Racial and Gender Differences in Self-Efficacy Among Black and White Urban College Students

Sidney C. St. Leger
Loyola University Chicago

Recommended Citation
http://ecommons.luc.edu/luc_theses/3377
RACIAL AND GENDER DIFFERENCES IN SELF-EFFICACY
AMONG BLACK AND WHITE URBAN COLLEGE STUDENTS

by

Sidney C. St. Leger

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts
April
1985
ACKNOWLEDGMENTS

This research project was made possible through the cooperation of the students, faculty, and staff of Loyola University of Chicago. I am deeply grateful to Drs. Roderick W. Pugh and Patricia A. Rupert whose generosity of time was exceeded only by the helpfulness of their comments and their ongoing concern.

Special thanks are also extended to Dr. Carol Adams, Director of the Loyola University Afro-American Studies Program and to Ms. Cyndee Bishop, her Administrative Assistant, for their helpful cooperation in support of this research.
VITA

The author, Sidney C. St. Leger, is the son of Wilhelmina (Powell) and Sidney A. St. Leger. He was born on July 19, 1951, in Chicago, Illinois.

He received his elementary and secondary education in the parochial and public schools of Chicago. He was awarded the Bachelor of Arts Degree with Highest Honors from DePaul University in June of 1980. His major field of study was psychology. He was the recipient of several scholarships and elected to membership in various honorary societies. As an undergraduate, he served as president for his university chapter of Psi Chi, the national honor society in Psychology.

Prior to beginning graduate work toward the Ph.D. in Clinical Psychology, the author was employed as a rehabilitation counselor for the Thresholds Psychosocial Rehabilitation Center and as a individual and family counselor for Ebony Management Associates, both located in Chicago. Winning an American Psychological Association Minority Fellowship, full-time work toward the doctoral degree began in the autumn of 1981.

The author has trained in a number of settings throughout Chicago and is presently employed as a psychotherapist for the Bobby E. Wright CCMHC, and as a diagnos-
tician for a psychologist in independent practice. He is a member of various scholarly and professional organizations.

He is married to the former Cynthia Hunt and the father of two sons, Sidney Thomas, and Alan Jeffrey.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. REVIEW OF RELATED LITERATURE</td>
<td>4</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>4</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>14</td>
</tr>
<tr>
<td>Performance accomplishments</td>
<td>17</td>
</tr>
<tr>
<td>Vicarious experience</td>
<td>17</td>
</tr>
<tr>
<td>Verbal persuasion</td>
<td>17</td>
</tr>
<tr>
<td>Emotional arousal</td>
<td>18</td>
</tr>
<tr>
<td>Formulation of Hypotheses</td>
<td>23</td>
</tr>
<tr>
<td>III. METHOD</td>
<td>25</td>
</tr>
<tr>
<td>Subjects</td>
<td>25</td>
</tr>
<tr>
<td>Materials</td>
<td>25</td>
</tr>
<tr>
<td>Demographic data questionnaire</td>
<td>26</td>
</tr>
<tr>
<td>Self-efficacy scale</td>
<td>26</td>
</tr>
<tr>
<td>General self-efficacy</td>
<td>27</td>
</tr>
<tr>
<td>Physical self-efficacy scale</td>
<td>28</td>
</tr>
<tr>
<td>Efficacy-outcome instrument</td>
<td>30</td>
</tr>
<tr>
<td>Procedure</td>
<td>31</td>
</tr>
<tr>
<td>Subject recruitment</td>
<td>31</td>
</tr>
<tr>
<td>Assessment</td>
<td>33</td>
</tr>
<tr>
<td>IV. RESULTS</td>
<td>35</td>
</tr>
<tr>
<td>V. DISCUSSION</td>
<td>44</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>48</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>55</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Means and Standard Deviations for Each Group on Self-Efficacy Measures</td>
<td>36</td>
</tr>
<tr>
<td>2. Analysis of Variance for General Self-Efficacy by Race and Gender</td>
<td>37</td>
</tr>
<tr>
<td>3. Analysis of Variance for Social Self-Efficacy by Race and Gender</td>
<td>38</td>
</tr>
<tr>
<td>4. Analysis of Variance for Physical Self-Efficacy by Race and Gender</td>
<td>39</td>
</tr>
<tr>
<td>5. Analysis of Variance for Efficacy Expectations by Race and Gender</td>
<td>40</td>
</tr>
<tr>
<td>6. Analysis of Variance for Outcome Expectations by Race and Gender</td>
<td>41</td>
</tr>
</tbody>
</table>
CONTENTS OF APPENDICES

APPENDIX A

Page 56
CHAPTER I

INTRODUCTION

Individual differences in thoughts, feelings, and actions have an extensive history in psychological literature. In attempting to delineate and demonstrate individual difference in self-representation, much of the research generated has focused on the self-concept. A sizeable percentage of these investigations concern themselves with racial, that is black-white differences (Gordon, 1977), and gender differences (Lenny, 1977). In spite of a voluminous amount of data, the conclusions drawn are often contradictory or at best confusing. Explanations for these inconsistent results are manifold, varying in breath from, experimenter bias (Gordon, 1977) to methodological errors (Banks & Rompf, 1973) and to doubts about the validity of the self-concept (Banks, 1976).

One of the most consistent and well articulated criticisms of this body of research findings is that the self-concept construct, the manner in which an individual views himself or herself, is too global to yield valid, quantitative differences (Bandura, 1977, Gecas & Schwalbe, 1983; Jenkins, 1982; Lenny, 1977); Bandura (1977) and Gecas and Schwalbe (1983) call into question the theoreti-
cal and philosophical notions underlying the dominant mode by which individual self-representations are identified. Specifically, these investigators express doubt about the passivity and reactivity of human nature, a position typified by Cook's (1964) notion of the "looking glass self." More germane to the thesis of this study are points raised by Jenkins (1982) and Lenny (1977) regarding racial differences in self concept. Jenkins argues that this construct is multifaceted. He further states that difficulties in data interpretation arise when investigators confuse racial self-esteem with personal self-esteem. A similar argument is put forth by Lenny (1977) in her paper on gender differences. In brief, she argues that more precision must enter into identifying variables which significantly influence women's concept of themselves.

In moving away from global evaluative measures, Bandura's self-efficacy construct is believed to explain individual differences in thoughts and feelings more efficiently (Bandura, 1977). Simply put, the self-efficacy concept is defined as belief in personal mastery. This construct is subdivided into two components: outcome expectancy which is defined as a "person's estimate that a given behavior will lead to specific outcomes," and efficacy expectation defined as the conviction one can successfully execute the behavior required to produce those outcomes.
(Bandura, 1977b, p. 79). The seminal work of Bandura has led investigators to believe that these differences in self-pictures are the result of a process of internalized cognitive summation across a variety of salient dimensions such as one's general sense of mastery, social self-efficacy and one's physical self-presentation. With this in mind, this study seeks to examine differences in self-efficacy among black and white urban college students. The primary goal of this undertaking is to add to the understanding of how racial and gender differences relate to self-efficacy.
Self-Concept

A sizeable percentage of the self-concept literature has focused on differences between the self-concepts of black and white Americans (Gordon, 1977). Briefly, self-concept is defined as the way an individual views himself or herself (Rogers, 1977). The term "self-concept" denotes the set of cognitions one holds toward the self, while "self-esteem" pertains to the evaluative connotations of these cognitions (Wylie, 1974).

Reported differences across the racial groups have been inconsistent. Initially, research on the self-concept of black and white Americans focused on the question of racial awareness and identity formation and typically discussed the notion of a generalized black personality. This orientation was derived largely from the works of Mead (1934) and Cooley (1964), both of whom maintain that social interaction is the means by which an individual formulates his or her self-concept.

Cooley (1964) stressed the importance of the individual's perception of how others see him and introduced the concept of the looking-glass self. Three principal elements comprise this notion of the self-concept or the "self-idea"
as Cooley labels it. They are: (1) the imagination of our appearance to the other person; (2) the imagination of his judgment of that appearance; and (3) some sort of self-feeling. Mead (1934) posited a similar argument about the genesis of the self, that is, the individual experiences himself not directly but indirectly from the standpoint of other members of the same social group to which he belongs.

The early empirical research (i.e., 1935-1953) reported findings which consistently indicated that blacks displayed more negative self-images relative to whites (e.g., Clark & Clark, 1947; Goodman, 1940; Horowitz, 1939). These investigations represent the vanguard of research methodology that measured the self-concept essentially in terms of a single salient dimension, that is race-color awareness. Collectively they became known as the Doll Studies. These studies employed dark and light complexioned dolls and puppets and presented black and white children with a forced-choiced design, which tested the child's willingness to associate/identify himself with a given race as represented by the dolls. These studies supported the conclusion that for black and white children, across geographic regions, white is good and being black is bad, or at least to a large degree, less desirable.

Similar conclusions were drawn by researchers employing other methodology investigating the self-concept. Field studies which used case histories and extensive inter-
views (Davis & Dolland, 1940; Frazier, 1940; Warner, 1941), yielded findings in the same general direction of the Doll Studies. Blacks in general had lower self-esteem and a higher degree of self-abasement as reported by investigators using projective tests and psychiatric interviews Grier and Cobb, 1967; Kardiner & Ovesey, 1951; Mussen, 1953).

These earlier findings seem no longer to maintain according to more recent literature in this area. Contrary to the previous findings, Gregor and McPherson (1964) using a variation of the Doll Test in their study of 83 white and 92 black children in a deep southern metropolitan area, found no difference in self-concept. Both groups of children were reported to have had a "viable and secure self-system" (Gregor & McPherson, 1964). Similarly, Larson and associates (1966) also employed a variation of the Doll Test in a study of urban black and white children. They reported that although the black children more often incorrectly identified themselves racially than white children, they showed no significant preference (among dolls) for either race in their positive and negative role assignment.

Perhaps one of the more interesting Doll Test variations was reported by Greenwald and Oppenheim (1968) who included a mulatto doll among the traditional choices of dark brown and white dolls. The presence of the mulatto doll was interpreted by the researchers to have offered the
children a wider range color options. Greenwald and Oppenheim reported that, although both black and white children rejected the black doll, a small number (compared to the Clark studies) misidentified themselves. They further reported that a close to significant number of the white children also selected the mulatto doll, a response which was viewed interesting as supporting the value of offering a wider range of color choices in the Doll Test (Greenwald & Oppenheim, 1968).

Another of the more recent Doll Studies which presents findings contrary to those of earlier studies was conducted by Hruba & Grant (1970). These researchers reported their data as indicating the children (89 black and 71 white, ages 4-8) tended to express a liking for dolls of both races. The results were considered to reflect the children's positive interracial attitude since they were observed to have interracial friendships. These investigators also speculated that the results indicated an increase in black pride, but not an accompanying rejection of whites.

Ward and Harris (1972) employing puppets in a variation of the Doll Test, reported no difference between blacks and whites in self-concepts. This study also demonstrated a relationship between racial preference and self-esteem. Those subjects who made more black color preference had high
self-concept scores than those who made fewer black color preferences.

More recent investigations employing projective techniques, reported increases in black-self-pride and thus inferred an increase in self-concept. Based on an informal observation of human figure drawings made by black children, Fish and Larr (1972) conducted a more rigorous examination comparing human figure drawings by black children before 1960 and by children after 1970. The results indicate a statistically significant increase in the number of black racial characteristics in the more recently completed drawings.

From a different perspective, Newman and her associates (Newman, Liss & Sherman, 1983) examined perceived differences in ethnic awareness when three ethnic groups (Black, Anglo, Hispanic) were represented. Arguing that ethnic awareness is not a unitary concept, items in their investigation tapped friendship preference, identification and status envy. Results indicated that all three groups identified their own ethnic groups correctly and tended to prefer friends belonging to the same ethnic groups.

How to synthesize and make sense out of these divergent results? Jenkins (1982) offers an insightful and perceptive solution. He argues that many of the negative interpretations attributed to blacks are derived from a
contamination of racial self-esteem and personal self-esteem. He continues, a majority of these studies, in essence, have tapped a representation of the self that is more involved in racial group characteristics as opposed to evaluative judgments about one's personal attributes. The self concept is not a unitary construct nor is it one dimensional. Individuals have available to themselves, according to Jenkins, a variety of vantage points which they employ to conceptualize themselves and their place in the world at any given time. Among these vantage points or anchors, Jenkins (1982) includes self-esteem (an evaluative judgment about one's worth) and, self-efficacy (a sense of personal effectiveness) and personal history and, situationality. The data, he concludes, merely reflects the complexity of one's self-representations (Jenkins, 1982, p. 30).

The literature on gender differences in self-concept bears a striking resemblance to racial differences. Taken as a whole these results are equivocal.

Theoretically, Erikson (1968) posits that identity formation occurs as a consequence of synthesis of biological, psychological and social influences which impinge upon the individual. Because of the biological differences pertaining to their genital structure and reproductive function, males and females are oriented differentially in their
respective syntheses. Erikson (1968) further writes that females as a result of this process tend to exhibit an "inner space" incorportative orientation which lends them to be interpersonally oriented and dependent on others (usually males) for establishing an adequate sense of self. This orientation is assumed to lead to the development of passivity, submissiveness and conformity (Erikson, 1968).

Males, in contrast are thought by Erikson, to have an "outer space" intrusive orientation. Individually-oriented and relatively independent of others for establishing an adaptive self-concept is the by-product of this orientation. This mode, Erikson (1968) writes, generally leads to the development of active, dominant and instrumentally effective behavioral repertoire. The components of male and female self-definitions are thought to have differential evaluative connotations. In brief, males will have a more positive self-picture than females.

From the perspective of social learning theory, the position of McCandless (1970) leads to similar conclusions about differences between male and female self-concept. McCandless asserts that males are rewarded in society for role behaviors indicative of instrumental effectiveness, assertiveness, independence and dominance, while interpersonal warmth and emotional expressiveness are rewarded in females. McCandless (1970) contends that behaviors
associated with males are more positively evaluated than female behavior. One concludes from this position that the self-concept of females is less positive than that of males.

Empirical data exists which bears directly and indirectly on the gender differences hypothesized by Erikson and McCandless. In studies of late adolescent males and females, several investigators (Block, 1973; Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972) report findings consistent with these predicted sex-role differences. In another investigation, items which traditionally thought to be associated with masculine behaviors were evaluated more positively by both males and females (Block, 1973).

However, more recent investigators have been unable to replicate these findings. Lerner and his associates (1981) conducted an investigation which involved five cohorts of college students and employed a time-lag design. These subjects were asked to give self-ratings to 16 evaluative items traditionally associated with sex differences. Males and females did not differ significantly in self-concept or self-esteem. What differences did exist accounted for less than 2% of the variance (Lerner, Sorrell & Brackney, 1981). Lerner and Spanier (1980) reported findings indicating that males and females do not differ reliably on over-
all measures of self-concept, however, on items where gender-differences do occur, males define themselves in terms of an "agency stereotype" and females define themselves in terms of a "communion stereotype."

Some of the questions surrounding differences in racial self-concepts also may pertain to self-pictures of males and females. It seems unclear whether the lowered self-evaluations of women reflect a generalized disposition or are these assessments determined situationally. Again, in order to make sense out of the data, movement away from global ratings is perhaps indicated. In her review, Lenny (1977) compared the results of numerous studies. She concluded that gender differences are often present in settings containing salient social, comparison cues but are generally absent in settings that minimize such cues. For example, she found that women often expressed lower self-confidence and self-esteem than men in situations where they expected future personal interaction with another individual who will evaluate their task performances, and when they were informed of others' performance norms or scores on achievement tasks they are about to undertake. This finding, however, does not maintain in investigations employing similar tasks in which the female participants worked alone or in anonymous group settings.

Empirical evidence of the presence of situation-
specific comparison cues is offered in a study by Lenney (1981). In this study, male and female undergraduate volunteers completed verbal, interpersonal perceptions, spatial-mechanical and creativity subtests. At the completion of each subtest, subjects were required to estimate their own score as well as that of the average undergraduate and the average male and female undergraduate. As expected women's self-confidence ratings were lower than men's on only the spatial-mechanical and creativity subtest.

Further evidence concerning the apparent conclusion that women's self-pictures may be unduly affected by situation-specific comparison cues is reported in a study by Lenny, Gold, and Browning (1983). In this project, volunteer subjects were male and female undergraduates who expected to cooperate in the future with a same sex partner of high, average or low ability. The experimental task required these subjects to select a difficulty level for an achievement test, to complete the test and then to estimate their performance as well as the likely performance of their future partners.

These investigators discussed their results in terms of underlying cognitive processes. Traditionally, women's lowered self-concepts were thought to be due to a relatively stable intrapsychic organization (Erikson, 1968), or global personality traits such as motive to avoid success (Horner,
1972). In contrast, Lenney and her associates (1983) proposed that women may have an "unstable or unreliable" rather than simply a low self-concept which fluctuates either upwards or downwards more so than their masculine counterparts. These writers conclude that more research is needed to elucidate the cognitive processes underlying this phenomenon.

**Self-Efficacy**

The construct of self-efficacy is possibly one of the significant cognitive variables which may provide a coherent framework for more accurately assessing thoughts and feelings about the self across both ethnicity and gender. The investigator most responsible for advancing the concept is Bandura (1977a, b, 1978, 1983). While much of his early works on self-efficacy concerned the processes underlying behavioral changes in the psychotherapeutic situation (Bandura, 1977; Rosenthal & Bandura, 1978), the scope has increasingly widened in recent years. This mechanism is now thought by some investigators to underlie all cognitive and behavioral changes in the human agency (Bandura, 1977a; Maddux, Sherer & Rogers, 1982).

Self-efficacy theory, in its present form, maintains that all processes of psychological change operate through the alteration of the individual's sense of personal mastery or efficacy (Bandura, 1977). According to this
theory, achieved behavioral changes are highly related to changes in the individual's efficacy expectations: belief that one is or is not capable of performing a specific behavior or set of behaviors. The theory posits two independent expectancies: an outcome expectation, defined as a belief that a given behavior will or will not lead to a predictable outcome and a efficacy-expectation, defined as the belief that the subject in question is capable of performing the requisite behavior.

Bandura's position is subsumed under social learning theory (Bandura, 1977b). From this perspective, human behavior is understood in terms of a reciprocal interaction between cognitive, behavioral, and environmental determinants (Bandura, 1977b, p. 7). Distinct from the unidirectional perspectives of causality is the central role that Bandura and social learning theory assigns to self-regulatory processes. In other words, individuals learn to select, organize and subsequently transform external stimuli which impinge upon them; they do not simply react out of the context of past learning. Influence over individual behavior is, according to this viewpoint, achieved through a system of self-generated rewards and consequences. This system is termed "reciprocal determinism" by Bandura (1978). In Bandura's thinking, reciprocal determinism is the "basic principle for analyzing psychological phenomenon at the
levels of intrapersonal development, interpersonal trans-
actions, and interactive functioning of organizational and
social systems" (Bandura, 1978).

Expectations of personal mastery affect both imitation
and persistence of behavior according to this theoretical vantage point (Bandura, 1977a). In other words, whether or not an individual will engage in or attempt to cope with a given situation is largely determined by the strength of an individual's convictions in his or her own effectiveness. Generally speaking, people tend to avoid situations which they believe exceeds their coping capacity. The anticipation of these events is experienced as noxious and threatening. On the other hand, individuals become easily engaged in those tasks and activities which they believe do not exceed their coping skills.

As conceptualized by Bandura, efficacy expectations vary on several dimensions that have significant implications for cognitive and behavioral performance. They are: (1) magnitude, (2) generality, and (3) strength. In this context magnitude refers to the complexity or level of difficulty of a task, whereas generality relates to the breadth, or circumscription of the mastery expectation and strength concerns the degree to which these expectations are extinguishable. An adequate analysis of efficacy expectations, according to Bandura, would entail a thorough assess-
ment of each of these dimensions. Such an analysis, to be considered comprehensive, should also attempt to clarify the reciprocal effects of efficacy expectations and performance (Bandura, 1977b).

There are four major sources of information by which expectations of personal mastery are formed. In the order of their relative impact on self-efficacy, they are:

1. **Performance accomplishments.** Simply put, success raises mastery expectations and repeated failures lowers them. According to Bandura, performance accomplishments which enhance self-efficacy exert their influence either by participant modeling, performance desensitization, performance exposure and self-instructed performance (Bandura, 1977a, p. 85).

2. **Vicarious experience.** This relates to efficacy expectations which results from, observing others' act successfully in similar situations. Bandura has demonstrated that a number of modeling variables, such as "similarity and competence" exert a significant impact on the modeling process. Live modeling and symbolic modeling are the principle types of vicarious experiences (Bandura, 1977a, p. 80).

3. **Verbal persuasion.** Because of the ease of avail-
ability, verbal persuasion is a universally employed mechanism. For the most part, these attempts include, interpretive treatment, suggestion, exhortation and self-instruction. Empirical evidence demonstrates clearly that these sources of information are of lesser potency than either performance accomplishment or vicarious experience (Bandura, 1977a, p. 80).

4. Emotional arousal. This source of information primarily entails physiological responses to stressful and taxing stimuli. Whether or not action will be initiated, and to what degree it will be maintained, is determined by cognitive appraisal of one's emotional state. The components of emotional arousal are, attributions, relaxation and biofeedback training, symbolic desentization and exposure (Bandura, 1977a, p. 80).

Much of the research undertaken by Bandura and others has occurred in the laboratory and has been concerned with relatively circumscribed sets of behavior such as snake phobias (Bandura, 1977b; Bandura, Reese & Adams, 1982; Sappington, Russell, Triplett & Goodwin, 1981). In a typical experiment assessing self-efficacy (Bandura, 1977a), adults suffering from snake phobia to the degree that ad-
versely affected their lives were assigned to one of three experimental conditions, that is, participant modeling, modeling alone or a nontreatment condition. Subjects in the participant modeling condition, which was characterized by direct mastery experiences, were assisted by whatever induction aids necessary to engage in progressively more threatening interaction with a snake, usually a boa constrictor.

Subsequent to the completion of all experimental tasks, including snake-handling, subjects engaged in a brief period of self-directed mastery.

The level, strength and generality of the volunteer participants expectations of personal mastery were assessed at critical junctures in the experimental process. All participants endorsed, from a list of 18 tasks ranked in order or increasing threats, those which they felt themselves able to perform. On a 100-point Likert-Scale, in 10 point intervals, the subjects then rated the strength of their expectations. These measurements were obtained at pretest and post-test intervals. In general, the notion of self-efficacy was well supported.

As predicted and in line with a social learning analysis, experiences founded on performance accomplishments yielded higher, more generalizable and stronger expectation of personal mastery, than did either of the other two treatment modalities. It should also be noted that exposure to vi-
cariously produced efficacy expectations exceeded the control condition (Bandura, 1977a; Bandura & Adams, 1977; Bandura, Adams & Byer, 1977).

Agoraphobia, defined traditionally as the fear of open places, is well-suited for further validation of the self-efficacy theory. Bandura and his co-workers undertook this task (Bandura, Adams, Hardy & Howell, 1980). The participants in this study were 11 agoraphobics (10 females and one male) who were accompanied to the treatment site by a support person for the 10-day study. Self-efficacy was assessed via the use of eight scales comprised of items agrophobics usually find frightening.

In the setting, the treatment relied heavily on the principal of "enactive mastery experiences" developed by Hardy (1976). The dependent measure included an assessment of coping behavior and fear arousal. Both level and strength of efficacy increased significantly for those subjects who received this treatment (Bandura, Adams, Hardy & Howell, 1980). Thus, these results indicate support for the generality of the self-efficacy construct.

A number of investigators have provided additional support for the self-efficacy construct as a cognitive process mediating behavioral change across diverse situations. Kazdin (1979) examined the effects of elaboration of imagery during covert modeling treatment and the effects of treat-
ment of unassertiveness on self-efficacy. Goldfried and Robbins (1982) examined the procedural efforts in increasing self-efficacy within the psychotherapeutic hour. Favorable results were reported by Moe and Zeiss (1982) on the facilitation of social skills by strengthening efficacy expectations. Similarly, fear arousal and protection motivation have demonstrated sensitivity to alterations in levels of self-efficacy (Bandura, 1983; Bandura, Reese & Adams 1982; Maddox & Rogers, 1983). Bandura and his colleagues have also demonstrated a relationship between cardiac acceleration, elevation in blood pressure and perceived self-efficacy (Bandura, Reese & Adams, 1982).

More germane to the present study is the issue of the reactivity of self-efficacy measures. It seems reasonable, in other words, to wonder whether making efficacy judgments per se can affect performance as a by-product of creating public commitment and internally generating pressure for consistency. Results reported by Bandura and coworkers indicated the behavioral tests itself produced no significant changes in either level or strength of self-efficacy. In both of these investigations, the volunteer subjects had a good sense of their coping capabilities and did not alter this appraisal as a result of the testing (Bandura, 1983; Bandura, Adams, Hurdy & Howell, 1980). Thus, paper and pencil instruments seem to be useful as non-reactive
measures of perceived self-efficacy.

Recently, investigators have begun to move away from those more global paper and pencil based assessment of efficacy expectations. Sappington, Russell, Triplett and Goodwin (1982) investigated the relationship of four types of expectancy to snake avoidance behavior and its reduction through modeling. Based on their investigation, they conclude that a four-variable expectancy model is necessary to explain behavior. They are:

1. **Response-outcome expectancies.** Beliefs about the consequences of a behavior.

2. **Self-efficacy expectancies.** Belief about one's ability to perform the behavior.

3. **Intellectually based expectations.** Views of oneself or the world are perceived to be accurate representations of reality.

4. **Emotionally based expectancies.** Are views of oneself or the world that may be perceived as inaccurate or irrational by the person who holds them.

Other investigators who have attempted to deliniate and clarify the self-efficacy variable have been Sherer and his coworkers, who constructed a self-efficacy scale. A factor analysis revealed the subscales: a General Self-efficacy Subscale and a Social Self-efficacy Subscale
(Sherer et al., 1982). A self-efficacy scale which assesses belief about personal mastery related to physical attributes has been developed by Rychman, Robbins, Thornton and Cantrell (1982). Based on a factor analysis of a pool of larger items, two underlying dimensions were identified: the Perceived Physical Ability factor is one dimension and the Physical Self-Presentation Confidence factor is the second dimension.

What seems evident from the effort of these researchers is that a new trend exists in the assessment of quantitative differences in self-representation. More and more investigators interested in self-conception are going beyond Cooley's (1934) "looking-glass" metaphor. The trend is toward self-conceptions that are based on evaluations of one's performance. Self-concept formation is overwhelmingly thought, at present, to be more efficacy based.

Formulation of Hypotheses

The present study is designed to examine racial and gender differences in self-efficacy among black and white college students. Based on the following review of the literature, the hypotheses generated are as follows:

1. There will be a statistically significant difference between blacks and whites on overall levels of self-efficacy, such that blacks will
demonstrate higher levels of self-efficacy than whites.

2. There will be a statistically significant effect for gender such that males will score higher than females.
CHAPTER III

METHOD

Subjects
A total of 82 university undergraduate students participated in this study. The volunteers were black and white male and female college students. These volunteers were obtained from the Loyola University Afro-American Studies Program and from advanced psychology classes. Two subjects were dropped because of incomplete questionnaires. Thus, the analysis was conducted on 80 subjects. Volunteer subjects were divided into four groups of 20 subjects each: black males, black females, white males and white females. Subjects ranged in age from 18-29, with an overall mean age of 21.3 years. The mean age for Afro-American students was 22.0 (males = 21.4 and females = 22.7) and the mean age for white students was 20.6 (males = 20.6 and females = 20.6). Educational level was also roughly equivalent, with the overall mean equaling 14.1. For black students the mean educational level obtained was 14.3 and for white students 13.9.

Materials
Subjects completed four separate paper and pencil instruments. They were: Demographic Data Questionnaire
(St. Leger, 1984); The Self-Efficacy Scale (Sherer, et al., 1982); The Physical Self-Efficacy Scale (Rychkman, Robbins, Thorton & Congreu, 1982); and The Efficacy-Outcome Instrument (Fish, 1983).

Demographic Data Questionnaire. This questionnaire asked for information such as age, race, educational level, parents' income level, highest grade completed and employment. It is a one-page questionnaire constructed for use in the present study. Beginning with the statement "Please Answer The Following Question" this instrument combines a short-answer and check list format.

There were a total of 13 categories of information requested. The checklist response format appeared on three items. They were in their order of appearances: (1) MARRITAL STATUS: Single ___, Married ___, Separated ___, Divorced ___, (2) EMPLOYED: Yes ___, No ___, and (3) FATHER'S YEARLY SALARY: under 5,000 ___, 5,000 - 10,000 ___, 10,000 - 15,000 ___, 15,000 - 20,000 ___, 20,000 - 25,000 ___, over 25,000 ___, this listing was replicated for MOTHER'S YEARLY SALARY. The remaining ten item stems were followed by a blank space designed to hold a brief response. A sampling of these items include: Sex, Type of Job, Father's Occupation (For complete Questionnaire, see Appendix A).

Self-Efficacy Scale. This is a 23-item questionnaire designed to measure one's expectations of personal mastery and success in producing desired outcome in a number of
usually encountered situations. These items focused on three areas: (1) willingness to initiate behavior, (b) willingness to expend effort in completing the behavior, and (c) persistence in the face of adversity. A factor analysis conducted by the developers of the scale (Sherer et al., 1982) yielded two subscales: (1) General Self-Efficacy, and (2) Social Self-Efficacy.

**General Self-Efficacy.** This factor consists of 17 items which measure self-efficacy without reference to specific behavioral domains and accounts for 26.5% of the total variance. The remaining six items load on the Social Self-Efficacy factor reflecting efficacy expectancies in social situations and accounting for 8.5% of the total variance.

All items from the original scale were included in this investigation. In contrast to the 14-point Likert Scales used by the original author, this investigation employed a forced-choice, that is TRUE/FALSE, response format. The items were reproduced in the same order as they appeared in the original article. When reproduced for this investigation the Self-Efficacy Scale was one and one-third pages in length. Double-spacing between items and single-spacing within, for items that exceeded one line was the design format. All items were typed in capital letters. The response checklist appeared on the right-hand side of the page directly below the item, for example:
WHEN I DECIDED TO DO SOMETHING, I GO RIGHT TO WORK ON IT.

**TRUE ___** \( \text{FALSE} ___ \)

(For complete scale, see Appendix A).

**Physical Self-Efficacy Scale.** This instrument is a 22-item questionnaire intended to measure one's physical self-representation which is an individual's perception of his/her own physical skills. A factor analysis of the global measures conducted by Ryckman (1982) and his associates, the original developers, initially revealed 3 factors with eigenvalues greater than 1, which were then varimax rotated. The three factors that emerged reflected a Perceived Physical Ability dimension, a Physical Self-Presentation Confidence dimension, and a Physical Appearance dimension. According to the authors, there were only a few items that loaded adequately on the Physical Appearance dimension and most were contaminated by social desirability (Ryckman, Robbins, Thornton & Cantrell, 1982). This dimension was subsequently eliminated from further consideration.

The results of this process was a 10-item Perceived Physical Ability (PPA) Subscale and a 12-item Physical Self-Presentation Confidence (PSPC) Subscale.

The two scales may be combined to yield on overall Physical Self-Efficacy Score for subjects. This format was adopted in the present investigation. The internal
consistency of both PPA and PSPC subscales as well as the composite PSE scale were assessed via coefficient alpha (Cronbach, 1951). The values were .84, .74, and .81 respectively. There is also strong convergent validity of the PSE with the Tennessee Physical Self-Concept Scale.

Included in this investigation were all items from the original scale. They were reproduced in the same order as they appeared originally. The same scoring system as employed in the original research was utilized in this study. When reproduced for this investigation, the Physical Self-Efficacy Scale was two pages in length. The first page consisted of an introduction indicating the questionnaire was a series of attitude statements and that the experimenter is interested in the extent to which you agree or disagree. Next were samples of the 6 point Likert Scoring System, (i.e., strongly agree = 1 to strongly disagree = 6). Lastly there appeared a directive to indicate that the rating which most accurately reflect the subjects feelings at the time of responding. Double spacing between items and single spacing within four items that exceeded one line was the design format for this instrument. All items were numbered. Immediately to the left of each item a space was provided for the subject to indicate his or her responses. Examples for each of the subscales and format are:

1. I have excellent reflexes. (Perceived Physical Ability)
2. Because of my ability, I have been able to do things which many others could not do. (Physical Self-Presentation Confidence).

Note: The labelling of items are for illustrative purpose and did not appear on the specimen reproduced for this project. For complete scale see Appendix A.

Efficacy-Outcome Instrument. This is an 18-item paper and pencil measure developed by Fish (1983) and is intended to be a measure of self-efficacy. Data on validity and reliability are unavailable. Each item is divided into an A and B section, which measure efficacy and outcome expectations respectively. In other words, after a brief description of a problem the subject is required to make an endorsement concerning his belief that he would (a) engage in a particular action (the A section) and (b) how successful that course of action would be (the B section). Subjects indicated their choice on a 6-point Likert scale ranging from definitely would do it = 1 to definitely would not = 6.

All items from the original study were included in the specimen reproduced for this project. The questionnaire in its final form was six single-spaced pages. The first page listed a brief explanatory note concerning the nature of the questionnaire. Simply, it stated "This questionnaire contains number of situations a person might find him or herself in." The description was followed by a set of in-
structions, indicating that the subject was to imagine himself or herself in the situation described and to indicate whether he or she would engage in the course of behavior described and if so how successful would that course of action be. A sample item is:

You buy a pair of pants from a good store but the first time you wear them the zipper breaks. You decide it is appropriate to try to return the pants.

a. How certain are you that you would try to return the pants even though the salesperson said they had a policy of not accepting returns after two weeks from the time of purchase (it's been a month since you bought them)?

1 2 3 4 5 6

b. If you tried to return them would the store take them back?

1 2 3 4 5 6

(For complete Scale, see Appendix A).

Procedure

Subject recruitment. Volunteer subjects were obtained from advanced psychology courses by a brief classroom presentation. After securing permission from the class instructor, the experimenter made the following remarks:

Hello, my name is Sidney St. Leger, I am presently a 3rd year student in the doctoral program in Clinical Psychology here at the university. I am looking for volunteers to participate in my Master's thesis project.
Briefly this project is designed to examine how people feel they will behave in a variety of situations, which we encounter frequently. Should you agree to participate, you will be required to complete several questionnaires, one of which will ask you to specify certain demographic variables, such as, age, sex, educational level and so forth. The remaining questionnaires pertain more directly to the subject under investigation. A typical question might be "When I make plans, I am certain I can make them work."

Your participation is strictly voluntary and you are free to withdraw at any time. All responses are confidential. Should you participate and request feedback, it will be given about the general results of the study, rather than individual performances. The entire process should take slightly less than one hour. However, you are free to complete the questionnaires at your own pace. We will meet in small groups of 8-12 students and I will be available to answer any questions should they arise.

Thank you for your time and cooperation, your participation will be greatly appreciated. I am now going to circulate a sign-up sheet, if you are interested please put down your name, phone number and specify time when it will be most convenient to contact you. Again thank you.

An insufficient number of Afro-American students were recruited through the classroom presentation. Of the 40 needed, only 31 responded to this method. The remaining 9 (6 males, 3 females) participants in this project were solicited by telephone. A phone number where the experimenter could be reached was circulated to students in the Afro-American Studies Program by the Program's administrative assistant, accompanied by an abbreviated form of the in-class presentation. It is as follows:
I am looking for volunteers to participate in my Master's thesis project. Briefly, this study is designed to measure how people feel they would behave in a variety of frequently encountered situations. You will be required to complete several questionnaires. This should take less than an hour. All responses are confidential. If you are interested please contact me at the number listed below.

Assessment. Subjects who indicated an interest in participating in this project were contacted by the experimenter and were seen in small groups of 8-12 for a one hour testing session. The project took place in a room provided by the Afro-American Studies Program. At the beginning of the session the experimenter gave a brief introduction to the purpose of the study:

I would like to thank each of you for coming. Briefly, this study is intended to measure how people feel they would behave in a variety of frequently encountered situations. You will be required to fill out several questionnaires. Be sure to answer all items. This would take slightly less than one-hour. You are free to work at your own pace and if you need more time, that is alright. As you work, if questions arise, I will be available to answer them. After we begin, I will be in the hallway nearby. I would like to again mention, that while I greatly appreciate your participation, it is strictly voluntary. I am now going to circulate a consent form. Please sign it and return to the questionnaire. Be certain to place it in a separate stack from the questionnaires. You are free to leave when you finish.

The data collection then began. Subjects worked quietly and quickly, finishing before the allotted time. They were thanked for their participation as they exited the testing
room. There were no disruptions or otherwise unusual circumstances occurring during these procedures.
CHAPTER IV

RESULTS

The present investigation examined racial and gender differences on five separate indices of self-efficacy. To test for predicted differences, 2(Black, White) x 2(Male, Female) Factorial analyses of variance were conducted on each dependent measure. The means and standard deviations generated from these analysis are presented in Table 1. Summary tables for each analysis can be found in Tables 2-6.

The Self-Efficacy Scale yielded two indices of self-efficacy: General Self-Efficacy and Social Self-Efficacy. The results of the analysis for General Self-Efficacy (Factor 1), F(1, 76) = .486, p > .06, yielded no significant main effects or interactions and thus did not support the hypothesis of racial and gender differences in overall self-efficacy.

There was, however, an unexpected significant interaction between the variables of race and gender F(1, 76) = 4.067, p < .05, on Social Self-Efficacy (Factor 2), such that black males, black females and white females had significantly higher scores than white males. Follow-up comparison using the Student-Neuman-Keuls procedure confirmed the significance of these observed differences.
### Table 1

Means and Standard Deviations for Each Group on Self-Efficacy Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>General</td>
<td>14.15</td>
<td>13.00</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>2.66</td>
<td>2.44</td>
</tr>
<tr>
<td>Social</td>
<td>4.40</td>
<td>4.50</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>1.14</td>
<td>1.43</td>
</tr>
<tr>
<td>Physical</td>
<td>109.20</td>
<td>90.65</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>11.94</td>
<td>16.76</td>
</tr>
<tr>
<td>Efficacy</td>
<td>89.35</td>
<td>80.45</td>
</tr>
<tr>
<td>Expectations</td>
<td>9.57</td>
<td>14.78</td>
</tr>
<tr>
<td>Outcome</td>
<td>84.40</td>
<td>75.30</td>
</tr>
<tr>
<td>Expectations</td>
<td>11.61</td>
<td>15.74</td>
</tr>
</tbody>
</table>
Table 2

Analysis of Variance for General Self-Efficacy by Race and Gender

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>6.500</td>
<td>2</td>
<td>3.250</td>
<td>0.486</td>
<td>0.617</td>
</tr>
<tr>
<td>Sex</td>
<td>4.050</td>
<td>1</td>
<td>4.050</td>
<td>0.606</td>
<td>0.439</td>
</tr>
<tr>
<td>Race</td>
<td>2.450</td>
<td>1</td>
<td>2.450</td>
<td>0.366</td>
<td>0.547</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>7.200</td>
<td>1</td>
<td>7.200</td>
<td>1.077</td>
<td>0.303</td>
</tr>
<tr>
<td>Sex × Race</td>
<td>7.200</td>
<td>1</td>
<td>7.200</td>
<td>1.077</td>
<td>0.303</td>
</tr>
<tr>
<td>Explained</td>
<td>13.700</td>
<td>3</td>
<td>4.567</td>
<td>0.683</td>
<td>0.565</td>
</tr>
<tr>
<td>Residual</td>
<td>508.095</td>
<td>76</td>
<td>6.685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>521.795</td>
<td>79</td>
<td>6.605</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3

Analysis of Variance for Social Self-Efficacy by Race and Gender

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>22.525</td>
<td>2</td>
<td>11.262</td>
<td>5.849</td>
<td>0.004</td>
</tr>
<tr>
<td>Sex</td>
<td>10.512</td>
<td>1</td>
<td>10.512</td>
<td>5.459</td>
<td>0.022</td>
</tr>
<tr>
<td>Race</td>
<td>12.012</td>
<td>1</td>
<td>12.012</td>
<td>6.238</td>
<td>0.015</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>7.813</td>
<td>1</td>
<td>7.813</td>
<td>4.057</td>
<td>0.048</td>
</tr>
<tr>
<td>Sex Race</td>
<td>7.812</td>
<td>1</td>
<td>7.812</td>
<td>4.057</td>
<td>0.048</td>
</tr>
<tr>
<td>Explained</td>
<td>30.337</td>
<td>3</td>
<td>10.112</td>
<td>5.251</td>
<td>0.002</td>
</tr>
<tr>
<td>Residual</td>
<td>146.349</td>
<td>76</td>
<td>1.926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176.687</td>
<td>79</td>
<td>2.237</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

Analysis of Variance for Physical Self-Efficacy by Race and Gender

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>4180.996</td>
<td>2</td>
<td>2090.498</td>
<td>13.672</td>
<td>0.000</td>
</tr>
<tr>
<td>Sex</td>
<td>3976.200</td>
<td>1</td>
<td>3976.200</td>
<td>26.005</td>
<td>0.000</td>
</tr>
<tr>
<td>Race</td>
<td>204.800</td>
<td>1</td>
<td>204.800</td>
<td>1.339</td>
<td>0.261</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>396.051</td>
<td>1</td>
<td>396.051</td>
<td>2.590</td>
<td>0.112</td>
</tr>
<tr>
<td>Sex Race</td>
<td>396.050</td>
<td>1</td>
<td>396.050</td>
<td>2.590</td>
<td>0.112</td>
</tr>
<tr>
<td>Explained</td>
<td>4577.047</td>
<td>3</td>
<td>1525.682</td>
<td>9.978</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>11620.391</td>
<td>76</td>
<td>152.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16197.438</td>
<td>79</td>
<td>205.031</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Analysis of Variance for Efficacy Expectations by Race and Gender

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>524.200</td>
<td>2</td>
<td>262.100</td>
<td>2.462</td>
<td>0.092</td>
</tr>
<tr>
<td>Sex</td>
<td>500.000</td>
<td>1</td>
<td>500.000</td>
<td>4.698</td>
<td>0.033</td>
</tr>
<tr>
<td>Race</td>
<td>24.200</td>
<td>1</td>
<td>24.200</td>
<td>0.227</td>
<td>0.635</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>304.200</td>
<td>1</td>
<td>304.200</td>
<td>2.858</td>
<td>0.095</td>
</tr>
<tr>
<td>Sex Race</td>
<td>304.200</td>
<td>1</td>
<td>304.200</td>
<td>2.858</td>
<td>0.095</td>
</tr>
<tr>
<td>Explained</td>
<td>828.402</td>
<td>3</td>
<td>276.134</td>
<td>2.594</td>
<td>0.059</td>
</tr>
<tr>
<td>Residual</td>
<td>8089.304</td>
<td>76</td>
<td>106.488</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8917.707</td>
<td>79</td>
<td>118.882</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Analysis of Variance for Outcome Expectations by Race and Gender

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>712.850</td>
<td>2</td>
<td>356.425</td>
<td>2.649</td>
<td>0.077</td>
</tr>
<tr>
<td>Sex</td>
<td>460.800</td>
<td>1</td>
<td>460.800</td>
<td>3.425</td>
<td>0.068</td>
</tr>
<tr>
<td>Race</td>
<td>252.050</td>
<td>1</td>
<td>252.050</td>
<td>1.874</td>
<td>0.175</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>369.800</td>
<td>1</td>
<td>369.800</td>
<td>2.749</td>
<td>0.101</td>
</tr>
<tr>
<td>Sex * Race</td>
<td>369.800</td>
<td>1</td>
<td>369.800</td>
<td>2.749</td>
<td>0.101</td>
</tr>
<tr>
<td>Explained</td>
<td>1082.652</td>
<td>3</td>
<td>360.884</td>
<td>2.683</td>
<td>0.054</td>
</tr>
<tr>
<td>Residual</td>
<td>10223.996</td>
<td>76</td>
<td>134.526</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11306.648</td>
<td>79</td>
<td>143.122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The two underlying dimensions of Physical Self-Efficacy, that is, Perceived Physical Ability (PPA) dimension and the Physical Self-Presentation Confidence (PSPC) dimension will collapses to form one unitary variable. Thus treatment's in line with suggestions by the original developer of this instrument (Ryckman, Robbins, Thornton & Cantrell, 1982). As anticipated, there was significant gender effect such that males scored predictably higher than females, $F(1, 76) = 26.01$, $p < .0001$. These results strongly suggest that males ($M = 105.37$, $SD = 10.93$) regardless of race are more confident above their physical abilities, motor coordination and physical self-presentation than their female counterparts ($M = 91.27$, $SD = 13.92$).

The Efficacy-Outcome Instrument yielded the factors: Efficacy Expectations (Factor 1) and Outcome Expectations (Factor 2) the analysis on Factor 1 scores revealed a significant main effect for gender, $F(1, 76) = 4.698$, $p < .05$. As expected, males ($M = 87.95$, $SD = 8.45$) scored demonstrably higher in the predicted direction than did females ($M = 82.95$, $SD = 12.01$). These results indicate that as a group, males are more willing to engage in action required to produce the sought-after outcomes.

However, for Factor 2 of the Efficacy-Outcome Instrument, the results were nonsignificant, $F(2, 76) = 3.65$, $p > .07$. This factor taps belief in the strength of out-
come expectations. Thus, while males are more willing to expend effort to produce these sought-after results, neither males nor females differ significantly in their belief that these behaviors will culminate in the desired effects.

In summary, only partial support for the hypotheses was found. The expected racial differences were not apparent on any of the measures of self-efficacy. There was evidence, however, of gender differences, with males scoring higher than females on both physical self-efficacy and efficacy outcome expectations. In addition, race and gender interacted to influence social self-efficacy such that white males scored lowest in this area.
Researchers, during the past four and one-half decades, have generated a voluminous amount of literature regarding individual differences in self conception. Many of these investigations have concerned themselves with differences across the more obvious human groupings, for example, race and gender. A causal perusal of this body of work leaves the interested reader, at best, puzzled by results which are often equivocal. Increasingly, as a result, researchers have become dissatisfied with the self-concept construct as a measure which accurately assesses these differences (e.g., Bandura 1983; Gecos & Schwalbe, 1983; Jenkins, 1982; Lenney, 1977). The most consistent and well-articulated criticism posited by these investigators is that, in it's present form, the self-concept is too global to reflect valid and replicable individual differences. Rather than being a unitary variable these researchers argue that self-conception is the result of individual traits being summated across a number of salient personality dimensions. Included among these traits would be self-evaluations about our confidence in abilities and potential for achievement in a variety of settings.
Bandura (1977a, 1978) suggest that the self-efficacy construct is the mechanism that underlies all cognitive and behavioral changes within the human agency. It is further concluded by Bandura (1983) that a well-done expectancy analysis will yield a more accurate assessment of self-representations. The present investigation, therefore, had as its focus the relationship of gender and race to self-efficacy. Based on a review of the pertinent literature, the following hypotheses were generated. It was hypothesized that significant differences between blacks and whites would be present on all measures, that is, blacks will score higher than whites. Also, that in general, men would display higher levels of self-efficacy than women across all indices.

While the results obtained in the present study were only partially consistent with these predictions, a number of interesting observations emerge from these data sets. First, gender differences were most dramatic but not unexpected in the area of physical self-representation. It is hardly surprising that men would score higher than women on this instrument which taps confidence in physical abilities and motor coordination. These differences are well explored by Erikson (1968), and McCandless (1970) that females would demonstrate a greater degree of relational efficacy, this does fit the data obtained in this study. Their positions do not account for the disparity between black males and
white males. Theoretical and empirical evidence accounting for the finding does not exist and remains a task for future research.

A third observation concerns the sensitivity and validity of these self-efficacy measures. The results of this investigation reveals a lack of consistency between the Self-Efficacy Scale (Sherer et al., 1982) and the Efficacy-Outcome Instrument (Fish, 1983) both of which ostensibly were developed to be measures of general self-efficacy. The limitation of the paper and pencil based method of self-efficacy assessment is but one possible explanation for the inconsistency. It is well-known that the typical paradigm employed by Bandura and others involves a performance-based component (e.g., Bandura, 19772, 1973; Maddox, Sherer & Rogers, 1983). One direction for those interceded in moving beyond this methodology would be to employ these or other such instruments in conjunction with a performance-based measure in order to determine their usefulness.

Lastly, but perhaps the most far-reaching observation surrounds the lack of a combination of the racial differences hypothesis. This project attempted to correct many of the often cited criticisms of this area of research. Effort was made to move away from a more global assessment of self-conception toward the assessment of personal mastery across
a variety of behavioral domains. The results indicate that Afro-Americans and whites do not differ significantly in their respective views of their ability to influence the course of daily events. These results align themselves with many of the more recent investigations of authority and self-representation, (e.g., Greenwald & Oppenhiam, 1968; Ward & Braun, 1972) indicating that past discrepancies have dissipated. Of course the appropriateness of these speculations and the tenability of these interpretations of the present data sets require further investigation. The overriding conclusion of this research points to the value of considering individual self-conception as reciprocally and plastically related to changing historical and sociocultural circumstances rather than ethnicity.

In summary, this study had as its focus racial and gender differences as they relate to self-efficacy. The data, in general, did not support the hypotheses generated. Some limitation of this study and future directions were discussed.
REFERENCES


APPENDIX A
PLEASE ANSWER THE FOLLOWING QUESTIONS

SEX: \hspace{3cm} AGE: \hspace{3cm} RACE:

HIGHEST GRADE COMPLETED:

MARITAL STATUS:

SINGLE _____ MARRIED _____ SEPARATED _____
DIVORCED _____

NUMBERS OF BROTHER OR SISTER WHO HAVE COMPLETED COLLEGE OR IN COLLEGE: _____

EMPLOYED: YES _____ NO _____

TYPE OF JOB:

HOW LONG:

HOW MANY HOURS DO YOU WORK PER WEEK? _____

FATHER'S EDUCATIONAL LEVEL:
FATHER'S OCCUPATION:

MOTHER'S EDUCATIONAL LEVEL:
MOTHER'S OCCUPATION:

FATHER'S YEARLY SALARY:
Under $5000 _____
$5000 - 10,000 _____
10,000 - 15,000 _____
15,000 - 20,000 _____
20,000 - 25,000 _____
Over 25,000 _____

MOTHER'S YEARLY SALARY:
Under $5000 _____
$5000 - 10,000 _____
10,000 - 15,000 _____
15,000 - 20,000 _____
20,000 - 25,000 _____
Over 25,000 _____
THE SELF-EFFICACY SCALE

1. WHEN I MAKE PLANS I AM SURE I CAN MAKE THEM WORK? 
   TRUE ____ FALSE ____

2. ONE OF MY PROBLEMS IS THAT I CAN'T GET DOWN TO WORK WHEN I SHOULD. 
   TRUE ____ FALSE ____

3. IF I CAN'T DO A JOB AT FIRST I KEEP TRYING UNTIL I CAN. 
   TRUE ____ FALSE ____

4. WHEN I GET IMPORTANT THINGS FOR ME TO DO I RARELY END UP DOING THEM. 
   TRUE ____ FALSE ____

5. I GIVE UP ON THINGS BEFORE FINISHING THEM. 
   TRUE ____ FALSE ____

6. I AVOID FACING DIFFICULT PROBLEMS. 
   TRUE ____ FALSE ____

7. IF SOMETHING LOOKS TOO HARD I DON'T BOTHER WITH IT. 
   TRUE ____ FALSE ____

8. WHEN I HAVE SOMETHING UNPLEASANT TO DO, I STICK TO IT UNTIL IT'S DONE. 
   TRUE ____ FALSE ____

9. WHEN I DECIDE TO DO SOMETHING, I GO RIGHT TO WORK ON IT. 
   TRUE ____ FALSE ____

10. WHEN TRYING TO LEARN SOMETHING NEW, I SOON GIVE UP IF I DON'T GET IT AT FIRST. 
    TRUE ____ FALSE ____

11. WHEN PROBLEMS TURN UP THAT I DON'T EXPECT I DON'T HANDLE THEM TOO WELL. 
    TRUE ____ FALSE ____

12. I DON'T TRY TO LEARN NEW THINGS WHEN THEY LOOK TO HARD TO DO. 
    TRUE ____ FALSE ____

13. FAILURE MAKES ME TRY HARDER. 
    TRUE ____ FALSE ____

14. I'M JUST NOT SURE ABOUT MY ABILITY TO DO THINGS. 
    TRUE ____ FALSE ____

15. I DON'T NEED TO DEPEND ON OTHERS. 
    TRUE ____ FALSE ____

16. I GIVE UP EASILY. 
    TRUE ____ FALSE ____

17. I DON'T SEEM ABLE TO DEAL WITH MOST PROBLEMS THAT COME UP IN LIFE. 
    TRUE ____ FALSE ____

18. IT IS HARD FOR ME TO MAKE NEW FRIENDS. 
    TRUE ____ FALSE ____
19. IF I SEE SOMEONE I WOULD LIKE TO KNOW, I'LL GO UP TO THEM RATHER THAN WAITING FOR THEM TO COME OVER TO ME.
   TRUE ___ FALSE ___

20. IF I MEET SOMEONE INTERESTING WHO IS HARD TO MAKE FRIENDS WITH, I'LL SOON STOP TRYING TO MAKE FRIENDS WITH THEM.
   TRUE ___ FALSE ___

21. WHEN I'M TRYING TO BECOME FRIENDS WITH SOMEONE WHO SEEMS UNINTERESTED AT FIRST, I DON'T GIVE UP EASILY.
   TRUE ___ FALSE ___

22. I DON'T HANDLE MYSELF WELL IN SOCIAL GATHERINGS.
   TRUE ___ FALSE ___

23. I HAVE FRIENDS BECAUSE I KNOW HOW TO MAKE FRIENDS.
   TRUE ___ FALSE ___
THE PHYSICAL SELF-EFFICACY SCALE

This questionnaire is a series of attitude statements about you. We are interested in the extent to which you agree or disagree with them.

Please read each statement carefully. Then indicate the extent to which you agree or disagree by marking the appropriate number on your answer sheet. The numbers and their meaning are indicated below:

If you agree strongly - 1
If you agree somewhat - 2
If you agree slightly - 3
If you disagree slightly - 4
If you disagree somewhat - 5
If you disagree strongly - 6

If you find that the numbers to be used in answering do not adequately indicate your opinion, please use the one which is closest to the way you feel.
1. I have excellent reflexes.
2. I am not agile and graceful.
3. I am rarely embarrassed by my voice.
4. My physique is rather strong.
5. Sometimes I don't hold up well under stress.
6. I can't run fast.
7. I have physical defects that sometimes bothers me.
8. I don't feel in control when I take tests involving physical dexterity.
9. I am never intimated by the thought of a sexual encounter.
10. People think negative things about me because of my posture.
11. I am not hesitant about disagreeing with people bigger than me.
12. I have poor muscle tone.
13. I take little pride in my ability in sports.
14. Athletic people usually do not receive more attention than me.
15. I am sometimes envious of those better looking than myself.
16. Sometimes my laugh embarrasses me.
17. I am not concerned with the impression my physique makes on others.
18. Sometimes I feel uncomfortable shaking hands because my hands are clammy.
19. My speed has helped me out of some tight spots.
20. I find that I am not accident prone.
21. I have a strong grip.
22. Because of my agility I have been able to do things which many others could not do.
THE EFFICACY-OUTCOME INSTRUMENT

This questionnaire contains a number of situations a person might possibly find him--or herself in. Certainly, nobody would encounter all of these situations.

What I would like you to do is to imagine yourself as being in the situation as it is described. I'm sure there are better solutions to the dilemmas offered, but try to only consider the options which are offered. Try to be as honest, in other words as realistic, as you can be.

Please use the following number guide when answering the questions:

For each question 'a':

I definitely would do it ...................... 1
I probably would do it............................ 2
It is more than likely that I would do it....... 3
It is less than likely that I would do it....... 4
I probably wouldn't do it........................ 5
I definitely would not do it.................... 6

For each question 'b':

Definitely (Yes).............................. 1
Probably ..................................... 2
More than likely ............................... 3
Less than likely ............................... 4
Probably not .................................. 5
Definitely not (No)............................ 6

You must circle one number and one number only for each question. Please do not skip any questions—if you are not sure how you would react then just give your best guess. It is best to work quickly and not spend time pondering those questions which prove to be most difficult for you.

1. Traffic is bumper-to-bumper, crawling along on the expressway. You have been daydreaming. Traffic has started to move when you notice your exit almost directly to your right. However, you are three lanes over. The next exit brings you 10 minutes out of your way, longer if the traffic remains bad, so you decide it is in your best interests to take your exit.
a. How strongly do you believe that you would try for the exit and risk honks and dirty looks?

1 2 3 4 5 6

b. If you tried for the exit, would you make it?

1 2 3 4 5 6

2. For months you've planned a trip to the Bears game with some good friends. You are all planning on driving together and in fact you have no other way of getting to the stadium. An emergency arises which you have to take care of but, if your friends wait for you, they'll be late and easily miss the opening kickoff. You feel it is appropriate to ask them to wait, even though the outcome of this game will determine whether the Bears get into the playoffs or not.

a. How certain are you that you would ask them to wait for you?

1 2 3 4 5 6

b. If you asked them to wait, would they?

1 2 3 4 5 6

3. For an hour you've been standing in line waiting for a movie you really want to see. The line is long and there's a slim chance you won't get in. An elderly couple cuts into the line in front of you. You would like to ask them to move.

a. How certain are you that you would ask them to move?

1 2 3 4 5 6

b. If you asked them, would they move?

1 2 3 4 5 6

4. In a restaurant you put ketchup on your french fries. After you take your first bite you realize that the ketchup is bad (sour). You want another order of fries.

a. How strongly do you believe that you would ask for another order of fries?

1 2 3 4 5 6

b. If you asked for another order of fries, would you get more for no extra charge?

1 2 3 4 5 6
5. You are illegally parked. As you're walking to your car you see a policeman about to write you a ticket although he hasn't started yet. You feel like asking him not to write up the ticket.

   a. How certain are you that you would ask him not to write you a ticket?
      1  2  3  4  5  6

   b. If you asked him, would he agree not to write you a ticket?
      1  2  3  4  5  6

6. You have a good friend who has just been hospitalized. You go to visit your friend but because of a traffic jam you arrive 15 minutes after the very strictly enforced visiting hours have ended. You would like to sneak in to see your friend.

   a. How certain are you that you would try to sneak in to see your friend and risk the embarrassment of being kicked out?
      1  2  3  4  5  6

   b. If you tried, would you succeed in seeing your friend?
      1  2  3  4  5  6

7. You buy a pair of pants from a good store but the first time you wear them the zipper breaks. You decide it is appropriate to try to return the pants.

   a. How certain are you that you would try to return the pants even though the salesperson said they had a policy of not accepting returns after two weeks from the time of purchase (it's been a month since you bought them)?
      1  2  3  4  5  6

   b. If you tried to return them would the store take them back?
      1  2  3  4  5  6

8. In an elevator you lose one of your contact lenses. It is in your best interests to try and find it because your eyesight is very poor and your glasses are at home, 20 minutes away.

   a. How certain are you that you would stay in the
elevator and continue looking for your lens while the elevator went up and down?

b. Would you eventually find it?

9. You are 2 miles from home, in no hurry. You only have a $20 bill. The only store around is a fashionable clothing store. You need exact change for the bus.

a. How certain are you that you would go into the fashionable store and request change?

b. If you asked for change, would you get it?

10. You have been lonely recently. You see the guy/gal of your dreams at a party. You know this person is unattached. You desire to talk with this person.

a. How strongly do you believe that you would initiate or arrange a conversation with this person?

b. If you began talking with this person, would he/she respond favorably?

11. The person in question No. 10 above responded somewhat favorably but seemed a little distant or perhaps preoccupied. You would like to arrange a date with this person because you believe that the two of you have possibilities as a couple.

a. How strongly do you believe that you would ask for or arrange a date with this person?

b. If you asked for or tried to arrange a date with this person, would he/she accept?

12. You need money for the evening and rush to the bank, getting there 2 minutes before closing time. But the tellers have already quit for the day and are totalling up their day's activities. You can't get money elsewhere and, since you were there before closing, you feel it is reasonable to ask to get your check cashed.
13. The bully on the block is picking on your neighbor's children. You feel it is appropriate to tell him to stop.

a. How strongly do you believe that you would tell him to stop?
   1 2 3 4 5 6

b. If you told him to stop, would he?
   1 2 3 4 5 6

14. The people playing tennis on the court for which you signed up plead that they only have one more game left to finish their set. But it is already 5 minutes after the hour and someone has the hour after your partner and yourself. You would like them to leave.

a. How strongly do you believe that you would ask them to leave?
   1 2 3 4 5 6

b. If you asked them, would they leave?
   1 2 3 4 5 6

15. You are very coordinated and have the opportunity to learn a skill that could get you a better-paying job. They accept everyone who applies into the training program but only pass half of those who start. It is in your best interests to go through the training program successfully.

a. How certain are you that you would enter the training program?
   1 2 3 4 5 6

b. If you did would you pass?
   1 2 3 4 5 6

16. You saw your dream home. Mortgage rates are too high for you now but there is a possibility of getting federally funded low interest loan by standing in line overnight at one of the banks in town. Hundreds of other people will be trying for the loan money, of which there is a limited amount. You would like the low-interest loan, as rates
will be high for a long time.

a. How strongly do you believe that you would try for the loan?
   1  2  3  4  5  6

b. If you tried for the loan, would you get it?
   1  2  3  4  5  6

17. You are in a great hurry. The elevator stops for you but it is jam-packed full of people who all seem like they are ignoring you. You would like to take this elevator.

a. How certain are you that you would try to squeeze onto this elevator?
   1  2  3  4  5  6

b. If you tried to get onto the elevator this trip, would you succeed?
   1  2  3  4  5  6

18. You need one more sale this week to win a vacation to Hawaii. Your only prospect for a sale is a very mean, nasty man. It is desirable for you to make the sale and win the trip.

a. How strongly do you feel that you would set up an appointment with that person?
   1  2  3  4  5  6

b. If you set up the appointment, would he buy the policy and ensure your trip to Hawaii?
   1  2  3  4  5  6

Thank you very much. Please make sure you answered every question.
APPROVAL SHEET

The thesis submitted by Sidney C. St. Leger has been read and approved by the following committee:

Dr. Roderick W. Pugh, Director Professor, Psychology, Loyola

Dr. Patricia A. Rupert Associate Professor, Psychology, Loyola

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

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

April 3, 1985
Director's Signature