,  $\underline{p} < .0001$ . It also had a greater effect on the Self-evaluation Component Score means than on the Selfacceptance means, t(39) = 9.51, p < .0001.

#### Hypothesis Four

It was hypothesized that the dynamic component test items would have a greater change from premanipulation to postmanipulation than the static component test items. That is, the difference between the premanipulation condition and postmanipulation condition would be greater for the dynamic component scores than for the static component scores. This result was found with a significant Time (premanipulation vs. time two) by Direction of Manipulation (up vs. down) by Dynamic vs. Static interaction,  $\underline{F}(1,234) = 36.78$ ,  $\underline{p} < .001$  (see Table 9).

For the up manipulation conditions, it was found that the difference between the premanipulation scores and the postmanipulation scores was greater for the static component scores than for the dynamic component scores,  $\underline{t}(119) = 3.25$ ,  $\underline{p} < .01$ . This was contrary to the hypotheses. For the down manipulation conditions, it was found that the difference between the premanipulation scores and the postmanipulation scores was greater for the dynamic component scores than for the static component scores,  $\underline{t}(119) = 3.95$ ,  $\underline{p} < .001$ . That is, for the down manipulations there was a greater change in the appropriate direction for the dynamic test items than for the static test items. Hypothesis Five

It was hypothesized that the up and down manipulations would produce a greater change from premanipulation to postmanipulation in the dynamic and static components for which they were targeted than for the other dynamic and static components. That is, a manipulation was targeted at a certain component of self-esteem or group of test items, and the difference between that component's dynamic and static scores would change more from premanipulation to postmanipulation than the nontargeted components. This was found with a significant five-way interaction [F(4,468) = 6.35, p < .0001] which consisted of the following independent variables: Component Score Type (Self-efficacy vs. Self-acceptance vs. Self-evaluation), Direction of Manipulation (up vs. down), Time

### Hypothesis Four Means

Manipulation	Premanipulation		Postmanipulation
Up:			
Dynamic	3.98		4.21
Postmanipulation minus Premanipulation		.23	
Static	3.71		4.02
Postmanipulation minus Premanipulation		.31	
Down:			
Dynamic	3.98		2.58
Postmanipulation minus Premanipulation		-1.40	
Static	3.69		2.64
Postmanipulation minus Premanipulation	· · ·	-1.05	
Comparison (Postmanipulation minus Premanipulation)	. t		n
	<u>+</u>		<u> </u>
Up Dynamic vs. Static	3.25		.01
Down Dynamic vs. Static	3.95		.001

(premanipulation vs. postmanipulation), Dynamic vs. Static, and Manipulation (Selfefficacy vs. Self-acceptance vs. Self-evaluation) (see Table 10). The comparisons were made by looking at the difference between the postmanipulation and the premanipulation scores between the up manipulations and the down manipulations. This difference between the up and down conditions for the static component scores was taken from the difference between the up and down conditions for the dynamic component scores.

The Self-efficacy up and down manipulations produced a greater change from premanipulation to postmanipulation in the dynamic and static Self-efficacy scores than the Self-acceptance manipulations, t(39) = 3.40, p < .01, and the Self-evaluation manipulations, t(39) = 2.09, p < .05 (see Figure 1).

The Self-acceptance up and down manipulations produced a greater change from premanipulation to postmanipulation in the dynamic and static Self-acceptance scores than the Self-efficacy manipulations,  $\underline{t}(39) = 2.60$ ,  $\underline{p} < .025$ , and the Self-evaluation manipulations,  $\underline{t}(39) = 5.22$ ,  $\underline{p} < .001$  (see Figure 2).

The Self-evaluation up and down manipulations did not produce a greater change from premanipulation to postmanipulation in the dynamic and static Self-evaluation scores than the Self-efficacy manipulations,  $\underline{t}(39) = 1.04$ , n.s., or the Self-acceptance manipulations,  $\underline{t}(39) = 1.18$ , n.s. (see Figure 3).

The Self-efficacy up and down manipulations produced a greater change from premanipulation to postmanipulation in the dynamic and static Self-efficacy component scores than in the Self-acceptance scores,  $\underline{t}(39) = 8.18$ ,  $\underline{p} < .0001$ , and the Self-evaluation scores,  $\underline{t}(39) = 3.45$ ,  $\underline{p} < .01$  (see Figure 4).

The Self-acceptance up and down manipulations produced a greater change from premanipulation to postmanipulation in the dynamic and static Self-acceptance component scores than in the Self-efficacy scores,  $\underline{t}(39) = 6.57$ ,  $\underline{p} < .0001$ , but not in the Self-evaluation scores,  $\underline{t}(39) = 0.33$ , n.s. (see Figure 5).

The Self-evaluation up and down manipulations did not produce a greater change

# Means For Experimental Conditions

	Self-efficacy Manipulation		Self-acceptance Manipulation		Self-evaluation Manipulation	
	Up	Down	Up	Down	Up	Down
Premanipulation:						
Self-efficacy Score:						
Dynamic	3.70	3.74	3.81	3.76	3.69	3.82
Static	3.51	3.53	3.71	3.57	3.52	3.66
Self-acceptance Score:						
Dynamic	3.98	3.90	4.05	3.93	3.84	4.00
Static	3.52	3.42	3.64	3.51	3.28	3.49
Self-evaluation Score:						
Dynamic	4.27	4.20	4.27	4.17	4.25	4.28
Static	4.10	3.90	4.11	4.14	4.02	4.02
Postmanipulation:						
Self-efficacy Score:						
Dynamic	4.05	2.97	4.05	2.47	3.71	2.58
Static	4.21	2.93	4.29	2.03	3.71	2.66
Self-acceptance Score:						
Dynamic	4.39	2.98	4.58	1.75	4.07	2.21
Static	3.84	3.04	4.29	1.83	3.48	2.76
Self-evaluation Score:						
Dynamic	4.23	3.53	4.46	2.54	4.34	2.17
Static	3.96	3.52	4.12	2.75	4.25	2.21



### Self-efficacy Scores



## Self-acceptance Scores



Self-evaluation Manipulation



## Self-evaluation Scores





### Self-efficacy Manipulation



### Self-acceptance Manipulation



from premanipulation to postmanipulation in the dynamic and static Self-evaluation component scores than in the Self-efficacy scores,  $\underline{t}(39) = 0.59$ , n.s. But there was a greater difference in the Self-evaluation scores than in the Self-acceptance scores,  $\underline{t}(39) = 6.22$ ,  $\underline{p} < .0001$  (see Figure 6).

#### Nonhypothesized Results

#### Gender Differences

There were no a priori hypotheses for gender differences; however, since the number of males (n = 134) approximated the number of females (n = 146), post hoc comparisons were made. The only significant difference found was for the premanipulation administration of the test items that comprise the Physical Attractiveness factor (see Table 11). Males were slightly more satisfied with their physical selves than were females,  $\underline{t}(278) = -2.01$ ,  $\underline{p} < .05$ .

#### Main Effects

Significant main effects were found for all five of the independent variables. There was a significant difference in the dependent measures that was related to the type of manipulation (Self-efficacy, Self-acceptance, and Self-evaluation),  $\underline{F}(2,234) = 8.64$ ,  $\underline{p} < .0002$ . There was a significant difference in the dependent measures that was related to the up manipulations vs. the down manipulations,  $\underline{F}(1,234) = 284.33$ ,  $\underline{p} < .0001$ . There was a significant difference in the dependent measures that was related to the premanipulation condition vs. the postmanipulation condition,  $\underline{F}(1,234) = 186.14$ ,  $\underline{p} < .0001$ . There was a significant difference in the static component scores vs. the dynamic component scores,  $\underline{F}(1,234) = 140.95$ ,  $\underline{p} < .0001$ . There was a significant difference in the Self-efficacy component scores, the Self-acceptance component scores, and the Self-evaluation component scores,  $\underline{F}(2,234) = 151.42$ ,  $\underline{p} < .0001$ .

#### Two-Way Interactions

There was a significant difference found in the dependent variable that was related to the type of manipulation: up or down Self-efficacy, up or down Self-acceptance, or up

### Self-evaluation Manipulation



### Gender Differences

Score Type	Male Means	Female Means	ţ	р
Premanipulation:				
Total Score	3.82	3.80	46	n.s.
Assertive Self	3.78	3.72	.97	n.s.
Social Self	3.58	3.55	68	n.s.
Self-worth	3.94	3.90	55	n.s.
Physical Self	3.53	3.38	-2.01	.05
Moral Values	4.20	4.26	.95	n.s.
Family Self	3.99	4.07	1.01	n.s.
Postmanipulation:				
Total Score	3.38	3.43	.52	n.s.
Assertive Self	3.17	3.36	.57	n.s.
Social Self	3.32	3.34	08	n.s.
Self-worth	3.38	3.42	.26	n.s.
Physical Self	3.23	3.25	.32	n.s.
Moral Values	3.57	3.71	1.06	n.s.
Family Self	3.48	3.58	.85	n.s.

or down Self-evaluation, F(2,234) = 13.99, p < .0001.

It was found that there was a significant difference in the dependent variable that was related to the type of manipulation (Self-efficacy manipulation, Self-acceptance manipulation, or Self-evaluation manipulation) and varied from premanipulation to postmanipulation,  $\underline{F}(2,234) = 18.75$ ,  $\underline{p} < .0001$ .

There was a significant difference found between the static component scores and the dynamic component scores that was related to the up manipulation condition vs. the down manipulation condition,  $\underline{F}(1,234) = 18.08$ ,  $\underline{p} < .001$ .

It was found that there was a significant difference between the Self-efficacy component scores, the Self-acceptance component scores, and the Self-evaluation component scores that was related to the up manipulation condition vs. the down manipulation condition, F(2,468) = 6.47, p < .002.

There was a significant difference in the Self-efficacy component scores, the Selfacceptance component scores, and the Self-evaluation component scores from premanipulation to postmanipulation,  $\underline{F}(2,468) = 37.14$ ,  $\underline{p} < .0001$ .

It was found that the static component scores and the dynamic component scores were significantly different from the premanipulation condition to the postmanipulation condition,  $\underline{F}(1,234) = 93.80$ ,  $\underline{p} < .0001$ .

There was a significant difference found in the static and dynamic Self-efficacy component scores, the static and dynamic Self-acceptance component scores, and the static and dynamic Self-evaluation component scores, F(2,468) = 19.38, p < .0001. Three-Way Interactions

It was found that there was a significant difference in the dependent variable that was related to the up and down Self-efficacy manipulations, the up and down Self-acceptance manipulations, and the up and down Self-evaluation manipulations that varied from premanipulation to postmanipulation, F(2,234) = 20.81, p < .0001.

It was found that there was a significant difference in the static component scores

and the dynamic component scores that was related to the type of manipulation: up or down Self-efficacy manipulation, up or down Self-acceptance manipulation, or up or down Self-efficacy manipulation,  $\underline{F}(2,234) = 3.89$ ,  $\underline{p} < .025$ .

It was found that there was a significant difference in the Self-efficacy scores, the Self-acceptance scores, and the Self-evaluation scores that was related to the type of manipulation: up or down Self-efficacy manipulation, up or down Self-acceptance manipulation, or up or down self-evaluation manipulation,  $\underline{F}(4,234) = 28.28$ ,  $\underline{p} < .0001$ .

It was found that there was a significant difference in the Self-efficacy scores, the Self-acceptance scores, and the Self-evaluation scores that was related to the type of manipulation (Self-efficacy manipulation, Self-acceptance manipulation, or Self-evaluation manipulation) and differed from premanipulation to postmanipulation,  $\underline{F}(4,468) = 5.02$ ,  $\underline{p} < .001$ .

It was found that there was a significant difference in the Self-efficacy scores, the Self-acceptance scores, and the Self-evaluation scores that was related to the up manipulations vs. the down manipulations. This difference varied from premanipulation to postmanipulation, F(2,468) = 10.86, p < .0001.

It was found that there was a significant difference in the static component scores and the dynamic component scores that was related to the type of manipulation (Selfefficacy, Self-acceptance, or Self-evaluation). This difference varied from premanipulation to postmanipulation,  $\underline{F}(2,234) = 6.08$ ,  $\underline{p} < .025$ .

It was found that there was a significant difference in the static and dynamic Selfefficacy scores, the static and dynamic Self-acceptance scores, and the static and dynamic Self-evaluation scores that was related to the up manipulation vs. the down manipulation condition, E(2,468) = 25.83, p < .0001.

It was found that there was a significant difference in the static and dynamic Selfefficacy scores, the static and dynamic Self-acceptance scores, and the static and dynamic Self-evaluation scores, and this difference varied from premanipulation to postmanipulation,  $\underline{F}(2,468) = 14.62$ ,  $\underline{p} < .0001$ .

#### Four-Way Interactions

It was found, from premanipulation to postmanipulation, that there was a difference in the static component scores and the dynamic component scores which was related to type of manipulation (up vs. down and Self-efficacy, Self-acceptance, and Self-evaluation),  $\underline{F}(2,234) = 6.02$ ,  $\underline{p} < .01$ .

It was found that there was a significant difference between the dynamic Selfefficacy scores, static Self-efficacy scores, dynamic Self-acceptance scores, static Selfacceptance scores, dynamic Self-evaluation scores, and static Self-evaluation scores that was related to the type of manipulation (up and down Self-efficacy, up and down Selfacceptance, and up and down Self-evaluation),  $\underline{F}(4,468) = 6.13$ ,  $\underline{p} < .0001$ .

It was found that there was a difference between the static and dynamic Selfefficacy scores, static and dynamic Self-acceptance scores, and static and dynamic Selfevaluation scores which was related to the type of manipulation (Self-efficacy, Selfacceptance, and Self-evaluation). This difference varied from premanipulation to postmanipulation,  $\underline{F}(4,468) = 2.70$ ,  $\underline{p} < .03$ .

There was a significant difference found between the static and dynamic Selfefficacy scores, the static and dynamic Self-acceptance scores, and the static and dynamic Self-evaluation scores that was related to the up manipulation conditions vs. the down manipulation conditions. This difference varied from the premanipulation to the postmanipulation conditioning,  $\underline{F}(2,468) = 54.21$ ,  $\underline{p} < .0001$ .

#### Discussion

The results of this study provide at least partial support for each of the five hypotheses. For the control group, there was no difference between the time-one scores and the time-two scores. There was a difference between the premanipulation scores and the postmanipulation scores for the six manipulation conditions.

The up manipulations consistently resulted in a change in the subjects' scores in a positive direction. The down manipulations consistently resulted in a change in the subjects' scores in a negative direction. Thus, the manipulations were successful in effecting a change in reported self-esteem in both a positive and a negative direction.

The hypotheses that the manipulations had a greater effect on the component scores to which they were targeted than the nontargeted scores was supported by 19 of 24 comparisons. In an attempt to validate the Self-efficacy manipulation, eight comparisons were made using the Self-efficacy means, and two of these comparisons were not significant. The Self-acceptance and Self-evaluation down manipulations created a greater negative change in Self-efficacy scores than the Self-efficacy down manipulation. The Self-acceptance up manipulation created a change in the Self-efficacy scores that was not significantly different from the Self-efficacy manipulation. The Self-efficacy manipulation did not create more change in the Self-efficacy scores than the Self-acceptance scores. The face validity of this manipulation (see Appendix D) suggests that the manipulation would alter the Self-efficacy scores of Assertive Self-efficacy and Social Self-efficacy. The manipulation of Self-efficacy used a hypothetical story which centered around a summer job as a telemarketing representative. It is possible that a telemarketing job is an alien occupation to freshman undergraduate students and they were not able to identify with the situation. The Self-acceptance manipulations were successful in targeting the Self-acceptance means in all eight of the comparisons that were made to verify the effectiveness of the Self-acceptance manipulation. For the Self-evaluation manipulation, three of the eight comparisons used to verify its effectiveness were not significant. The

Self-evaluation up manipulation did not create any more change in the Self-evaluation means than the Self-efficacy means nor the Self-acceptance means. The Self-evaluation manipulation did not create any more change in the Self-evaluation means than did the Self-acceptance manipulation. These results may be due to the high premanipulation Selfevaluation scores (mean of 4.17). This ceiling effect did not leave much room for an upward change in score.

The dynamic component scores changed more, and in the appropriate direction, for the down manipulations but not for the up manipulations. Twelve comparisons were made to verify that the manipulations created more change in the targeted dynamic components than the targeted static components. Four of these twelve comparisons were not found to be significant. Three of these four nonsignificant results involved the Selfevaluation manipulation. The Self-evaluation manipulation did not effect a greater change in the targeted dynamic Self-evaluation scores than the static Self-evaluation scores. This may have occurred because the dynamic component of Self-evaluation, Evaluation of Moral Values, may be a less salient construct to freshman undergraduates than the static component of Evaluation of Family Relationships. The subjects may place a high value on family relations, which resulted in scores close to the moral value responses. Also, a ceiling effect may account for the lack of significance in trying to raise the dynamic scores.

There was only one gender difference found: males were more self-confident of their physical appearance than were females at the premanipulation phase. This result is in keeping with the societal ideal of the slim female physique and also with the higher occurrence of eating disorders (anorexia and bulimia) among females than males.

This study was unique in several ways. One was the type of manipulation that was used to create a change in the response to self-referent test items. The manipulations used were hypothetical situations, situations which the subjects could, hopefully, easily identify with. The subjects were asked to place themselves in a situation and imagine

what their reaction would be. This type of manipulation assumes that the subject has an ability to empathize. Studies that have employed manipulations of self-esteem have typically used deception or a counterfeit type of situation. The deception may involve giving false feedback on a test or some other task. Ahmed, Valliant, and Swindle (1985) provided false feedback on a social accuracy test. Heatherton and Polivy (1991) have related self-esteem to actual performance of college students on midterm examinations. Roger (1982) used a hypothetical situation to enhance self-esteem. The hypothetical situation involved nominating leaders; the elected leaders improved on their self-esteem scores. Roger (1983) confirmed the use of a hypothetical situation by replicating his 1982 study with a real-life situation that used a leadership course. The subjects that participated in the course raised their self-esteem scores. Roger's work provided support that a hypothetical situation can manipulate self-esteem. Heatherton and Polivy (1991) have evaluated self-esteem after psychotherapy and found that clinical intervention increased their feelings of self-worth and social competence. Other studies (Friedenberg & Gillis, 1977; Friedenberg & Gillis, 1980) have shown that presenting cognitive restructuring messages using video tape was successful in altering self-esteem. Friedenberg and Gillis' (1977) work supports the idea that self-esteem could be manipulated solely using cognitive methods. It was questionable at the outset of this study whether the hypothetical situation would be adequate to bring about a change in the subject's response style. The data of the preliminary study and the current study clearly indicate that the hypothetical situation was effective. There could have been a demand characteristic working in the studies. The subjects may have figured out that the story they read was supposed to create a change in their response style in either a positive or negative direction. This may have been somewhat difficult for subjects to do since they would have to figure out which of the test items to distort. Other evidence that the hypotheses were not supported due to demand characteristics of the subjects is that the subjects were blind as to the hypothesized structure of self-esteem. They did not know which test items comprised the dynamic

component or the static component or which test items comprised the components of Selfefficacy, Self-acceptance, or Self-evaluation. The long-term effects of this type of manipulation have not been assessed; this could be an area of future study. Most studies that employ a self-esteem manipulation do not follow-up with longitudinal data.

This study was also unique in that the conceptualization of self-esteem that was used consisted of static and dynamic components of self-esteem that were distinct. It was hypothesized that these distinct components could be manipulated independently of each other. It was found that the test items that comprised the static and the dynamic components were responded to differentially. The manipulations effected a greater change in the dynamic test items than it did in the static test items. It was also assumed that the manipulations would effect a greater change in the set of test items to which it was targeted. This was found in that two of the three manipulations used successfully targeted a specific component of self-esteem (Self-efficacy, Self-acceptance, or Self-evaluation). That targeted subset of test items showed a greater change than the other two sets of test items. Future work with the instrument used in this study could use in vivo manipulations to validate the hypothetical situations.

This study was unique in that it utilized four self-esteem measures: the Tennessee Self Concept Scale (Fitts, 1965), the Texas Social Behavior Inventory (Helmreich, Stapp, & Ervin, 1974), the Rosenberg Self-esteem Scale (Rosenberg, 1965; Rosenberg, 1979), and the Semantic Differential (Franks & Marolla, 1976). This provided for a variety of test items that addressed several different aspects of self-esteem.

A common question of self-esteem studies that employ manipulations is whether the manipulations were altering mood or self-esteem. It has been generally concluded that self-esteem and mood are two distinct constructs; Heatherton and Polivy (1991) advocate that their study supports the idea that mood and self-esteem are distinct constructs. They found differences in the pattern of results obtained between self-esteem measures and various mood measures, suggesting that mood and self-esteem are empirically distinct constructs. Clearly, by looking at instruments that measure mood such as the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the Multiple Affect Adjective Check List (Zuckerman & Lubin, 1965), the test items are very different than the test items used in self-esteem measures. It has been found, however, that mood and self-esteem are related. The average reported correlation between selfesteem and mood is between .40 and .60 (Brockner, 1983).

There are practical applications for the results of this study. Clinicians could use the instrument developed in this study to obtain scores on the various components of a client's self-esteem. This instrument would have a unique clinical application because it provides scores on six components of self-esteem: self-worth, physical attractiveness, moral values, family relations, self-worth, and social self-assertiveness. This would provide the clinician and client with detailed information regarding the areas of self the client may need to improve. Rather than a general, possibly misdirected attempt to raise self-esteem, the clinical intervention could be targeted to the specific aspect or aspects of self-esteem that the client scored the weakest. The intervention could be tailored to the specific need. A low Assertive Self-efficacy score could be intervened with assertiveness training. A poor Social Self-efficacy score could be mediated with social skills training, social phobic desensitization, or social group therapy. A low score of Physical Selfacceptance could be improved with a change in actual physical appearance or possibly with cognitive restructuring of body image disturbance. A low score of Evaluation of Family Relations may be improved with family treatment methods. A poor self-image of Evaluation of Moral Values may be improved with existential therapy. A low Self-worth score may be raised with psychotherapy employing the theory of Bednar, Wells, and Peterson (1989) using coping skills enhancement and minimizing of avoidant behaviors to improve overall self-worth and Self-efficacy.

In summary, this study supports the idea that self-esteem is not a unitary construct. Not only is it multifaceted, but it consists of dynamic and static components.

Further work may provide further clarification on the nature of the dynamic aspects of self-esteem. Are they solely dependent on situation? Are they constructs of self that are naturally fluctuating around a base level?

#### References

- Ahmed, S. M. S., Valliant, P. M., & Swindle, D. (1985). Psychometric properties of Coopersmith self-esteem inventory. <u>Perceptual and Motor Skills</u>, <u>61</u>, 1235-1241.
- Allport, G. W. (1961). <u>Pattern and growth in personality</u>. New York: Holt, Rinehart & Winston.
- Aronson, E., & Mettee, D. (1968). Dishonest behavior as a function of differential levels of induced self-esteem. <u>Journal of Personality and Social Psychology</u>, 9, 121-127.
- Bachman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. <u>Journal of</u> <u>Personality and Social Psychology</u>, <u>35</u>, 365-380.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bardwick, J. M., & Douvan, E. (1977). Ambivalence: The socialization of women. In
  P. J. Stein, J. Richman, & N. Hannon (Eds.), <u>The family functions, conflicts, and</u> <u>symbols</u>. Reading, MA: Addison-Wesley.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. <u>Archives of General Psychiatry</u>, 4, 561-571.
- Bednar, R. L., Wells, M. G., & Peterson, S. R. (1989). <u>Self-esteem: Paradoxes and innovations in clinical theory and practice</u>. Washington, DC: American Psychological Association.
- Benson, C. S., & Wilsnack, S. C. (1983). Gender difference in alcoholic personality characteristics and life experiences. In W. M. Cox (Ed.), <u>Identifying and measuring</u> <u>alcoholic personality characteristics</u>. San Francisco: Jossey-Bass.

- Bentler, P. M. (1972). [Untitled review of the Tennessee Self Concept Scale]. In O. K.
  Buros (Ed.), <u>The seventh mental measurements yearbook</u> (Vol. I, pp. 366-367).
  Highland Park, NJ: The Gryphon Press.
- Bingham, W. C. (1983). Problems in the assessment of self-esteem. <u>International</u> Journal for the Advancement of Counselling, 6(1), 17-22.
- Brockner, J. (1983). Low self-esteem and behavioral plasticity: Some implications. In
  L. Wheeler & P. Shaver (Eds.), <u>Review of personality and social psychology</u> (pp. 237-271). Beverly Hills, CA: Sage Publications.
- Buras, H. J., & Phillips, J. (1990). [An investigation of the reliability and validity of five self-esteem measures]. Unpublished raw data.
- Buras, H. J., & Phillips, J. (1991). [Manipulations using imagery as a validation of dynamic and static constructs of self-esteem]. Unpublished raw data.
- Carmines, E. G., & Zeller, R. A. (1979). <u>Reliability and validity assessment</u>. Beverly Hills, CA: Sage Publications.
- Chapman, I. (1966). Role and self concept assessments of delinquents and nondelinquents. <u>Sociological Quarterly</u>, 7, 373-379.
- Cooley, C. H. (1902). <u>Human nature and the social order</u>. New York: Charles Scribner's Sons.
- Coombs, R. (1969). Social participation, self concept, and interpersonal evaluation. Sociometry, 32, 273-286.
- Cooper, J., & Duncan, B. (1971). Cognitive dissonance as a function of self-esteem and logical inconsistency. <u>Journal of Personality</u>, <u>39</u>, 289-302.
- Cox, W. M. (1979). The alcoholic personality: A review of the evidence. In B. A.
   Maher (Ed.), <u>Progress in experimental personality research</u> (Vol. 9). New York: Academic Press.
- Demo, D. H. (1985). The measurement of self-esteem: Refining our methods. Journal of Personality and Social Psychology, 48, 1490-1502.

- Dissertation Abstracts International. (1989-1990). [Vols. 49B(4)-51B(6)]. Ann Arbor, MI: University Microfilms International.
- Dittes, J. (1959). Attractiveness of group as function of self-esteem and acceptance by group. Journal of Abnormal and Social Psychology, 59, 77-82.
- Dworkin, A. (1964). Stereotypes and self-images held by native-born and foreign-born Mexican Americans. <u>Sociology and Social Research</u>, 49, 214-224.
- Eagly, A. H. (1967). Involvement as a determinant of response to favorable and unfavorable information. Journal of Personality and Social Psychology, 7, 1-15.
- Felice, L. (1973). Mexican American self concept and educational achievement: The effects of ethnic isolation and socioeconomic deprivation. <u>Social Science Quarterly</u>, <u>53</u>, 716-726.
- Fitch, G. (1970). Effects of self-esteem, perceived performance, and choice on causal attributions. Journal of Personality and Social Psychology, 16, 311-315.
- Fitts, W. H. (1965). <u>Tennessee Self Concept Scale</u>. Nashville, TN: Counselor Recordings and Tests.
- Forzi, M. (1984). Generalizability and specificity of self-schemata. <u>Bollettino di</u> <u>Psicologia Applicata, 170</u>, 3-12.
- Franks, D. D., & Marolla, J. (1976). Efficacious action and social approval as interacting dimensions of self-esteem: A tentative formulation through construct validation. <u>Sociometry</u>, <u>39</u>, 324-341.
- Friedenberg, W. P., & Gillis, J. S. (1977). An experimental study of the effectiveness of attitude change techniques for enhancing self-esteem. Journal of Clinical <u>Psychology</u>, 33, 1120-1124.
- Friedenberg, W. P., & Gillis, J. S. (1980). Modification of self-esteem with techniques of attitude change: A replication. <u>Psychological Reports</u>, <u>46</u>, 1087-1095.
- Gecas, V., & Schwalbe, M. L. (1983). Beyond the looking-glass self: Social structure and efficacy-based self-esteem. <u>Social Psychology Quarterly</u>, <u>46</u>, 77-88.

- Gellen, M. I., & Hoffman, R. A. (1984). Analysis of the subscales of the Tennessee Self Concept Scale. <u>Measurement and Evaluation in Counseling and Development</u>, <u>17</u>(2), 51-55.
- Gergen, K., & Bauer, R. (1967). Interactive effects of self-esteem and task difficulty on social conformity. Journal of Personality and Social Psychology, 6, 16-22.
- Goldsmith, R. E. (1986). Dimensionality of the Rosenberg self-esteem scale. Journal of Social Behavior and Personality, 1, 253-264.
- Goldsmith, R. E., & Goldsmith, E. B. (1982). Dogmatism and self-esteem: Further evidence. <u>Psychological Reports</u>, <u>51</u>, 289-290.
- Graf, R., & Hearne, L. (1970). Behavior in a mixed motive game as a function of induced self-esteem. <u>Perceptual and Motor Skills</u>, 32, 511-517.
- Guralnik, D. B. (Ed.). (1984). <u>Webster's New World Dictionary</u>. New York: Simon & Schuster.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. <u>Journal of Personality and Social Psychology</u>, <u>60</u>, 895-910.
- Heiss, J., & Owens, S. (1972). Self-evaluations of blacks and whites. <u>American</u> Journal of Sociology, 78, 360-370.
- Helmreich, R. L., & Stapp, J. (1974). Short forms of the Texas Social Behavior Inventory (TSBI), an objective measure of self-esteem. <u>Bulletin of the</u> <u>Psychonomic Society</u>, 4, 473-475.
- Helmreich, R. L., Stapp, J., & Ervin, C. (1974). The Texas Social Behavior Inventory (TSBI): An objective measure of self-esteem or social competence. JSAS: <u>Catalog</u> <u>of Selected Documents in Psychology</u>, 4, 79.
- Hensley, W. E. (1977). Differences between males and females on Rosenberg scale of self-esteem. <u>Psychological Reports</u>, <u>41</u>, 829-830.
- Hensley, W. E., & Roberts, M. K. (1976). Dimensions of Rosenberg's self-esteem scale. <u>Psychological Reports</u>, <u>38</u>, 583-584.
- Hoffman, R. A., & Gellen, M. I. (1983). The Tennessee Self Concept Scale: A revisit. <u>Psychological Reports</u>, 53, 1199-1204.

James, W. (1890). Principles of psychology. New York: Holt.

- Janis, I. L., & Field, P. B. (1959). Sex differences and personality factors related to persuasibility. In C. I. Hovland & I. L. Janis (Eds.), <u>Personality and</u> <u>persuasibility</u>. New Haven, CT: Yale University Press.
- Jones, S. C., & Ratner, C. (1967). Commitment to self-appraisal and interpersonal evaluations. Journal of Personality and Social Psychology, 6, 442-447.
- Joshi, K., & Rai, S. N. (1987). Effect of physical attractiveness upon the inter-personal attraction of subjects of different self-esteem. <u>Perspective in Psychological</u> <u>Researches</u>, 10(2), 19-24.
- Kaplan, H. B. (1975). The self-esteem motive and change in self-attitudes. <u>Journal of Nervous and Mental Disease</u>, <u>161</u>, 265-275.
- Kaplan, H. B., & Pokorny, A. D. (1969). Self-derogation and psychosocial adjustment. Journal of Nervous and Mental Disease, 149, 421-434.
- Kokenes, B. (1978). A factor analytic study of the Coopersmith self-esteem inventory. Adolescence, 13, 149-155.
- Korman, A. K. (1970). Toward an hypothesis of work behavior. Journal of Applied <u>Psychology</u>, 4, 31-41.
- Korman, A. K. (1976). Hypothesis of work behavior revisited and an extension. Academy of Management Review, 1, 1-37.
- Lewis, M. I., & Burler, R. R. (1974, November). Life review therapy: Putting memories to work in individual and group psychotherapy. <u>Geriatrics</u>, <u>29</u>(11), 165-173.

- Luckey, E. (1961). Perceptual congruence of self and family concepts as related to marital interaction. <u>Sociometry</u>, 24, 234-250.
- Mackie, M. (1983). The domestication of self: Gender comparisons of self-imagery and self-esteem. <u>Social Psychology Quarterly</u>, <u>46</u>, 343-350.

May, R. (1983). The discovery of being. New York: Norton.

- McFarland, C., & Ross, M. (1982). Impact of casual attributions on affective reactions to success and failure. Journal of Personality and Social Psychology, 5, 937-946.
- McIntire, S. A., & Levine, E. L. (1984). An empirical investigation of self-esteem as a composite construct. Journal of Vocational Behavior, 25, 290-303.
- McMillen, D. L., & Reynolds, J. (1969). Self-esteem and the effectiveness of reconciliation techniques following an argument. <u>Psychonomic Science</u>, <u>17</u>, 208-209.
- Mead, G. H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Meadow, K. (1969). Self-image, family climate, and deafness. <u>Social Forces</u>, <u>47</u>, 428-438.
- O'Brien, E. J. (1985). Global self-esteem scales: Unidimensional and multidimensional. <u>Psychological Reports</u>, 57, 383-388.
- O'Malley, P. M., & Bachman, J. G. (1983). Self-esteem: Change and stability between ages 13 and 23. <u>Developmental Psychology</u>, <u>19</u>, 257-268.
- Openshaw, D. K., Thomas, D. L., & Rollins, B. C. (1981). Adolescent self-esteem: A multidimensional perspective. Journal of Early Adolescence, 1, 273-282.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). <u>The measurement of</u> <u>meaning</u>. Urbana, IL: University of Illinois Press.
- Pepitone, A., Faucheux, C., Cesa-Bianchi, M., Iacono, G., Asprea, A., Moscovici, S.,
  Magistretti, G., & Villone, G. (1967). The role of self-esteem in competitive choice behavior. <u>International Journal of Psychology</u>, 2, 147-159.

- Phillips, J. L., Spradlin, J. M., Cope, L. I., & Torres, L. V. (1989). <u>The Rosenberg</u> <u>self-esteem scale is not unidimensional: Further evidence</u>. Unpublished manuscript.
- Psychological Abstracts. (1983-1990). [Vols. 69(1)-77(12)]. Arlington, VA: The American Psychological Association, Inc.
- Richards, J. M. (1983). Validity of locus of control and self-esteem measures in a national longitudinal study. <u>Educational and Psychological Measurement</u>, <u>43</u>, 897-905.
- Roger, D. B. (1982). Body-image, personal space and self-esteem: Preliminary evidence for "focussing" effects. <u>Journal of Personality Assessment</u>, <u>46</u>, 468-476.
- Roger, D. B. (1983). Body-image, personal space and self-esteem: A field study. Journal of Personality Assessment, 47, 288-293.
- Rosenberg, F. R., & Rosenberg, M. (1978). Self-esteem and delinquency. Journal of Youth and Adolescence, 7, 279-297.
- Rosenberg, M. (1965). <u>Society and the adolescent self-image</u>. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

SAS system for linear models. (1986). Cary, NC: SAS Institute, Inc.

- Savin-Williams, R. C., & Demo, D. H. (1983). Situational and transituational determinants of adolescent self-feelings. <u>Journal of Personality and Social</u> <u>Psychology</u>, 44, 824-833.
- Savin-Williams, R. C., & Demo, D. H. (1984). Developmental change and stability in adolescent self concept. <u>Developmental Psychology</u>, <u>20</u>, 1100-1110.
- Schalon, C. L. (1968). Effect of self-esteem upon performance following failure stress. Journal of Consulting and Clinical Psychology, 32, 497.
- Silber, E., & Tippett, J. S. (1965). Self-esteem: Clinical assessment and validation. <u>Psychological Reports, 16</u>, 1017-1071.

- Silverman, I., Ford, L., & Morganti, J. (1966). Inter-related effects of social desirability, sex, self-esteem, and simplicity of argument on persuasibility. <u>Journal</u> <u>of Personality</u>, <u>34</u>, 555-568.
- Swanson, H. R., & Weary, G. (1982). The acceptance of personality evaluations: Constraints on consistency motivations. <u>Journal of Personality Assessment</u>, <u>46</u>, 350-358.
- Taylor, J. (1987). Predicting athletic performance with self-confidence and somatic and cognitive anxiety as a function of motor and physiological requirements in six sports. <u>Journal of Personality</u>, <u>55</u>, 139-153.
- Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. Journal of Sport <u>Psychology</u>, 8, 221-246.
- Watson, M. J. (1984). State and trait global self-esteem as a result of academic performance. (Doctoral dissertation, University of South Florida, 1984).
   <u>Dissertation Abstracts International</u>, <u>45</u>, 3118B.
- Wells, L. E., & Marwell, G. (1976). <u>Self-esteem: Its conceptualization and</u> <u>measurement</u>. Beverly Hills, CA: Sage Publications.
- Wylie, R. C. (1961). The self concept. Lincoln, NE: University of Nebraska Press.
- Wylie, R. C. (1974). <u>The self concept: A review of methodological considerations and</u> <u>measuring instruments</u>. Lincoln, NE: University of Nebraska Press.
- Zuckerman, M., & Lubin, B. (1965). <u>Manual for the Multiple Affect Adjective Check</u>
   <u>List</u>. San Diego, CA: Educational and Industrial Testing Service.

### Appendix A

### Manipulations Used in Preliminary Study Two

### Self-efficacy Factor

### Up Manipulation

I am taking a psychology class this semester, and one of the requirements is that we form groups of eight people and work on a project together. I like to work in groups, even if I don't know the other people. When a group like this gets together, I like to be the group leader. So when it came time to select someone to lead things, I volunteered. No one objected, so I took charge. Things went pretty well. There were a few disagreements on how we should go about doing things, but I managed to get the group to come to an agreement. I got along really well with the others in the group. We got the job finished on time, and everyone got a good grade. I feel good about how I get along with other people.

### **Down Manipulation**

I am taking a psychology class this semester, and one of the requirements is that we form groups of eight people and work on a project together. I like to work in groups even if I don't know the other people. When a group like this gets together, I like to be the group leader. So when it came time to select someone to lead things, I volunteered. No one objected, so I took charge. Things did not go well. I kept getting into an argument with this one girl. Then this other guy started disagreeing with me a lot. I could not seem to win an argument with him. Then the others in the group started taking his side. Eventually, the other guy took over my role as leader. I feel like I don't get along with others very well.

### Self-acceptance Factor

### Up Manipulation

Spring is coming. I haven't exercised all winter, and I've gotten soft and out of shape. I feel like I look pretty awful. I want to feel good about how I look in a swimsuit this summer. I think I'll join a gym and get into shape. Six weeks after joining the gym, I've been to the gym three times a week every week, and I can see the difference. It really feels good to set a goal for myself and accomplish it. I look pretty good, and I feel good about being seen in a swimsuit now. Summer is here; I'm invited to a pool party this weekend; and I feel good about myself.

#### **Down Manipulation**

Spring is coming. I haven't exercised all winter, and I've gotten soft and out of shape. I feel like I look pretty awful. I want to feel good about how I look in a swimsuit this summer. I think I'll join a gym and get into shape. Six weeks after joining the gym, I've only been to the gym twice, and I look worse than before. I feel so discouraged when I set a goal for myself and I don't meet it. I hate the thought of being seen in a swimsuit, and it's too late now. Summer is here; I'm invited to a pool party this weekend; and I feel pretty bad about myself.

### Self-evaluation Factor

### Up Manipulation

I was in Hastings record store yesterday with a couple of friends of mine. There was this guy in the store that looked really suspicious to me. My friends told me to mind my own business and to stop watching the guy. When he thought no one was looking, that guy put several tapes into his backpack. The store clerk didn't catch him, but I thought it was really unfair that he get away with it. I hate to be the one to turn someone in, but this guy just stole five tapes. I told the cashier, and the guy was arrested. The next day, my name was in the newspaper for turning the guy in. It turns out that the thief had an apartment full of stolen stuff. The newspaper made me into a hero. My family saw the article in the newspaper, and they were really proud of me.

### **Down Manipulation**

I was in Hastings record store yesterday with a couple of friends of mine. There was a new tape in there that I really wanted, but I didn't have the cash to buy it. My friends told me to just put it into my backpack, but I couldn't do something like that. They kept pushing me to steal it. They convinced me that no one would ever know. Then, when no one was looking, I thought I could actually get away with it. I slipped the tape into my backpack. The cashier didn't catch me, but another customer saw me and turned me in. It was awful. My name was in the newspaper today for committing a theft, and my family saw it. They were so upset with me that we had a big fight, and now they won't even speak to me. They say that I'm on my own now.

### **Control Condition**

It is the spring semester 1991. I am a student at Oklahoma State University, and I am enrolled in an introductory psychology class. I am participating in this experiment for extra credit. I have just finished answering several questions. After I read this, I will answer more questions.

## Appendix B

Procedure to Eliminate Test Items Used in Preliminary Study Two

- 1. Four means for each item were computed per each of the six factors:
  - i. The item means for the time-one up manipulations.
  - ii. The item means for the time-two up manipulations.
  - iii. The item means for the time-one down manipulations.
  - iv. The item means for the time-two down manipulations.
- 2. Two differences were computed for each item per factor:
  - i. The difference between the time-two mean and the time-one mean for the up manipulations.
  - ii. The difference between the time-two mean and the time-one mean for the down manipulations.
- 3. The difference between the value computed in Step 2.i and the value computed in Step 2.ii was calculated for each item per factor.
- 4. The mean for the values in Step 3 was computed for each of the six factors.
- 5. The values of Step 3 which fell below the mean of Step 4 were eliminated for the dynamic factors of Assertive Self-efficacy and Self-worth. The values of Step 4 which fell above the mean of Step 4 were eliminated for the static factor of Social Self-efficacy.
- 6. The other factors did not have a sufficient number of items to be put through the above procedures. One item was eliminated from Physical Self-acceptance because it was also on the Self-worth factor. No items were eliminated from the Evaluation of Moral Values factor. One item, the lowest value, as calculated in Step 3, was eliminated from the Evaluation of Family Relationships factor.

# Appendix C

# Test Items Used in the Current Study

# Dynamic Self-efficacy Factor: Assertive Self-efficacy

1. I try to please others, but I don't overdo it.						
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5	
2.	I get along well v	with other peop	le.			
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5	
3.	I do not feel at ea	se with other p	eople.			
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5	
4.	I do not feel at ea	se with other p	eople.			
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5	
5.	I would describe	myself as one	who attempts to mas	ster situations.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5	
6.	I would rather no	t have very mu	ch responsibility for	other people.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5	
7.	I would describe myself as indecisive.					
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5	
8.	I frequently find opinions of other	it difficult to de	efend my point of vie	ew when confi	onted with the	

	Never 1		Seldom 2		Sometim 3	es	Oft 4	en	Always 5
9.	Decisive	1	2	3	4	5	6	7	Indecisive
10.	Leader	1	2	3	4	5	6	7	Follower

## Static Self-efficacy Factor: Social Self-efficacy

1. I feel confident of my appearance.

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

2. I enjoy social gatherings just to be with people.

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

3. I cannot seem to get others to notice me.

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

4. When I work on a committee, I like to take charge of things.

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

5. It is hard for me to start a conversation with strangers.

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

## 6. I am popular with men.

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

7. I find it hard to talk with strangers.

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

8. When in a group of people, I have trouble thinking of the right things to say.

Never	Seldom	Sometimes	Often	Always
1	2	3	4	5

9. I would describe myself as self-confident.

Never	Seldom	Sometimes	Often	Always
1	2	3	4	5

10. Other people look up to me.

	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
11.	I feel I can confid	lently approach	n and deal with anyor	ne I meet.	
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
12.	When I meet a st	ranger, I often	think that he/she is b	etter than I arr	1.
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
13.	I am popular with	n men.			
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
14.	I find it hard to ta	alk with strang	ers.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
		Dynamic Self-	acceptance Factor: S	elf-worth	
1.	I don't feel as we	ell as I should.			
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
2.	I am not the pers	on I would like	e to be.		
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
3.	I wish I didn't gi	ve up as easily	as I do.		
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
4.	On the whole, I a	am satisfied wi	th myself.	<b>、</b>	
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5

5. At times, I think I am no good at all.

	Completely false 1		Mostly false 2		Partly fa and partly 3	alse v true	M	lostly true 4	Completely true 5
6.	I wish that I co	uld ha	ve more	resp	ect for my	vself.			
	Completely false 1		Mostly false 2		Partly fa and partly 3	ilse v true	М	lostly true 4	Completely true 5
7.	I am a nobody.								
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
8.	I like my looks	just tl	he way t	hey a	re.				
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
9.	I am satisfied to	o be ju	ist what	I am.					
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
10.	I wish I didn't	give u	p as eas	ily as	I do.				
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
11.	On the whole,	I am s	atisfied	with	myself.				
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
12.	I feel I do not h	nave n	nuch to b	e pro	oud of.				
	Never 1		Seldom 2		Sometir 3	nes	• (	Often 4	Always 5
13.	All in all, I am	inclin	ed to fee	l I arr	n a failure.				
	Never 1		Seldom 2		Sometir 3	nes	C	Often 4	Always 5
14.	Satisfied	1	2	3	4	5	6	7	Discontent
15.	Нарру	1	2	3	4	5	6	7	Sad

# Static Self-acceptance Factor: Physical Self-acceptance

1. I am an attractive person.

	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tr	stly ue 4	Con	npletely true 5	
2.	I like my looks	just	the way th	ey a	re.						
	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tr	stly ue 4	Con	npletely true 5	
3.	I would like to	chan	ge some p	arts	of my bo	dy.					
	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tr	stly ue 4	Con	npletely true 5	
4.	I should have r	nore	sex appeal		·						
	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tr	stly ue 4	Con	npletely true 5	
5.	5. I like to look nice and neat all the time.										
	Never 1		Seldom 2		Someti 3	mes	Of	ten 4	A	lways 5	
6.	6. I take a positive attitude toward myself.										
	Never 1		Seldom 2		Someti 3	mes	Of	iten 4	A	lways 5	
7.	I would like to	chan	ge some p	arts	of my bo	ody.					
	Never 1		Seldom 2		Someti 3	mes	Of	iten 4	A	lways 5	
8.	I should have r	nore	sex appeal	l.							
	Never 1		Seldom 2		Someti 3	mes	Of	iten 4	A	lways 5	
9.	Attractive	1	2	3	4	5	6	7	Ur	attractive	
10.	Neat	1	2	3	4	5	6	7		Messy	

# Dynamic Self-evaluation Factor: Evaluation of Moral Values

1. I am a moral failure.

	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tru 2	stly ue 1	Completely true 5
2.	I am a morally	weak	person.						
	Completely false 1		Mostly false 2		Partly f and partl 3	alse y true	Mo tra	stly ue 1	Completely true 5
3.	I am satisfied	with n	ny moral	behav	vior.				
	Completely false 1		Mostly false 2	;	Partly f and partl 3	alse y true	Mo tru 2	stly ue 1	Completely true 5
4.	I am a moral f	ailure.							
	Never 1		Seldom 2		Someti 3	mes	Of	ten 4	Always 5
5.	I am satisfied	with n	ny moral I	behav	vior.				
	Never 1		Seldom 2		Someti 3	mes	Of	ten 4	Always 5
6.	I have trouble	doing	the thing	s that	are righ	t.			
	Never 1		Seldom 2		Someti 3	mes	Of	ten 4	Always 5
7.	Nice	1	2	3	4	5	6	7	Awful
8.	Moral	1	2	3	4	5	6	7	Amoral
	Static S	elf-ev	aluation F	Factor	: Evalua	tion of I	Family I	Relation	<u>ships</u>
1.	I have a family	y that	would alv	vays l	help me	in any ki	ind of tr	ouble.	

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

2. I am a member of a happy family.

Completely	Mostly	Partly false	Mostly	Completely
1	$\frac{1}{2}$	and party frue	4	5

3. I am a religious person.

	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
4.	I am an importan	t person to my	friends and family.		
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
5.	I take a real inter	est in my famil	у.		
	Completely false 1	Mostly false 2	Partly false and partly true 3	Mostly true 4	Completely true 5
6.	I am a member o	f a happy fami	ly.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
7.	I am a religious p	person.			
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
8.	I am satisfied wit	th my family re	elationships.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
9.	I understand my	family as well	as I should.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always
10.	I take a real inter	est in my famil	у.		
	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
11.	I quarrel with my	/ family.			
	Never 1	Seldom	Sometimes 3	Often 4	Always 5

## Appendix D

### Manipulations Used in the Current Study

### Self-efficacy Factor

### Up Manipulation

This past summer, I went to work for a telemarketing company. Each day I was given a list of prospective customers. I had to phone each of them and try to persuade them to switch their long-distance phone company. I thought it would be a fun job because I like talking with people. After I worked there for a few weeks, I had some ideas that I thought were pretty good that would increase sales. I presented them to my boss, but he was not interested. I wanted to try out my ideas, and when I decide something, I work hard at it. I persisted, and eventually, my boss decided to give my ideas a chance. My assertiveness paid off. My ideas worked, and sales increased. He rewarded me by giving me a promotion and putting me in charge of a few people. The people I supervised seemed to like me pretty well, and I liked being in charge. It was a good summer job, and I made a lot of money. I feel like I mastered that telemarketing job.

### Down Manipulation

This past summer, I went to work for a telemarketing company. Each day I was given a list of prospective customers. I had to phone each of them and try to persuade them to switch their long-distance phone company. I was somewhat hesitant to take the job because I was a little afraid to have to phone people that I don't know. I did like the sound of the job because I would not have much responsibility. After I worked there for a few weeks, I had some ideas that I thought were pretty good that would increase sales. I presented them to my boss, but he was not interested. I really wanted to try out my ideas, but I could not decide if I should bring it up with my boss again since he was so negative about it the first time. So I decided to try my ideas by myself and not tell my boss. My sales went up some but not a whole lot, so I never mentioned it again. It was a good summer job, and I made a lot of money. I feel that if I had been more assertive I would have mastered that telemarketing job.

### Self-acceptance Factor

### Up Manipulation

It has been ten years since I completed my bachelor's degree. Back when I was in school, I thought that the world was mine. I thought that I was going to get my degree and go to work and make a lot of money. It worked out just as I planned it. It is ten years later, and I am a success. I have been working at this same job for ten years, and I have been promoted three times. I surely am proud of myself. I know that other people I graduated with have done a lot worse than I have. It got hard sometimes, but I feel so satisfied with myself for not ever giving up. My physical appearance has hardly changed in the past ten years. I like working out and staying in shape. It's easy to respect myself when I feel like I'm just the person that I would like to be. I feel really happy when I think about myself and what I've accomplished.

### **Down Manipulation**

It has been ten years since I completed my bachelor's degree. Back when I was in school, I thought that the world was mine. I thought that I was going to get my degree and go to work and make a lot of money. But it certainly did not work out that way. It is ten years later, and I feel like such a failure. I have been working at this same job for ten years, and I have not been promoted even once. I surely am not proud of myself. I know that other people I graduated with have done a lot better than I have. I feel so dissatisfied with myself for giving up so easily. My physical appearance is not what I want it to be either. I never thought I could get so out of shape in ten years' time. It's hard to respect myself when I don't feel like I'm the person that I would like to be. I feel really sad when I think about myself and what I didn't accomplish.

### Self-evaluation Factor

### Up Manipulation

I was in Hastings record store yesterday with a couple of friends of mine. There was this guy in the store that looked really suspicious to me. My friends told me to mind my own business and to stop watching the guy. When he thought no one was looking, that guy put several tapes into his backpack. The store clerk didn't catch him, but I thought it was really unfair that he get away with it. I hate to be the one to turn someone in, but this guy just stole five tapes. I told the cashier, and the guy was arrested. The next day, my name was in the newspaper for turning the guy in. It turns out that the thief had an apartment full of stolen stuff. The newspaper made me into a hero. My family saw the article in the newspaper, and they were really proud of me.

### **Down Manipulation**

I was in Hastings record store yesterday with a couple of friends of mine. There was a new tape in there that I really wanted, but I didn't have the cash to buy it. My friends told me to just put it into my backpack, but I couldn't do something like that. They kept pushing me to steal it. They convinced me that no one would ever know. Then, when no one was looking, I thought I could actually get away with it. I slipped the tape into my backpack. The cashier didn't catch me, but another customer saw me and turned me in. It was awful. My name was in the newspaper today for committing a theft, and my family saw it. They were so upset with me that we had a big fight, and now they won't even speak to me. They say that I'm on my own now.

### Control Condition

It is the fall semester 1991. I am a student at Oklahoma State University, and I am enrolled in an introductory psychology class. I am participating in this experiment for extra credit. I have just finished answering several questions. After I read this, I will answer more questions.

### Herbert J. Buras

### Candidate for the Degree of

Doctor of Philosophy

### Dissertation: AN INVESTIGATION INTO THE STATIC AND DYNAMIC COMPONENTS OF SELF-REFERENT ATTITUDES

Major Field: Psychology

Biographical:

- Personal Data: Born in New Orleans, Louisiana, on July 3, 1956, the son of Herbert and Rosemary Buras.
- Education: Graduated from Archbishop Shaw High School, Marrero, Louisiana, in May 1974; received Bachelor of Science degree in Computer Science from the University of Southwestern Louisiana, Lafayette, Louisiana, in December 1978; received Master of Science degree in Psychology at Oklahoma State University in December 1989; completed the requirements for the Doctor of Philosophy degree at Oklahoma State University in May 1994.
- Experience: Nine years of experience as a computer programmer/analyst, including two and a half years with the Specialized Center of Research, Arteriosclerosis, at Louisiana State University; employed as a research assistant by San Diego State University, Summer-Fall 1986, and by the University of California-Los Angeles, Summer-Fall 1987; Oklahoma State University, Department of Psychology, 1988 to 1993.
- Professional Memberships: American Psychological Association, Oklahoma Psychological Association, Southwestern Psychological Association, Psi Chi (The National Honor Society in Psychology).

### OKLAHONA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH

Proposal Title: \_\_\_\_\_\_ Self-Referent Attitudes: \_\_\_\_\_ Do\_\_\_\_ They Vary Over Time\_\_\_\_\_

Principal Investigator:	J. Phillips/H. Buras						
Date:2-10-92	IRB #	AS-92-030					
This application has been r	eviewed by the IRB	and					
Processed as: Exempt [ ]	Expedite [ ] Full	Board Review [ ]					
Renewai or C	Continuation [X]						
Approval Status Recommended	by Reviewer(s):						
Approved (X)		Deferred for Revision [ ]					
Approved wit	h Provision [ ]	Disapproved [ ]					

Approval status subject to review by full Institutional Review Board at next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or Disapproval:

Change Terry Macuila's name on consent form to LeAnn Prater.

Signature:

Date: \_\_\_\_\_ Institutional Review Board Cha: