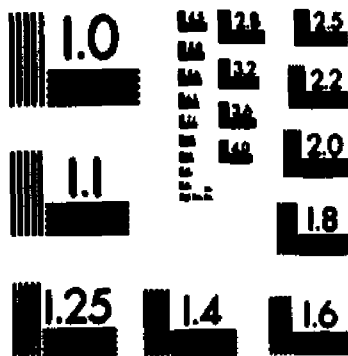
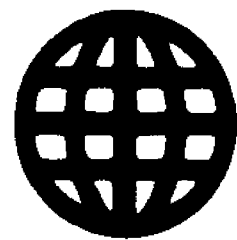


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**THE RELATIONSHIP AMONG FIELD DEPENDENCE, FEAR OF SUCCESS AND
THE PROTESTANT ETHIC FOR AFRO-CARIBBEANS, AFRO-AMERICANS AND
WHITE COLLEGE STUDENTS**

City University of New York

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**THE RELATIONSHIP AMONG FIELD DEPENDENCE, FEAR OF
SUCCESS AND THE PROTESTANT ETHIC FOR AFRO-CARIBBEANS,
AFRO-AMERICANS AND WHITE COLLEGE STUDENTS**

by

SANDRA VIRGINIA GONSALVES

A dissertation submitted to the
Graduate Faculty in Psychology
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy,
The City University of New York

1986

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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirements for the degree of Doctor of Philosophy.

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ABSTRACT

THE RELATIONSHIP AMONG FIELD DEPENDENCE, FEAR OF SUCCESS AND THE PROTESTANT ETHIC FOR AFRO-CARIBBEANS, AFRO-AMERICANS AND WHITE COLLEGE STUDENTS

by

Sandra Virginia Gonsalves

Adviser: Dr. Florence L. Denmark

The underlying theoretical and empirical relationship among three psychological constructs viz. field dependence (FD), the fear of success (FOS), and the Protestant Ethic (PE) were assessed for Afro-Caribbeans, Afro-Americans and white college students. Some of the principal purposes of this investigation were (1) to extend correlational findings among each of the constructs, and provide construct validation for each of the personality dimensions (2) to generate current normative data for the scales (3) to validate the instruments on an ethnically plural sample, some of whom have received scant attention in the psychological literature and (4) to factor analyze the PE scales.

The a priori hypotheses advanced were: (1) FD would endorse more FOS items than field independent (FI) individuals; (2) Greater levels of psychological differentiation (FI) would be associated with high PE endorsement; (3) High levels of FOS would be associated with low levels of PE endorsement; (4) The Hidden Figures Test (HFT) and the

Group Embedded Figures Test (GEFT) would be positively and significantly correlated; (5) The two PE scales would be positively and significantly correlated; (6) No statistically significant differences in PE endorsement would be evinced for Afro-Americans and Afro-Caribbeans; (7) Females would score in the FD direction; (8) Afro-Americans and Afro-Caribbeans would be more FD vis-a-vis their Anglo counterparts and; (9) Afro-Caribbeans would score higher on the PE scale compared to whites.

A total of 300 subjects voluntarily participated in this investigation as part of a nonprobability sample. The revised version of the Statistical package for the Social Science (SPSSX) was utilized as the software for data analyses. Pearson correlations, partial correlations, t-tests, factor analyses, ANOVAS, and multiple regression analyses were performed to illuminate the relationships among the psychological constructs. Two measures of FI/FD (the GEFT and the HFT), two measures of the Protestant Ethic (the Blood (1969) Pro-Protestant Ethic scale and the Mirels and Garrett (1971) scale and the Zukerman and Allison (1976) Fear of Success scale were administered to the research participants.

The findings evinced support for hypotheses 1, 4, 5, 6, 7, 8 and 9. However, hypotheses 2 and 3 remained unconfirmed. Rather than a positive correlation, a negative correlation emerged when the two measures of FI were

correlated with the two PE scales. Additionally, positive relationships were evinced when the PE scales were correlated with the FOS scale. Another unanticipated finding that emerged was that Blacks obtained a significantly higher mean score on the FOS scale compared to their white cohorts.

Plausible explanations with Afro-centrally oriented interpretations are advanced to account for these findings. Future directions for empirical research are suggested.

In loving memory of Papa

DEDICATION

To my father and mother who instilled in me the value of learning, nurtured my curiosity to explore my environment, taught me the love of fellow humans and the will to persevere.

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This initial entree into the dissertation represents, in my view, one of the most delightful sections. Expressions of sincere appreciations are appropriate and in order.

Dr. Florence L. Denmark, my dissertation advisor, mentor, and friend has been an ongoing source of encouragement and support. While I was an undergraduate at Hunter College, she gave substantive direction, guidance and helped me carve out and crystallize my career objectives through example and verbal dialogue. My honor's thesis with her on the professional Black woman in academe was the embryonic beginning of an area of research that I have readily embraced, as I attempt to forge ahead in new frontiers of scholarship on this topic that has been given scant attention in the empirical literature.

Additionally, Florence has furnished me with opportunities to advance professionally through her own intense involvement with the American Psychological Association. She has certainly stimulated my interest in working with this umbrella organization. Words are insufficient in conveying my profound gratitude and whole-hearted appreciation. She has meaningfully touched my life.

It has been a pleasure and honor to have Dr. Samuel Messick serve on my dissertation committee. I have appreciated his substantive comments and thorough evaluations of my work. Through his own formidable research, the importance of scholarship has been underscored and accentuated. He too has proved consistent and diligent in his assistance. He has helped in innumerable ways. To him I also owe my deep gratitude and appreciation.

Dr. Jacqueline Fleming too has served admirably. As one of the few pioneers in the area of achievement motivation among Black women, she has been inspirational. Jacqueline responded to my persistent calls with patience and understanding. Her enthusiasm, energy, affable and open style, substantive comments, and her willingness to be an integral part of this team effort is now gratefully acknowledged. Once again, my thanks cannot be easily conveyed.

Drs. Peter Weston and Dorothy Murgatroyd readily served as readers. In spite of their extremely busy schedules, they devoted invaluable time in the careful reading and evaluation of my manuscript. They both demonstrated good scholarship and raised a number of substantive, provocative, and insightful issues regarding the dynamics of these psychological constructs and their interrelationships. I am grateful to them for their participation as team members on my dis-

sertation committee, and their conscientious efforts are appreciatively acknowledged.

My formal thanks is also extended to all the subjects who voluntarily participated in this fairly time-consuming investigation. Their belief in the importance of this study, combined with their insightful questions gave the project a life of its own. Without them, this work would not have been feasible. Allison Webster and Rodney Hines, my student assistants at Bates College worked diligently in assisting me in various ways. They spent many long hours during the week and on the weekend working on my behalf. Carmen Bartlett and Joyce Caron worked arduously and in record time to type sections of the manuscript and offered tangible support in many other ways. My warmest appreciation is extended to all these people.

At Bates College, Deidre Beckford, Walter McNeil, Jr., Marva Rowe, Camille McKayle and Kofi willingly extended their friendship and love. They were emotionally supportive, kind and offered me pleasant distractions from the pressures of teaching and dissertation work.

Helen Dermatis and Carla Lewis, fellow doctoral students, offered me their encouragement and friendship throughout the entire arduous process of graduate study. Godwin (Tony) Bernard, a fellow collaborator and colleague, offered much. He extended himself, sacrificed valuable time, gave advice,

offered critical comments and responded as a true friend to my needs for assistance on some technical issues related to data analyses.

Amy Zambroski became my right arm when I relocated to New Jersey. Having a computer tape that was essentially unreadable, she went beyond the call of duty as a computer consultant to provide invaluable time, a tremendous amount of technical assistance, and support during this difficult and utterly frustrating time. She gently helped me to wade through the process, and facilitated my extensive interaction with computer systems, as I attempted to master a new "language". Indeed, Amy deserves my warmest expressions of appreciation and profound gratitude.

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It is to my immediate family that I owe my most profound gratitude. They have provided so very much that it is impossible to document. My mother, Esmay, my three brothers, Morris, Clayton and Leonard (Leo) gave me tremendous dosages of encouragement, coupling this with financial and emotional support to continue on my chosen academic path. They fully understood the seriousness and importance of my career.

decision. They have assisted in fostering my continued personal and professional growth through their own consistency and steadfastness. My debt cannot be easily conveyed.

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TABLE OF CONTENTS

	ACKNOWLEDGEMENTS.....	vi
CHAPTER ONE		
I.	(a) INTRODUCTION.....	1
	(b) FIELD INDEPENDENCE/FIELD DEPENDENCE.....	4
	a) Introduction.....	4
II.	PSYCHOLOGICAL DIFFERENTIATION.....	6
III.	MEASURES OF FIELD INDEPENDENCE/FIELD DEPENDENCE.....	11
	a) Norms for HFT (Cf-1)	15
	b) Gender differences in HFT	16
IV.	RELEVANT FINDINGS ON FI/PD	16
	a) Gender differences.....	16
	b) FD among Afro-Americans.....	17
V.	THE PROTESTANT ETHIC: FORMULATIONS, SCALES, CORRELATES AND FINDINGS.....	20
VI.	FEAR OF SUCCESS.....	27
	a) Introduction.....	27
	b) Measures of Fear of Success.....	31
	c) Criticisms of the Fear of Success Construct.....	36
	d) Fear of Success in Black Women.....	39
CHAPTER TWO		
I.	REVIEW OF RELEVANT LITERATURE.....	45
CHAPTER THREE		
I.	HYPOTHESES AND RESEARCH DESIGN.....	57
	b) Hypotheses.....	57
II.	METHOD.....	58
	a) Subjects.....	58
	b) Test Materials.....	59
	c) Procedure.....	59

CHAPTER FOUR

I. RESULTS..... 61

CHAPTER FIVE

DISCUSSION..... 89

APPENDICES

I. Appendix A: Instruments 109
II. Appendix B: Tables 1-98 142
REFERENCES 254
ADDENDUM 290

LIST OF TABLES

	PAGE
Table 1	Global Pearson Correlation Coefficients for Constructs.....142
Table 2	Pearson Correlation Coefficients among Constructs for Afro-Caribbeans.....143
Table 3	Pearson Correlation Coefficients among Constructs for Afro-Americans.....144
Table 4	Pearson Correlation Coefficients for Blacks....145
Table 5	Pearson Correlation Coefficients for Whites....146
Table 5A	Pearson Correlation Coefficients for Black Males.....147
Table 5B	Pearson Correlation Coefficients for Black Females.....148
Table 5C	Pearson Correlation Coefficients for White Males.....149
Table 5D	Pearson Correlation Coefficients for White Females.....150
Table 6	Pearson Correlation Coefficients.....151
Table 7	Pearson Correlation Coefficients.....152
Table 8	Pearson Correlation Coefficients.....153
Table 9	Pearson Correlation Coefficients.....154

	PAGE
Table 10	Pearson Correlation Coefficients.....155
Table 11	Pearson Correlation Coefficients.....156
Table 12	Pearson Correlation Coefficients.....157
Table 13	Pearson Correlation Coefficients.....158
Table 14	Pearson Correlation Coefficients.....159
Table 15	Pearson Correlation Coefficients.....160
Table 16	Pearson Correlation Coefficients.....161
Table 17	Partial Correlation Coefficients.....162
Table 18	Partial Correlation Coefficients.....163
Table 19	Partial Correlation Coefficients.....164
Table 20	Partial Correlation Coefficients.....165
Table 21	Partial Correlation Coefficients.....166
Table 22	Partial Correlation Coefficients.....167
Table 23	Partial Correlation Coefficients.....168
Table 24	Partial Correlation Coefficients.....169
Table 25	T-Test for Blacks and Whites.....170
Table 26	T-Test for Afro-Americans and Afro-Caribbeans..171

	PAGE
Table 27	T-Test for Afro-Caribbeans and Anglos.....172
Table 28	T-Test for Afro-Americans and Anglos.....173
Table 29	T-Test for the Global Sample.....174
Table 30	T-Test for Afro-Caribbeans.....175
Table 31	T-Test for Afro-Americans.....176
Table 32	T-Test for Blacks.....177
Table 33	T-Test for Whites.....178
Table 34	T-Test for Females.....179
Table 35	T-Test for Females.....180
Table 36	T-Test for Females.....181
Table 37	T-Test for Females.....182
Table 38	T-Test for Afro-Caribbeans and Jews.....183
Table 39	T-Test for Males.....184
Table 40	T-Test for Males.....185
Table 41	T-Test for Males.....186
Table 42	T-Test for Males.....187
Table 43	T-Test for Males.....188

	PAGE
Table 44	Reliability Analysis for the Blood Pro-Protestant Ethic Scale.....189
Table 45	Reliability Analysis for the Blood Pro-Protestant Ethic Scale.....190
Table 46	Reliability Analysis for the Blood Pro-Protestant Ethic Scale.....191
Table 47	Reliability Analysis for the Blood Pro-Protestant Ethic Scale for Women.....192
Table 48	Reliability Analysis of the Blood Pro-Protestant Ethic Scale for Men.....193
Table 48A	Reliability Analysis of the Mirels and Garrett Scale for Males.....194
Table 48B	Reliability Analysis of the Mirels and Garrett PE Scale for Females.....195
Table 48C	Reliability Analysis of the Mirels and Garrett PE Scale.....196
Table 49	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....197
Table 50	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....198
Table 51	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....199
Table 52	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....200
Table 53	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....201

	PAGE
Table 54	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....202
Table 55	Factor Analysis of the Blood Scale.....203
Table 56	Factor Analysis of the Blood Pro-Protestant Ethic Scale.....204
Table 57	Factor Analysis of the Blood Scale.....205
Table 58	Factor Analysis of the Mirels and Garrett PE Scale.....206
Table 59	Factor Analysis of the Mirels and Garrett PE Scale.....207
Table 60	Factor Analysis of the Mirels and Garrett PE Scale.....208
Table 61	Factor Analysis of the Mirels and Garrett PE Scale.....209
Table 62	Factor Analysis of the Mirels and Garrett PE Scale.....210
Table 63	Factor Analysis of the Mirels and Garrett PE Scale.....211
Table 64	Factor Analysis of the Mirels and Garrett PE Scale.....212
Table 65	Factor Analysis of the Mirels and Garrett PE Scale.....213
Table 66	Factor Analysis of the Mirels and Garrett PE Scale.....214

	PAGE
Table 67	Factor Analysis of the Mirels and Garrett PE Scale.....215
Table 68	Factor Analysis of the Mirels and Garrett PE Scale.....216
Table 69	Factor Analysis of the Mirels and Garrett PE Scale.....217
Table 70	Factor Analysis of the Mirels and Garrett PE Scale.....218
Table 71	Factor Analysis of the Mirels and Garrett PE Scale.....219
Table 72	Factor Analysis of the Mirels and Garrett PE Scale.....220
Table 73	Factor Analysis of the Mirels and Garrett PE Scale.....221
Table 74	Factor Analysis of the Mirels and Garrett PE Scale.....222
Table 75	Factor Analysis of the Mirels and Garrett PE Scale.....223
Table 76	Factor Analysis of the Mirels and Garrett PE Scale.....224
Table 77	Factor Analysis of the Mirels and Garrett PE Scale.....225
Table 77B	Factor Analysis of the Blood and Mirels and Garrett Protestant Ethic Scales.....226
Table 77C	Factor Analysis of the Fear of Success Scale...227

	PAGE
Table 77D	Factor Analysis of the FOS Scale.....228
Table 77E	Factor Analysis of the FOS Scale.....230
Table 77F	Factor Analysis of the FOS Scale.....231
Table 77G	Factor Analysis of the FOS Scale.....232
Table 78	ANOVA Cell Means.....233
Table 79	Analysis of Variance.....234
Table 80	ANOVA Cell Means.....235
Table 81	Analysis of Variance.....236
Table 82	ANOVA Cell Means.....237
Table 83	Analysis of Variance.....238
Table 84	ANOVA Cell Means.....239
Table 85	Analysis of Variance.....240
Table 86	ANOVA Cell Means.....241
Table 87	Analysis of Variance.....242
Table 88	ANOVA Cell Means.....243
Table 89	Analysis of Variance.....244
Table 90	Multiple Regression.....245

	PAGE
Table 91	Multiple Regression.....246
Table 92	Multiple Regression.....247
Table 93	Multiple Regression.....248
Table 94	Multiple Regression.....249
Table 95	Multiple Regression.....250
Table 96	Multiple Regression.....251
Table 97	Multiple Regression.....252
Table 98	Multiple Regression.....253

CHAPTER ONE

INTRODUCTION

Thus far, the empirical and theoretical interrelationships among field dependence (FD), the fear of success (FOS), and the Protestant Ethic (PE) have remained essentially unexplored in the area of social/personality psychology. In fact, the psychological literature is devoid of any systematic analysis of the patterns of endorsement of Afro-Caribbeans and Afro-Americans on personality scales either separately, together, or vis-a-vis their white cohorts. This study in its design and execution marries these twin issues with the view of profoundly illuminating some of the underlying relationships and/or dimensions while simultaneously focusing meaningful but special attention on two Black ethnic groups that have received scant if any serious attention in the field.

In reality, the psychological construct dubbed field dependence/field independence has been empirically grounded in a plethora of investigations. As a result, this style has been correlated with a vast array of personality and behavioral traits (Loo, 1978; Doyle, 1976; Fine, 1972; Carter and Loo, 1979; Beck, 1971; Lau, Figuerres and Davis, 1981; Hughes, Hall and Chambers, 1978; Loo and Townsend, 1977; Evans, 1967; Willoughby, 1967; Stuart, 1965; Hellkamp and

Marr, 1965; Levy and Rokeach, 1960; Fenchel, 1958; Zaks, 1954; Breskin and Gorman, 1969; Soat, 1974; Pawelkiewicz and McIntire, 1965; Guyot, Fairchild and Johnson, 1984; Watkins and Astilla, 1979; Zukerman, Kolin, Price and Zoob, 1964; Zukerman and Link, 1968; Farley, 1974; Bone and Choban, 1972; Lesnik-Oberstein and Cohen, 1984; Ohnmacht, 1968; Johnson et al., 1969; Cattell, 1969; Cattell and Hundleby, 1968; Doyle, 1975; Margulis, 1971; Dana and Goocher, 1959; Sousa-Poza, Roherberg and Shulman, 1973; Duke, 1969; and Simon and Wilde, 1971). Yet, in spite of its seeming longevity in the psychometric literature, according to the author's research, no study to date has assessed its interrelationship to the personality variables that are referred to here, viz: the Protestant Ethic and the fear of success.

However, besides the mere fact that these dispositional variables are in and of themselves intrinsically interesting and worthy of study in their own right, some more compelling rationale for relating them include:

1. With one exception, the relationship of cognitive styles to motivational variables has been sparsely reported in the literature (Wertheim and Mednick, 1958).
2. The findings on the Protestant Ethic and fear of success can provide a useful glimmer or insight into the value orientation of ethnic groups in the mosaic

of American society and help to ascertain the extent to which they share (or not share) the core values on competition or ways in which success can be attained in a capitalist system.

Besides the foregoing rationale, there are multiple reasons for the importance of this investigation. These include:

1. To assess the correlations among three constructs that have not been theoretically and empirically related to each other in the psychological literature.
2. To factor analyze the PE and the FOS scales in order to assess their underlying dimensions and to illuminate the correlational pattern to other personality variables.
3. To extend correlational findings among each of the constructs and by extension to provide construct validation for each of these dispositional variables.
4. To assess whether these correlations also hold for minority group members living within a majority culture.
5. To generate current normative data for the scales on a mixed sample.
6. To assess the correlates of gender differences in performance.
7. To assess the relationship between FI and motivational variables.

8. To ascertain whether the findings on POS also hold for Afro-Caribbeans.
9. To obtain a reliability estimate for both the Blood (1969) Pro-Protestant Ethic scale and the Mirels and Garrett (1971) scale.
10. To assess perceptual articulation among Afro-Caribbeans and Afro-Americans with a college age sample.

In order to obtain an insight into each of the dimensions that will be examined, the author will first provide a succinct yet thorough overview of each of the constructs, which will then be followed by a crisp integration of the psychological literature in Chapter 2.

FIELD INDEPENDENCE/FIELD DEPENDENCE

Introduction

Eschewing the S-R approach as a conceptual model accounting for the complexities of human behavior, the influence of cognitive processes as mediators between the environment and the organism's response to the environment gathered momentum. Mahoney (1977) has taken notice of this radicalization within the psychological literature as well as the spate of recent publications on cognition (Messick and Associates, 1976; Kogan, 1976).

Brody (1972) has observed the infiltration of cognitive approaches into personality research within the last decades. These perspectives share several characteristics such as

placing emphasis on style over content. This view accentuates the formal characteristics of thought rather than the actual content of thought. Yet, another identifying mark of cognitive styles includes prediction of other personality characteristics based on knowledge of an individual's perceptual orientation. Additionally, the cognitive approach views cognitive styles as traits.

Cognitive styles can be operationally defined as individual difference and information processing variables. They are hypothetical constructs that refer to the manner in which individuals conceptually organize their environment (Goldstein & Blackman, 1978; Messick, 1976). They are pervasive, stable dimensions and self-consistent modes of functioning which are cross-situational and have implications in perceptual, social and intellectual activities (Witkin, Oltman, Raskin & Karp 1971). Additionally, cognitive styles are conceived as process rather than content variables, (Witkin and Goodenough, 1977; Goodenough, 1978) in that, they answer the question of "how" rather than "what" of behavior.

Some psychologists differentiate between cognitive controls and cognitive styles. Klein (1954) was the first one to introduce the terminology cognitive controls. These cognitive controls function like the Freudian ego controls in that they delay need gratification. Gardner and Long (1962) augmented this definition by stating that "...controls are viewed as enduring cognitive structures that, like defense

mechanisms, presumably emerge in the course of development from the interaction of genetic and experiential determinants" (p. 387).

Historically, there have been a proliferation of terminologies to refer to dimensions of perceptual functioning. These include "perceptual attitude", "cognitive attitudes", "cognitive system principles", "cognitive controls" and "cognitive control principles". In spite of this, however, Kagan & Kogan (1970) noted that the distinction between cognitive style and cognitive control has not been strictly adhered to. The writer will refer to these personality dimensions as cognitive styles as Messick et al., (1976) do.

PSYCHOLOGICAL DIFFERENTIATION

The theoretical framework in which the FI/FD construct is embedded is psychological differentiation. In Witkin et al's (1962) earliest conceptualization, FD was defined as reliance on either the visual field or the body as referents in the perception of the upright. Field dependent individuals have an external frame of reference, are global in processing information, accept the prevailing field as given, and demonstrate interpersonal competencies. On the other hand, however, field independents are analytical in their articulation of incoming information and have an internal frame of reference. Expectedly then, they perform well in cognitive restructuring tasks (Goodenough, 1978).

Field independence/dependence is essentially viewed as a bipolar construct. Each pole has adaptive features under varying conditions, but is considered neutral with regard to value-orientation. Witkin and Goodenough (1977) have modified this theoretical construct and parsimoniously redefined FD/FI as "a general ability to overcome embedding contexts in perception" (p. 3). Besides perception, this orientation is evident in intellectual and social domains. Field independence is related to Thurstone's (1944) "flexibility of closure" as identified through his factor analytic studies, and is also related to Guilford's (1967) "convergent production of figural transformation".

The theory of differentiation or psychological differentiation is the model used to account for new findings in individual differences in establishing the upright in space. Beyond this usage, Witkin, Goodenough and Oltman (1978) noted that "the differentiation construct was also intended to serve as a guide to further research on the basis and scope of the broad patterns of individual psychological functioning" (p. 2).

The first attempt to grapple with the theory of psychological differentiation was in the 1962 book entitled Psychological Differentiation written by Witkin, Dyk, Faterson, Goodenough and Karp (1962). Differentiation refers to the complexity of an organismic structure; a system that is

highly differentiated is heterogeneous and contains specialized subsystems, while a less differentiated system is relatively homogeneous. Witkin et al, (1978) further add that

"a system which is more differentiated shows greater self-nonself segregation, signifying definite boundaries between and inner core of attributes, feelings and needs, identified as the self, and the outer world particularly other people. In a less differentiated system, in contrast, there is a greater connectedness between self and others. A system which is more differentiated is also characterized by greater segregation of psychological functions; that is functions are more separate from each other and activities within each are more specialized. In a differentiated system, these separate, specialized functions are complexly interrelated forming a hierachical structure" (p. 2).

Further, Witkin et al., (1978) posited the notion that constructs radiate from psychological differentiation as indicators, with articulated cognitive functioning being the first of the lower-order construct. This type of functioning entails experiencing the visual field as discrete and organized. Moving chronologically down, is separate identity. Here the individual is cognizant that his/her needs, values, and attributes are distinct and separate from others. This assists the person in some way to maintain autonomous functioning in the face of contradictory alternatives.

An articulated body concept constitutes the third lower-order indicator of differentiation. "This refers to an

impression of the body as having definite limits of boundaries and the parts within as discrete yet interrelated, and joined into a definite structure" (Witkin et al., 1978, p. 4).

The final indicator of differentiation is impulse control. The type of defense mechanism employed in impulse control is an indicator of more or less differentiated functioning. Denial and repression are considered unspecialized and developmentally primitive defenses that are associated with a FD mode of functioning. Isolation, projection and intellectualization are specialized defenses which FIs utilize (Brody, 1972).

There is a positive and linear relationship between chronological age and differentiation. The perceptual index, as Witkin's measure of differentiation, demonstrates that the differentiated individual should be more analytic and should be able to effectively segregate items from a complex gestalt.

Witkin et al., (1978) made some modification from their 1962 model of psychological differentiation. Witkin and Goodenough (1977) referred to a number of cognitive dimensions requiring spatial restructuring including speed of closure, functional fixity task (match stick problem), conservation, and perspectivism. These tasks are correlated with good performance on tests of FI.

Some of the most recent modification of FI/FD include:

- 1) Articulated (versus global) approach consisting of two separate functions: cognitive restructuring and reliance on vestibular referents.
- 2) Individuals who rely on an external visual field have a more interpersonal orientation, pay selective attention to social cues, seek more physical proximity, and are more self-disclosing than field independents. Field independents are often described as cold, more preoccupied with ideas and principles than with other people.
- 3) A hierarchically-ordered relationship between autonomous functioning, cognitive restructuring, and interpersonal competencies is part of Witkin and Goodenough's (1977) reformulation. In advancing causal relationships between these three variables, they explained that self-nonsel is implicated in reliance on external referents. These have consequences for the development of interpersonal competencies and the causal relationship between restructuring and autonomous functioning. Empirically, it has been established that a more autonomous individual goes beyond the visual field and information given which entails breaking up the organized gestalt so that its parts are discrete.

"In this view, the development of cognitive restructuring skills is conceived of as rooted in such basic characteristics as developed self-nonsel segregation and individual autonomy" (Witkin and Goodenough, 1977, p. 26).

- 4) Another major modification of the FD construct is the introduction of mobility - fixity of the cognitive variable. The idea proffered by Witkin and Goodenough (1977), is that, with the appropriate life experiences, individuals can acquire both cognitive restructuring and interpersonal competencies as part of their mode of functioning. A mobile individual can show characteristics of both styles. However, fixed individuals display characteristics that are prototypical of the FI or FD stylistic mode.

MEASURES OF FIELD INDEPENDENCE/FIELD DEPENDENCE

Since the author used two measures of FI/FD (The Group Embedded Figures Test and the Hidden Figures Test), a cursory overview of all the measures seem appropriate. The earliest measures of FI/FD were individually administered in the experimental laboratory, and were concerned with the inner versus visual field cues in the perception of the upright (Witkin and Asch, 1948a, 1948b). With the need to engage in large scale measurement, group administered version of certain measures were developed. Some of FD/FI tests include:

1) Tilting Room - Tilting Chair Test

In this test, the subject is seated in a chair that may be tilted. The room however is tilted left or right around the subject and measures 70" x 71" x 69". The subject is required to move the chair to an upright position. Correct alignment with the true vertical occurs if the perceptual conflict is resolved in favor of internal cues.

2) Rotating Room Test

Here, subjects and the room are rotated around a circular track. The room is in an upright position. The task remains the same as in the first test, in that, research participants are required to align themselves to the true vertical. However, in this task, reliance on the visual field will lead to accurate performance.

3) Body Adjustment Test

This test consists of six trials. In three trials, the room and chair are tilted in the same direction. In the other three trials, the room and chair are tilted in opposite directions. Once again, the subject is required to locate the upright.

4) Rod-and-frame test (RFT)

This test was one of the major instruments used in early research. The research participant is seated in a dark room, and is asked to view a luminous

square rod suspended within a luminous frame. The individual is required to align the rod to the true vertical. In the first series, the frame and the subject's body are both tilted 28 degrees to the opposite sides. In the third series, the subject remains erect while the frame is tilted 28 degrees to the left or right. The total score is obtained by converting the subject's score in each series into a standard score. The three scores are then averaged. Witkin et al., (1962) have recommended administering the third series of the RFT instead of the complete test as a time-saver.

5) The Embedded Figures Test (EFT)

The Embedded Figures Test (EFT) as an individually administered test of FI/FD is suitable for research participants 10 years and older. The individual is required to locate a simple geometric figure which is concealed within a complex gestalt. Witkin had selected 24 figures from the ones originally developed by Gottschaldt (1926) and chromatized some of them in order to increase test difficulty and complexity.

The participants are given a maximum of five minutes for each figure, and the score is derived from the mean amount of time taken to locate all 24 figures. Witkin et al., (1971) prepared a manual outlining

specific instructions for the group administered version. Jackson (1956) recommended the use of the first 12 items of the EFT to save time in administration. The short form correlated .99 with the whole scale and can be administered within three minutes. A group administered version of the EFT is the Group Embedded Figures Test (GEFT). It has been extensively used and is significantly correlated with other measures of FD (Witkin et al., 1971).

6) Hidden Figures Test (HFT)

Another measure of FI/FD that has gained a modicum of popularity in the psychometric literature is the Hidden Figures Test (HFT-Cf1). This test is an adaptation of Gottschaldt's (1926) Figure Test. Individuals are required to locate one of five geometric figures which is embedded in a complex achromatic design. Unlike the EFT which in part is chromatic, the entire HFT is achromatic. French, Ekstrom and Price (1963) have noted that the test is very difficult.

The test is comprised of two parts with 16 test items in each section. The total administration time is 20 minutes. The HFT is suitable for grades 6 through 16 (college-age samples), and is scored in terms of the number of figures correctly disembedded.

Norms for HFT (Cf-1)

Since the HFT has been infrequently used, the writer will present some normative data through which the present findings may be appropriately interpreted. In fact, one of the earliest set of norms for the HFT (Cf-1) was reported by Jackson, Messick and Myers (1964). They found a mean of 8.12 and an SD of 3.80 with a sample of 52 males and 60 female undergraduates at Pennsylvania State University. Willoughby though (1967) reported separate mean HFT scores for males and females. The mean HFT score for males was 12.44 with an SD of 5.26 while the mean HFT score for females was 11.51 with an SD of 5.14. Boersma (1968) reported means of 10.52 (SD 6.42) and 15.96 (SD=6.42) in two administrations respectively for a total of 216 male and female undergraduates in education. During that same year, Ohnmacht (1968) reported a mean HFT score (Cf-1) of 10.17 (SD=5.23).

Levine (1976), Pargman, Bender & Deshaies (1975), and Dargel & Kirk (1973) administered the HFT but failed to report any norms. The most recent normative data on the HFT has been provided by Weissenberg (1978). For a sample of 37 students in a class on organizational behavior, he reported a mean score of 9.5 with an SD of 6.93. Using a different scoring system, Williams (1975) reported a mean HFT score of 23.52 and an SD of 5.52. In discussing her scoring system, she stated "[T]he score is 10 points plus the total number of correctly completed figures minus the number of incorrectly

completed figures. Higher scores are indicative of greater field independence" (Williams, 1975, p. 282). Dargel and Kirk (1971) classified subjects whose scores were 14.25 or above as FIs and those whose scores were 7.20 or below as FDs.

Gender Differences in HFT

There have been some limited attempts to examine gender differences in HFT. Jackson et al., (1964) found no gender differences in EFT III (HFT) performance. Boersma, (1968) and Willoughby, (1967) also reported no gender differences in HFT performance. The latter reported that the mean HFT score for males was 12.44 with an SD of 5.26, while the mean HFT score for females was 11.51 (SD=5.14).

RELEVANT FINDINGS ON FI/FD

Gender Differences

There have been a spate of empirical investigations that have examined gender differences in the FI/FD dimension. This particular investigation wanted to assess whether these findings in gender differences would pan out cross-ethnically. The overwhelming consistency in findings has supported the claim that women are more FD (Boersma, 1968; Blanton and Nunnally, 1964; Parasnis and Long, 1979; Dreyer, Dreyer and Nebelkopf, 1971; Fiebert, 1967; Erdos, 1979; Copeland, 1983; Maccoby and Jacklin, 1974; Tyler, 1974; Witkin, Dyk, Paterson, Goodenough, and Karp, 1974; Holm, Bergman and Borg, 1980; Hughes, Hall and Chambers, 1978;

Petrakis and Hanson, 1981; Bogo, Winget and Gleser, 1971; Witkin et al., 1962; Morf, Kavanaugh and McConville, 1970; Stuart and Murgatroyd, 1971; Hulfish, 1978). Even cross-cultural research has given convincing support to gender differences in FI/FD style (Parlee and Rajagopal, 1974). Allen and Cholet (1978) in providing a summary of studies using the RFT and EFT reported that gender accounts for less than 15% of the variance of FD scores.

At the same time, however, there are findings that have demonstrated no gender differences in FI (Hughes, 1978; Stuart, Breslow, Brechner, Ilyus, and Wolpoff, 1965; Lis and Powers, 1979; Bush and Ecker, 1980; Jackson, Messick and Myers, 1964; Svinicki et al., 1974; Petrakis, 1979, 1981; Dreyer, Nebelkopf and Dreyer, 1969; Pawelkiewicz and McIntire, 1975). Interestingly, Di Nuovo (1984) and Hughes (1978) found that allowing subjects unlimited time minimized the gender differences in disembedding.

However, there has been some developmental evidence that girls were more FI than boys at age 5 and 7 (Coates, 1974; Lee, Fant, Life, Lipe and Carter, 1978).

Field Dependence Among Afro-Americans

Although there have been a number of cross-cultural studies (Pande, 1970; Page and Marais, 1981; Du Preez, 1968; Jegede and Bamgboye, 1982; Berry, 1966; Siann, 1972; Watkins and Astilla, 1979, 1980, 1981; Fitzgerald and Hunt, 1977; Preale, Amir and Sharan, 1970; Dershowitz, 1971; Cionini,

Smith, Magaro and Velecogna, 1979; Weitz, 1971; Vernon, 1965; Mitchelmore, 1973, 1974; Roach, 1979; Vigeland, 1973; Witkin, Price-Williams et al., 1974; Kagan, 1974; Knight, Kagan, Nelson and Gumbiner, 1978) unquestionably, there is a dearth of empirical investigations that have examined the differential effects of race on levels of field dependence. One of the earliest attempts to do so was conducted by Barclay and Cusumano (1967). However, the primary purpose of their study was to assess the relationship between father absence on level of perceptual articulation. Using the RFT as a measure of FI/FD, they advanced the hypothesis that paternal absence during formidable developmental years leads to cross-sex identification among male adolescents. Their findings demonstrated that father-absent boys (both Black and white) were more FD than father-present boys. However, Black adolescents were significantly more FD than white boys. One methodological flaw of this research which limits its external validity is its sole use of male research participants.

Schratz (1976) using adolescents as well as pre-adolescents explored the relationship between gender and ethnic membership on psychological differentiation and mathematical skills. Using 160 male and female research participants in the third to ninth grade, she found that white males' median score exceeded that of white females. However, quite unexpectedly, Black females had higher scores

than Black males, indicating greater levels of differentiation. Evidence of FD among Afro-Americans was adduced.

Using a total of 184 young participants between the ages of 4 1/2 to 7 1/2 years, Gill, Herdtner and Lough (1968) administered a modified RFT. Samples of children were drawn from middle-class schools or from lower socioeconomic sections of the city. Their findings demonstrated that Black children scored in the FD direction, compared to middle-class whites.

One hundred and eighty children from different ethnic groups were used as research participants by Ramirez and Price-Williams (1974). Subjects were ethnically divided between Blacks, Mexican-Americans and Anglo-Americans. Also, half of the subjects in each group were equally divided in terms of gender. Using the portable RFT, they found evidence that substantiated their hypothesis. Afro-American children were more FD compared to their Anglo counterparts. A similar trend of FD in Afro-American was gleaned from Ritzinger's (1971) research. He employed a sample of 48 Afro-American children between the ages of six and eleven.

Forty sixth-grade children from a suburban residential area served as research participants and were administered the EFT. Black children scored in the FD direction compared to Anglos; however, Black females were more FD than Black males.

One of two studies that have examined FI/FD among college students is that of Shade's (1981). She administered the GEFT to a small sample of 18 men and 18 women, who were equally divided by race. Her results evinced no evidence of race or gender differences. Yet, the small sample size might have washed out statistically significant differences. In a second experiment in the same article, Shade (1981) using 23 Afro-Americans and 17 Euro-Americans, found evidence of greater FD among Black students compared to their white cohorts.

In summary then, there is a consistent thread in the empirical literature on field articulation among Afro-Americans that they score in the field dependent direction compared to their white cohorts. Therefore, this present investigation will test this notion and further provide updated normative data on this Black ethnic group using a college-age sample.

THE PROTESTANT ETHIC: FORMULATIONS SCALES, CORRELATES AND FINDINGS

The development of modern capitalism and its pluralistic structures has been critically subjected to socioeconomic analysis by Karl Marx. However, Max Weber, a social thinker, embedded within a predominantly sociological milieu and framework and flavored with a historical tone has presented a thesis on capitalism. He deduced the embryonic formation of an awesome, ubiquitous, and individualistic force called "capitalism", by advancing a causal, isomorphic relationship

between religious radicalism as expressed in Calvinism, and the formation of capitalist systems.

Some of Weber's notions were gleaned from 17th century Puritanical teaching and writings. The nucleus of his thesis was that the Protestant Ethic, embraced within the Calvinist dogma and theology, provided moral and religious justification for the ferocious yet rational pursuit of wealth. Capitalism according to this formulation was an epiphenomenal outcome of Calvinism. Diligence, secular asceticism, hard work, conscientiousness, deferment of gratification, frugality, prudence, and the abhorrence of waste and idleness were characteristics that proved to be the passport to rapid commercial prosperity for both the individual and collective group in a secular system of economic development. It was this material success that was used as visible and tangible evidence of one's calling, and future glorification in the heavenly realm (Weber, 1958). On the other hand, poverty and other social stigmas of immorality served to socially ostracize and exert pressure on anyone who didn't fully comply with highly competitive entrepreneurial standards.

Weber's thesis is as riddled with controversy among Protestant and Catholic theologians alike, as it is among economic historians and sociological scholars many of whom feel that Catholic dogma does not militate against economic motivation and achievement (Giddens, 1976). However, Green (1959) notes that "Weber's thesis ... has become in some

instances, the victim of partisan contention" (p. IX). He has compiled a number of articles written by scholars in different fields of academic endeavor, critiquing Weber. Some of these criticisms run the gamut from cogently asserting that Weber's concept is reductionistic, oversimplified, and narrow (Hudson, 1959; Robertson, 1959) to the notion that Weber's emphasis on the role of Calvinism as a secular ascetic institution was deficient or inadequate in explaining the relationship between Protestantism and capitalism (Tawney, 1959). Tawney (1959) has argued for a reverse dynamism in which religious changes might have been contingent upon economic fluctuations. Yet, others have vehemently attacked Weber on historical grounds, showing that Protestantism had no impact on the development of modern capitalism (Hyma, 1959). The unidimensional nature of Weber's thesis that religion was sufficient condition for the development of capitalism has also come under much assail. Additionally, a methodological criticism that has been appropriately levelled against Weber's thesis was that he limited his analysis to Western economic structures, and did not take into consideration the characteristics of other non-Western capitalistic institutions (Giddens, 1976).

Beyond its obvious socioeconomic relevance, Weber's concept as a psychological construct magnetized various researchers and gathered momentum. McClelland (1961) elaborated on this conception, and related the work ethic to achievement motivation and economic prosperity within different cultures.

Mirels and Garrett (1971) in their attempts to explore the psychological nature of this construct, developed a 19 item, factor analyzed scale. They were one of the first ones to conceptualize the Protestant Ethic (PE) as a dispositional variable. However, prior to this, Blood (1969) developed an eight-item Pro-Protestant Ethic scale. During 1971, both Mirels and Garrett (1971) as well as Wollack, Goodale, Wijting and Smith (1971) published their measures of the Protestant Ethic. Wollack et al's (1971) Survey of Work Values (SWV) was comprised of 54 items.

Waters, Baltis and Water (1975) have assessed the interrelationship between Wollack et al's (1971) Survey of Work Values, Blood's (1969) Pro-Protestant Ethic scale and Mirels and Garrett's (1971) Protestant Ethic Scale. Additionally, they correlated each scale with the Rotter's I/E Scale, SAT total score, and cumulative grade point average. Their results were consistent with Mirels and Garrett's (1971) findings that higher PE scorers were more internal. None of the PE scales were significantly related to academic performance (as measured from GPA scores) and except for the SWV extrinsic subscales, the PE scales were unrelated to SAT scores. The three Protestant Ethic scales were positively and significantly correlated with each other. However, these researchers did not produce any normative data on any of these scales as the current author has done.

The PE scale has been correlated with other personality measures. Mirels and Garrett (1971) found a positive relation to the Mosher scales for sex guilt and morality conscience guilt, authoritarianism, and internal locus of control in an all-male sample. However, for both sexes, PE scores were correlated with the Strong Vocational Interest Blank, that is, with occupations involving concrete and pragmatic approaches to work. The obverse was true, in that the PE scale was negatively correlated with occupations requiring emotional sensitivity and humanistic values.

Norms for American males and females were generated but they didn't produce global norms as the present author has done. The findings indicated no statistically significant difference between the genders, but demonstrated good internal consistency ($\text{Alpha}=.79$) (Mirels and Garrett, 1971). Extending this, Heaven (1980) has produced cross-cultural norms for white South African males from his sample of 99 students. He found the mean PE score to be higher than the American mean. However, he does not indicate whether this difference was statistically significant. In reporting the mean score for his sample, he simply stated that, "[T]his difference suggests that white English-speaking South Africans endorsed the basic contentions of the Protestant Ethic more strongly than did American respondents" (Heaven, 1980, p. 47). Additionally, he suggests in his brief article

deleting nine items on the original scale, so that it may be more applicable for use in South Africa.

The present author feels that because Heaven (1980) did not include females in his sample, it limits the external validity of his findings even within the South African context. Further, because of this methodological omission, and the insufficient generation of global normative data which could be statistically validated through the use of t-tests, it makes suspect, tentative, or conditional his proposed modification of the PE scale. On the other hand, however, taking these shortcomings into consideration, my study parallels Mirels and Garrett's (1971) seminal work by including both males and females in the sample.

Other cross-cultural studies assessing levels of the Protestant Ethic have been conducted in Australia (Ray, 1982) Great Britain (Furnham, 1982), Asia (Bellah, 1979), India (Kennedy, 1962) and among Malaysians and the English (Furnham and Mahiudeen, 1984).

The differences between religious groups in differential adherence to the Protestant Ethic have generated much discussion when observed in relation to achievement (Lenski, 1963). This thesis though has been challenged (Schuman, 1971; Duncan and Featherman, 1972). Beit-Hallahmi (1979) has argued interestingly enough that the gap between Catholics and Protestants is being closed.

Other studies have attempted to discover behavioral correlates of the Protestant Ethic. Merrens and Garrett (1975) have assessed the relationship between repetitive work and endorsement of Protestant Ethic items. The results revealed that subjects who scored highly on the scale spend more time working on an assigned task, and therefore produced significantly more output.

McDonald's (1972) research has presented some additional findings on the correlates of the PE scale. He found that endorsement of PE items was related not only to negative attitudes towards the poor, but also opposition to a guaranteed minimum annual income. Besides this, high PE scores were related to authoritarianism, regular church attendance, and certain values that emphasize self-control, ambition, and salvation. Segalman (1968) outlined that social welfare was antithetical to the Protestant Ethic, yet it was functional for the establishment, in that, its existence subtly reinforced the value of the work ethic. "[I]n a sense, social welfare programs of that era served as a kind of human 'Department of Sanitation' in a Protestant Ethic society where being inefficient and unskilled is immoral and where the immoral can be exploited or discarded with impunity" (Segalman, 1968, p. 129). McDonald's (1972) empirical research has provided substantive support for these ideas.

In extending the number of correlates of the Protestant Ethic notion, Beit-Hallahmi (1979) assessed the link between PE and five variables: religious group affiliation, ethnic self-identification, political self-identification, socioeconomic status, and religious beliefs. His findings indicated that PE scores were significantly related to all the above mentioned variables except socioeconomic status, thus providing empirical support that the Protestant ethic is not only a dispositional variable, but a social psychological one.

An intriguing dimension of Beit-Hallahmi's (1979) research, not found in Mirels and Garrett's (1971) work is his assessment of the PE scale and its relationship to religious self-identification, which is one of the variables he controls for. This leads him to logically suggest that major religious groups share the same American core culture. He attempts to analyze different ethnic groups within the United States, but doesn't present normative data as the current author does on a sample of these ethnic groups.

FEAR OF SUCCESS

Introduction

The motive to avoid success or the fear of success (terminologies are used interchangeably) has been conceptualized within the framework of the expectancy-value theory of achievement motivation. This construct made its debut appearance in the achievement motivation literature with Matina

Horner's (1968) doctoral dissertation at the University of Michigan. She attempted to explain the unresolved sex difference in the literature. In fact, unlike men, women did not show an increment in need for achievement (n Ach) imagery on the TAT in response to the "arousal" experimental situation stressing competence and mastery. However, an elevation in achievement imagery was found when the instructions emphasized that stories would be assessed in terms of levels of social skills. Both males and female participants produced little imagery to the female stimulus figures (Veroff, Wilcox and Atkinson, 1953).

Horner (1968) conceived of the motive to avoid success as a stable inhibitory mechanism or predisposition acquired during early socialization, and which is latent until aroused during competition in a mixed sex group. The dominant societal stereotype views intellectual strivings, achievement motivation, and mastery as being antithetical and incompatible with traditional sex-role beliefs of "femininity". Therefore, the expectancy that success will be followed by negative consequences arouse anxiety or fear of success in high ability/high achievement-oriented women. Success, therefore, has both a positive and negative valence.

The awakening of this intrapsychic barrier is contingent upon the (1) expectation about the consequences of one's actions, and (2) the values of these consequences.

In Horner's (1972) original hypothesis, she claimed that fear of success (FOS) was more germane to women than men. On the other hand, this assumption seems timeworn in the face of overwhelming evidence to the contrary (Tresemer, 1974; Condry and Dyer, 1976; Hoffman, 1974; Goodmonson, 1973).

The research participants in Horner's (1968) study were freshmen and sophomores at a large Midwestern university. Ninety females, and 88 males participated. They were asked to write stories in response to the following verbal cue, "After first term finals, Anne finds herself at the top of her medical school class". The name "John" was substituted for "Anne" with the appropriate change in pronoun. Her findings indicated that 65.5% of the female subjects in comparison to 9.2% of the males wrote FOS stories.

Using a simplistic present/absent scoring system, Horner found that stories scored for negative imagery expressed:

- (a) unfavorable consequences because of success
- (b) negative affect about success
- (c) anticipated negative consequences because of success
- (d) conflict about success
- (e) instrumental activity away from present future success
- (f) denial of the situation and
- (g) exhibition of bizarre, and/or unrealistic responses to cue.

The chi square difference between male and female stories was significant at the .0005 level.

Women high in FOS do exact a heavy price, in that, they experience frustration, hostility, aggression, bitterness, and confusion. They are apprehensive about affiliative loss, social isolation, and rejection, as well as fearful of the perceived loss of femininity. In order to reconcile their high intellectual ability with their internalized sex-role appropriate behavior, these women "resolve" their conflicts by veering towards traditionally feminine majors (Horner and Walsh, 1974).

Fear of failure (FOF) can be subtly distinguished from fear of success. However, they both are inhibitory mechanisms that are debilitating for successful performance. Fear of failure though represents the anxiety an individual experiences about the expectancy for failing. On the other hand, FOS is the negative affect and discomfort that an individual feels over the expectancy of succeeding.

A review of 46 studies revealed that the percentage of subjects showing FOS in their stories ranged from 11% to 88% in females, and a median of 47%, and from 33% to 86% in males with a median of 43% (Tresemer, 1974). Paludi (1981) and her fairly recent review of 64 studies found that FOS in stories for females ranged from 6% to 93% with a median of 49%, and from 7% to 95% for men, with a median of 46%. These recent trends indicate higher percentages of FOS stories for both men and women, in addition to elevated median scores for the two groups.

Cross-cultural studies on the fear of success have been conducted (Feather and Raphelson, 1974). Other studies have attempted to replicate Horner's (1972) study with some modification in methodology (Hoffman, 1974) or have extended the boundaries of this research (Paludi, 1979); or assessed the relationship to other variables (Goodmonson, 1973; Beldner, 1975; Tangri, 1972).

Measures of Fear of Success

Until recently, the only measure of FOS was the TAT verbal cue that Horner (1968) developed for use in her seminal work. Scores were derived from this single projective cue of which only a simplistic present/absent system scoring with specified criteria to judge the imagery was used. Within recent years, a more sophisticated scoring system has been developed (Horner and Fleming, 1977).

There has been a spate of controversy in the literature concerning the unreliability of projective measures, and the interpretation of protocols written to verbal cues (Zukerman and Wheeler, 1975; Paludi, 1979; Tresemer, 1974, 1977). In response to some of these cogent criticisms, a number of "objective" measures have developed in the effort to tap the underlying dimensions of the FOS construct.

Pappo (1972) was one of the first researchers to accept this challenge to develop a paper-and-pencil measure of FOS. The final version of the scale was composed of 83 items. The

response format was essentially a forced-choice one, and he used the theoretical base of Harry Stack Sullivan. There are a number of dimensions that the scale purports to tap. They include (1) negative affective reaction, (2) repudiation of competence or motivation, (3) sabotage of success, (4) pre-occupation with evaluation and competition, (5) self-doubt and negative self-evaluation, (6) distractibility and impairment of concentration.

A Kuder Richardson (KR) reliability of .89 was reported and the scale was correlated with three personality tests. These include Rotter's (1966) internal-external scale, the Rosenberg (1965) self-esteem scale, and the Debilitating Anxiety scale (Alpert & Haber, (1960).

Two years later in 1974, Cohen following along a similar vein attempted to measure anxiety about success in general without a principal emphasis on academic achievements. She developed a 64 item, forced-choice scale. Like her predecessor, she worked with a neo-Freudian theoretical framework. FOS was conceived of as a defense strategy lodged in the anal stage of Freud's psychosexual stages of development.

She identified nine factors that were characteristic of high FOS scorers. They include:

- (1) anxiety over the expression of needs and preferences.
- (2) reluctance to acknowledge personal competence.
- (3) impaired concentration and distractibility.
- (4) indecisiveness

- (5) Safety Value Syndrome-fear of loss of control
- (6) illegitimacy of self-promotive behavior.
- (7) anxiety over being the focus of attention.
- (8) preoccupation with the underplaying of effectiveness.
- (9) factor nine

Cohen reported a KR-20 split-half reliability of .90 and a mean intercorrelation among the unrotated factors of .42. In attempts to assess the construct validity of this scale and to determine whether the fear of success is a unitary or multifaceted trait, Daniels, Alcorn and Kazelskis (1981) performed a factor analysis. Using a total of 501 entering freshmen, their findings indicated that six factors accounted for 99.6% of the common variance; accordingly, these factors were relabelled. Additionally, their results demonstrated that only 15 items within five of the six factors could be retained.

Good and Good (1973) attempted to construct a measure of the motive to avoid appearing incompetent, which has been construed as FOS measure. This is bound up with the notion of saving face. Initially, they began with a pool of 40 true/false items. The preliminary analysis of which the KR-20 was .88 discarded four items. Of the remaining 36 items, nine were modified through rewriting. The final form of the scale yielded a reliability of .89, with scores ranging from 0 to 36.

The mean score difference between males and females was significant at the .001 level, where females showed more evidence of face saving behavior than males.

However, this scale doesn't purport to measure fear of success in the same way formulated by Horner and others. Also, the scale is not adequately balanced to control for acquiescent response style, in that, 20 items were keyed in the affirmative direction, while 16 were keyed in the negative direction. Additionally, no concurrent validity or any other validity data are reported for the scale by the test constructors. Therefore, more extensive work needs to be done to improve these methodological inadequacies and to establish it as a measure of fear of success.

In a later attempt to construct a FOS scale, Zukerman and Allison (1976) developed a 27 item Likert scale (7 point). Examples of some of the items on this inventory include, "In competition I try to win no matter what", "When you're on top everyone looks up to you", "Achievement commands respect". This study utilized this scale as a measure of FOS.

Initial item analyses performed resulted in the elimination of a total of eight items from the original 35 items. Potential scores of their Fear of Success Scale (FOSS) ranged from 27 to 189, with high scores indicating high FOS. The reliability of the scale was .69 for males, and .73 for females. The difference between mean scores between males and females was statistically significant ($P < .01$), and provided evidence concurrent with that of Horner's.

They correlated their inventory with Horner's measure and found that the correlation between these two scales was significant ($p < .05$) in one sample. However, they noted "[I]n view of the different nature of the two tests, the significant correlations are encouraging. At the same time, it is obvious that the two measures do not tap the same construct" (Zukerman and Allison, 1976, p. 425). As anticipated, they found a negative correlation between the FOSS and the Mehrabian scale in their first sample. Validation was provided for the scale by assessing the relationship of FOS to casual attributions. It was hypothesized in view of past research that individuals who scored high on the FOSS would attribute success to external factors, and attribute failure to internal factors. Their hypothesis was confirmed in that high FOS subjects (both males and females) attribute success to external factors, and failure to internal factors.

In a fairly recent study, Paludi (1981) explored the relationship between the scales developed by Good and Good (1973), Pappo (1972), and Cohen (1974). She administered the objective measures of FOS in addition to Horner's fantasy-based measure, and found statistically significant relationships between the objective FOS measures for the genders. Unlike Zukerman and Allison's (1976) findings where their inventory was significantly correlated to Horner's story-telling technique, Paludi (1983) found the three

measures unrelated to Horner's. She interpreted these findings in terms of the diverse and inadequate conceptualization of the FOS measure, and cautions against the widespread use of these three scales.

Criticisms of the Fear of Success Construct

Voices of dissent have been raised in response to this construct that has gained popular empirical and media attention. One of the most fundamental issues raised in the literature is whether Horner's fantasy-based measure is tapping a stable disposition or a sex-role stereotype. Epstein (1976) has further outlined some additional criticisms. They include:

- (1) The misinterpretation of Horner's study.
- (2) The emphasis on early socialization practices, implying some stability and therefore very little opportunity for change. In other words, the idea is that one could "blame" early experience but is unable to do much about it.
- (3) A criticism that has ramifications within the socio-politico structure is that, if women don't want to be in top position, then one can't "blame" employers for denying them upwardly mobile jobs.

Smith (1976) in addressing himself to some critical issues associated with research on FOS showed that studies have employed small and/or atypical samples underscoring the

need for investigators to report interscorer reliability. He emphasized the need for further theoretical and conceptual refinement, with attention on its contributions to the scientific study of human motivation and/or gender differences in behavior.

Zuckerman and Wheeler (1975), Monahan, Kuhn, and Shaver (1974) have advanced the notion that FOS may reflect cultural stereotypes of behavior deemed socially acceptable for the genders rather than a personality disposition unique to women. In harmony with this idea, Cherry and Deaux (1978) found that both male and female research participants generated more FOS stories to the Anne cue. Other problematic features of FOS construct are its inadequate operational definition, its narrow conceptualization of success, and lack of a comprehensive scoring manual even though there has been some recent attempts to remedy this (Horner and Fleming, 1977; Horner, Tresemer, Berens and Watson, 1973).

It is recalled that Horner's (1968, 1972) FOS measure was comprised of only one verbal TAT cue. However, there has been some modification and extension of the number of cues beyond this singular measure. Yet, despite these methodological refinement, some investigators continue to depend solely on Horner's singular cue.

The low reliability and predictive validity of Horner's fantasy-based measure of FOS have also been critiqued.

Another criticism of this concept that has crystallized is the idea that FOS may be related to realistic expectancies about the negative consequences of deviating from norms and sex-appropriate behavior (Condry and Dyer, 1976). They have outlined difficulties of the FOS construct on two levels of conceptualization. One of these is at the level of evidence; they advance little support for the notion that when women acquire sex-role appropriate behavior, they also acquire a conflict between femininity and achievement. Additionally, there is little evidence that this internalized conflict results in a personality disposition that is lifted from a state of dormancy in an achievement-oriented context.

Also, these investigators have addressed the issue that FOS might in fact be related to external problems in the society rather than an intrapsychic process germane to women. The predominant use of college students as research participants in the methodological design of FOS studies has been another problematic itch. Very little research is conducted on other samples, and on other career life-styles outside of this restricted range. Further, there has been very little investigation done with males and females from different subcultural and ethnic groups.

Finally, one criticism to the far left that some have levelled, is the need to either abandon the label FOS altogether, or to more precisely rename it. (Paludi, 1981, Smith, 1976).

Fear of Success in Black Women

As have been previously outlined, there is a morass of controversy in the FOS literature with its attendant inconclusive and inconsistent findings. Most of this empirical research has focused solely on, and have assessed the existence of this motivational disposition in white women, with varying emphasis on their male counterparts. However, there is a paucity of research conducted in which Black women serve as principal or comparative subjects. The relationship between FOS in Black women is almost a statistical rarity, with a limited number of exceptions (Fleming, 1982; Esposito, 1977).

In assessing the total number of articles and empirical research on this construct vis-a-vis Black women, Gonsalves (1983) performed a computer search. This endeavor yielded a total of 20 references, five of which were unpublished manuscripts and spanned a 12 year period from 1970 to 1982.

The first research examining the relationship between this avoidant tendency and social class was conducted by Weston (1969) in his master's thesis at Howard University. In a later article that he coauthored with Mednick (1970) based on his previous research, he found a lower incidence of FOS imagery in Black women compared to their white counterparts. A secondary hypothesis advanced, was that

lower class Black women would generate fewer motive to avoid success stories than their middle-class cohorts. However, this prediction was unconfirmed, as no statistical difference emerged. These findings were interpreted in light of Black cultural values which promote the view that intellectual mastery is compatible with femininity.

During the same year, Bright (1970) found less incidence of FOS in Black women vis-a-vis their white cohorts. Puryear (1971, 1974) in extending this research, augmented and extended the number of personality/behavioral correlates of the FOS construct. She investigated the relationship between the avoidant motive to militancy and affective attachment. In view of the militant rhetoric where Black women were encouraged to take a supportive and/or ancillary role to the Black man, and were encouraged to assimilate values of passivity, Puryear (1971) postulated that women who endorsed militant attitudes and views would experience intense conflict about intellectual achievement. Yet another hypothesis that was formulated in view of Gump's (1972) work on sex-role ideology in Black women, was the idea that Black college women who were either attached through engagement or marriage would be less likely to exhibit FOS. In other words, attachment would moderate the relationship between FOS and militancy.

Fear of success was measured by using Horner's medical school cue, in conjunction with newly made-up ones. One of

these include, "Fannie has been elected head of the local Black liberation group". Attachment was measured using Gump's (1972) rating scale, while militancy was measured by the modified Robinson (1971) scale.

The results indicated a confirmation of the hypothesis that militant women produced a copious amount of FOS imagery compared to their non-militant counterparts. FOS though was not significantly related to attachment. These findings were explained in terms of the women not taking into account the attitudes of the males to whom they were attached.

Mednick and Puryear (1976) in a study published later, replicated the earlier Weston and Mednick's (1970) study. They predicted that FOS would occur more frequently for white women than for Black women. Another stated purpose of their research was to compare the levels of success avoidant stories in 1971 with those reported in the 1968 group. Their findings indicated a significantly lower level of FOS in white women tested in 1971, as compared with those tested in 1968. However, an unexpected finding was the increment in FOS imagery for Black women. This result didn't confirm the race difference hypothesis, and underscored the need for additional empirical investigations.

Esposito (1977) in extending Puryear's (1971, 1974) attempt at finding correlates of FOS, related the construct to occupational choice. Previous research by Horner (1972)

had indicated that traditional women high in FOS veered toward sex-role appropriate fields.

Blacks and whites of both genders served as research participants. Five verbal TAT cues were administered to assess levels of this avoidant motive while Holland's Self Direct Search (SDS) was used to measure vocational choice. Gender differences emerged, in that, women (both Black and white) scored higher than men on the FOS scale. This finding is congruent with earlier research on gender differences in FOS. Also, high FOS stories were associated with traditional, sex-role occupations. Esposito (1977) found interestingly enough that the motive to avoid success is increasing among Black females, and decreasing in Black males, and provided support for the claim that FOS in Black women may be related to desires for economic well-being.

In a more recent study of FOS as it relates to Black women, Savage, Stearns and Friedman (1979) assessed the relationship between the success avoidant motive to locus of control, self-concept, and masculinity-femininity. They advanced the hypothesis that (a) college seniors would demonstrate higher levels of FOS than freshmen, (b) externals would express more FOS imagery than internals, (c) women with negative self-concept would express more FOS imagery than women with positive self-concept and (d) women who scored in

the feminine direction of the M/F scale would express more FOS imagery than women who scored in the masculine direction.

No significant differences for freshmen and seniors emerged. However, the high FOS scorers were more externally oriented in locus of control. As a whole, however, the research participants had positive self-concepts, and demonstrated like other research on Black women (Weston and Mednick, 1970, Bright, 1970) low levels of FOS. Femininity though was uncorrelated with any of the FOS measure.

Fleming (1978) operating under the assumption that FOS is an insignificant motivational variable among Black college women outlined that the primary purpose of her investigation was to assess whether this inhibitory mechanism was aroused during competition in a cross-sex group. Other secondary objectives were to test the relationship of the motive to avoid success to achievement related behaviors such as role preference, choice of college major, occupational aspirations and test anxiety. The relationship between need for achievement and achievement behavior in Black women was also tapped. Social class impacted greatly on the findings, in that, among middle-class women, FOS facilitated competition with a male peer. For working-class Black women, FOS was an inhibitory motivational variable adversely affecting achievement strivings. This result goes counter to Horner's (1968) findings and in fact represents a challenge to the belief that FOS is an insignificant motivational determinant for Black women.

In a more recently published article on FOS in Black males and females, Fleming (1982) found no evidence of success avoidance in either gender among a sample of graduate students. However, among Black females, the motive to avoid success was related to conflicting values of traditional sex-role beliefs about femininity and career interests. Additionally, these women were likely to come from working-class backgrounds. Fear of success males seem to come from small, middle-class Southern families and were likely to endorse stereotypical ideas about Black males. Also, these research participants were likely to describe the ideal wife as "nice" and "sweet".

Clearly then, the FOS literature on Black women is riddled with inconsistency. A large number of studies report low levels of the imagery indicating that the motive to avoid success is an irrelevant motivational determinant among Black women. Other studies report no race difference, yet others report elevated scores for Black women. Research on fear of success among Black males represent a statistical rarity. At least in part, some of this inconsistency can be accounted for in terms of the inadequacy of projective measures. However, steps have been implemented to remedy this situation. Moreover, the issue of social class as it impacts on FOS remains unsettled. Perhaps more adequate conceptualization and measures of social class (a fuzzy variable) need to be done.

CHAPTER TWO
REVIEW OF RELEVANT LITERATURE

The underlying theoretical and empirical relationship among field independence, the fear of success and the Protestant ethic has essentially remained unexplored and uncharted. In fact, the relationship of cognitive styles to motivational variables has been sparsely reported on in the literature, with a few exceptions (Wertheim and Mednick, 1958). In spite of this, these aforementioned constructs are concurrently related to a similar array of personality and behavioral correlates. It is from this kind of assessment that conceptual linkages may be established at the empirical level and predictions may be drawn using the classical approach (Bailey, 1982).

It is the author's attempt at this juncture to review and integrate the literature in order to assess the nature of these theoretical connections. Witkin et al., (1962) stated that "...with a less structured defensive system a greater amount of anxiety is apt to be expressed". Therefore, lower levels of differentiation (FD) would be associated with higher levels of anxiety. Despite this professed relationship, there has been a paucity of research on anxiety and perceptual articulation. However, one of these studies conducted by Dargel and Kirk (1971) examined the inter-

relationship among manifest anxiety, field dependence, and task performance. Their results demonstrated that highly anxious subjects made more errors on the perceptual learning task than low anxious subjects. Field independents (FI) were superior compared to field dependents (FD) in performing moderately difficult tasks. Contrary to their original hypothesis though, there was no interaction between manifest anxiety and FD. Two years later, Dargel and Kirk (1973) retested the relationship between anxiety and FD and once again failed to confirm the purported degree of association.

Loo and Cauthen (1976) extended the research of Dargel and Kirk (1971, 1973) by assessing the interrelationship between trait and state anxiety to perceptual articulation. Again, contrary to Witkin et al's., (1962) assertions, they found no statistically significant relation between anxiety and FD. One methodological note is that this inconsistency in findings may be partially accounted for in terms of the sole use of female subjects in two out of the three studies. Additionally, and more importantly, different measures of cognitive styles and anxiety were employed.

Canavaan-Gumpert, Garner and Gumpert (1978) have assessed the relationship between fear of success (FOS) and anxiety. Their findings demonstrated that high FOS subjects expressed anxiety in academic testing situations. Confirmatory evidence was evinced from Horner's (1968) research as she

noted that the expectancy that success will be followed by negative consequences arouse anxiety or fear of success in high ability/high achievement-oriented women. She explicitly stated that this conflict generates "a disposition to become anxious about achieving success because they expect negative consequences as a result of succeeding" (Horner, 1972, p. 159). The anxious individual may proceed to sabotage his/her success (Pappo, 1983).

Beyond this similar correlational pattern between field dependence and the fear of success, field independence and low levels of fear of success have both been related to enhanced self-concept (Canavaan-Gumpert et al., 1978; Soat, 1974; Watkins and Astilla, 1979; Pappo, 1983). Also, Miller (1980) found that individuals who perceived their parents as encouraging success and autonomy had lower FOS levels. A field independent orientation has been associated with more independence, less conformity and to early socialization fostering autonomy (Witkin and Berry, 1975; Witkin et al., 1962; Witkin, Price-Williams, Bertini, Christiansen, Oltman, Ramirez, and Van Meel, 1974; Chatterjea and Paul, 1982; Kagan, 1974). Witkin et al's., (1978) study augments this evidence by stating that a system that is differentiated is more complex and specialized.

Horner and Walsh (1974) evinced support that high FOS subjects who have internalized sex-role appropriate behavior

will resolve their intrapsychic conflicts by veering towards traditionally feminine majors. Forbes and King (1983) found that this relationship between FOS and sex-role is reliable in the predicted direction. Similarly, Thomas (1983) found that women high in FOS perceived their career choices to be more traditional, while Fleming (1982) found that for females, the motive to avoid success significantly correlated with having majored in the social sciences while in college. This finding on choice of majors or fields of study of FOS subjects has been substantiated as descriptive of a field dependent orientation. Field dependents gravitate to the liberal arts, humanities, social sciences, and to non-analytic and concrete vocational interests (Arbuthot and Gruenfeld, 1969; Pierson, 1965; Windsor, 1983; De Russy and Futch, 1971; Witkin, Moore, Oltman, Goodenough, Friedman, Owen and Raskin, 1977). Therefore, in view of the foregoing, it is hypothesized that field dependents would be more likely to endorse fear of success items.

Midgley and Abrams (1974) have investigated the relationship between locus of control and FOS. Congruous to their hypothesis, they discovered that a high level of the motive to avoid success was associated with externality. Similarly, the relationship between FD and locus of control has been subjected to empirical investigations. Willoughby (1967) using the Adult Locus of Evaluation and Control scale found that field dependents would rely on others for self-assessment. Unexpectedly, FD was uncorrelated with externality.

Using three locus of control measures (Levenson's Locus of Control scale, the Powerful Others, and Chance scales) and the HFT with a Filipino group and an American sample, Lau, Figuerres and Davis (1981) found no linear relationship between locus of control and FI. Results pointed to a curvilinear relationship with those high in FI and FD being more external than those scoring in the middle range of this bipolar dimension.

In Witkin et al's., (1962) earliest conceptualization, FD was defined as a reliance on either the visual field or the body as referents in the perception of the upright. FD individuals have an external frame of reference and are global in processing information. Also, field dependents accept the prevailing field as given, and demonstrate more interpersonal competencies. Once again, in view of the foregoing integration, field dependents would be more likely to endorse significantly more fear of success items.

In continuing then, the relationship between FI/FD and the Protestant ethic may be similarly examined in terms of the cluster or patterns of correlates. As stated before, field independence is associated with an independent, non-conformist stance. In deducing the embryonic formation of the ubiquitous force called "capitalism", Weber (1958) demonstrated that the Protestant ethic was based on highly individualistic and competitive entrepreneurial standards.

Additionally, McClelland (1961) argued that Protestant parents stressed self-reliance, mastery training, and self-monitoring in their child-rearing, furthering reinforcing the idea that FIs would be more likely to endorse Protestant Ethic items.

Interestingly enough, Ray (1982) has emphasized the individualistic kind of socialization practices and orientation among Protestants. He stated that "the importance of personal relationship with the Deity among Protestants led to early independence training among children, thence to achievement motivation and thence to actual economic achievement" (Ray, 1982, p. 128). Albec (1977) also makes a similar point, in that, capitalism promoted an increase in personal autonomy. These are all characteristics associated with a field independent orientation, giving rise to the a priori hypothesis that field independents will endorse more Protestant Ethic items.

Mirels and Garrett (1971) found that PE scores for both sexes were correlated with the Strong Vocational Interest Blank and with occupations involving concrete and pragmatic approaches to work. The obverse was true, in that the PE scale was negatively correlated with occupations requiring emotional sensitivity and humanistic values. The foregoing corresponds to empirical research relating occupations entailing sensitivity to a FD mode of perceptual articulation. Additionally, Merrens and Garrett (1975) garnered support that there was a positive relationship between

patterns of PE endorsement and spending more time working on an assigned task. Stake (1983) too found that high PE subjects produced more on the basis of worker-controlled variables such as number of hours worked etc., than did low PE endorsers. Achievement motivated individuals show greater persistence in working at an achievement related task and demonstrate more efficiency than low achievement individuals (Atkinson and Litwin, 1960). Wertheim and Mednick (1958) found a positive relationship between the need for achievement and FI. Deductively then, endorsement of PE items would be related to a FI orientation.

Fear of success and the Protestant ethic can be theoretically related to each other. Horner's (1968) findings demonstrated that women who scored high on this dimension experience anxiety in achievement-related situations and that this motive is aroused during competition. On the other hand, according to the Calvinist dogma, one's material success was a visible and tangible evidence of one's calling; this view fostered and promoted competition. In fact, it provided the impetus for the rational pursuit of wealth (Weber, 1958). Therefore, rather than perceiving an unfavorable consequence or experiencing a negative affect as do high FOS subjects, endorsers of PE items would envision successful outcomes as result of their conscientiousness, asceticism, and/or self-control. In other words then, high FOS scores would be less likely to endorse PE items.

Another conceptual linkage is provided by Midgley and Abrams (1974) and Zuckerman and Allison's (1974) findings which indicate a relationship between the motive to avoid success and PE. This evidence is garnered in relationship to findings on causal attributions. High POS individuals attribute success to external factors. On the other hand, Mirels and Garrett's (1971) findings indicated that high PE scorers were more internal in their locus of control as measured on the Rotter Internal-External scale. Therefore, high PE scores would probably score low on the POS scale.

Mirels and Garrett (1971) found a positive and significant correlation between the PE scale and the California F scale ($r = .51$). Previously, Stuart (1965) confirmed the hypothesized relationship between authoritarianism and FD. A finding that fits in with the conceptual linkages between FD and authoritarianism/dogmatism is that of Di Maria and Nuovo (1983). They found that dogmatism scores negatively correlated with the GEFT scores. In other words, articulated and differentiated individuals were less dogmatic. The Mirels and Garrett's (1971) result is surprising and must be interpreted in light of the evidence that the F scale is contaminated with acquiescence response style (Messick, 1967; Messick and Jackson, 1958; Peabody, 1961). Rather than reflecting authoritarianism, high PE subjects and FD individuals may be endorsing these scale items irrespective of item content. Marlowe and Gergen (1969) argue that the F

scale scores rather than reflecting underlying personality dimensions reflect sociocultural norms.

Another revealing set of findings relating PE to FD has been the correlation of the F scale scores with political conservatism. Gonsalves and Bernard (1983a) correlated the PE scale with the Wilson-Patterson (1966) Conservatism Scale (a replacement for the F scale) and found a positive and significant correlation ($r = .33, p < .001$). However, a factor analysis of a reduced version of the C scale yielded 3 factors viz. religiosity, control-punitiveness and liberality (Kirton, 1978). So, high F scale and PE endorsers may also be responding to the underlying "religious" dimension. Also, in view of Thomas and Mischel's (1972) findings that high scores on the F scale are related to Christian traditionalism and political conservatism, it is possible to account for the unexpected relationship between PE (high levels) and FD in terms of their endorsing traditional/religious beliefs.

Another set of research findings that is worth mentioning, in that it relates to a secondary hypothesis, is the differential effects of race on levels of field dependence for Afro-Americans and Afro-Caribbeans vis-a-vis their Anglo cohorts. The research on cognitive styles as it relates to these two groups indicate a FD orientation as described in Chapter One (Barclay and Cusumano, 1967; Schratz, 1976; Gill et al., 1968; Ramirez and Price-Williams, 1974; Ritzinger, 1971; Shade, 1981; Vernon, 1965).

The tendency on the part of Afro-Americans to score in the FD direction is not surprising when viewed in the context of the legacy of African philosophical thinking. This collective consciousness with its emphasis on cooperation, communalism, and mutual aid are features that have remained remnants of our ancestral existence (Nobles, 1980; White, 1984; Jones, 1980; Barnes, 1980). These societal beliefs have been shown to be integrally locked into a FD mode of orientation (Berry, 1966; Goodenough, 1978).

Unquestionably, there is a paucity of empirical investigations that have examined cognitive styles among Caribbean subjects. Vernon (1965) found that 10 1/2 to 11 year-old Jamaican boys scored in the FD direction on a battery of perceptual and performance tests. Mitchelmore (1974a) assessed the relationship between FD and socioeconomic status of grade 9 children in Jamaica. He obtained a small but significant correlation between these two variables for boys ($r = .24, p < .01$) and for girls ($r = .21, p < .01$). Furthermore, father-absent boys were more FD than father-present boys. This relationship was non-significant for girls. Roach (1979) using 206 boys and 212 girls from five urban schools who were in Grade 6, found that for girls, FI correlated positively and significantly with socioeconomic status, but significantly and negatively with father's absence. This finding didn't hold water for boys.

One study that the author is aware of that has examined perceptual style among college students in the Caribbean is the research of Stuart, Murgatroyd and Denmark (1978). Using 100 research participants (25 East Indian males, 25 East Indian females, 25 Black males, 25 Black females) in Trinidad, they administered the Internal-External locus of control scale and the Edwards' Personal Preference Schedule (EPPS). Their results indicated that the East Indians obtained higher scores on the Modified RFT (displaying a FD proclivity) than Blacks. Also, they found no significant relation between RFT and I-E scores. Female students of both groups obtained higher mean RFT scores compared to their male counterparts.

Green (1970) have found empirical support that the attitudes of Caribbean Blacks in Trinidad are similar to that of West African Black students. East Indians who share the same geographical area share dissimilar attitudes with Blacks. Green (1970), noting the cultural continuity for Blacks from their West African legacy states that "[T]he main aim is to avoid ostracism and to maximize one's inclusiveness through geniality and conformity to the group norms" (p. 192). This type of world view and stylistic orientation is associated with field dependence.

Further, Kerr (1952) stated that in the Jamaican society, discipline is severe and the upbringing is strict. Dyk and Witkin (1965) as well as Witkin et al., (1962, 1974) found

that strict childrearing practices emphasizing conformity to parental norms is associated with field dependence. Goodenough (1978) comments on this link of socialization practices to the development of field dependence. He states, "[W]hen the course of development is either governed by a tightly organized, strictly enforced set of rules and prescriptions for behavior, or when parental nurturing and protective functions inhibit separation, then greater field dependence ensues" (p. 195). In view of the foregoing, Afro-Caribbeans like Afro-Americans would have a FD mode of perceptual orientation.

CHAPTER THREE
HYPOTHESES AND RESEARCH DESIGN

Hypotheses

In view of the foregoing discussion in the literature review, the following hypotheses may be appropriately advanced.

1. Field dependents would endorse more FOS items than field independent individuals.
2. Greater levels of psychological differentiation (FI) would be associated with higher PE endorsement.
3. High levels of FOS would be associated with low levels of PE endorsement.
4. The HFT and GEFT should be positive and significantly correlated.
5. The two PE scales would be positively and significantly correlated (Water et al., 1975).
6. There will be no statistically significant difference in PE endorsement among Afro-Americans and Afro-Caribbeans (Gonsalves and Bernard, 1983).
7. Female college students will be more FD than male college students (Boersma, 1968; Blanton and Nunnally, 1964; Parasnis and Long, 1979; Dreyer, Dreyer and Nebelkopf, 1971; Piebert, 1967; Erdos, 1979; Copeland, 1983; Maccoby and Jacklin, 1974; Tyler, 1974, Witkin, Dyk, Faterson, Goodenough, and Karp, 1974; Holm, Bergman and Borg, 1980; Hughes,

Hall, and Chambers, 1978; Petrakis and Hanson, 1981; Bogo, Winget and Gleser, 1970; Witkin et al., 1962; Morf, Kavanaugh and McConville, 1971; Stuart and Murgatroyd, 1971; Hulfish, 1978; Parlee and Rajagopal, 1974).

8. Black women will score lower on the Zukerman and Allison (1976) FOS scale (indicating lower levels of FOS) compared to their white cohorts (Weston, 1969; Bright, 1970; Horner, 1968, 1972).
9. Afro-Americans and Afro-Caribbeans will score in the FD dimension on both the HPT and GEFT vis-a-vis their Anglo counterparts.
10. There will be no gender differences on the HPT.

METHOD

Subjects

A total of 300 subjects voluntarily participated in this investigation. The research participants were recruited as part of a nonprobability sample from a number of undergraduate institutions within the CUNY system, Kean College of New Jersey, and at Bates College in Lewiston, Maine.

Of the 300 subjects, 17 were excluded from the analyses because they checked "Hispanic" in response to the question assessing their race. Of the 283, 185 (65.4%) were Black, 94 (33.2%) were white and four individuals failed to identify

their race. Of the 185 Blacks, 88 were Afro-Caribbeans and 95 were Afro-Americans. Two Black subjects failed to specify their ethnicity.

Even though two subjects failed to indicate their gender, the sample was predominantly female. The subjects ranged in age from 18 to 64, while the mean age was 22.9 years.

The sample constituted an admixture of freshmen, sophomores, juniors, and seniors. However, there were more freshmen who participated in this investigation. The modal reported GPA was 3.00 (out of 4.00), while a large number of participants were first borns (34.6%). The mean family income for the sample was \$30,742, while 88.3% (250) of the participants were full-time students.

Test Materials

The French, Ekstrom and Price (1963) Hidden Figures Test, the Group Embedded Figures test, the Blood (1969) Pro-Protestant Ethic scale, the Mirels and Garrett (1971) Protestant Ethic scale, and the Zukerman and Allison (1976) Fear of Success scale were all administered to the subjects. In conjunction with this, detailed demographic information was requested (See Appendix A for complete questionnaire).

Procedure

As the research participants entered the testing room, they were warmly greeted and invited to procure a seat. Verbal instructions were given, and they were asked to

respond to the questions requesting demographic information first. They then completed all the personality inventories.

In order to build confidence, the GEFT was next administered prior to the HFT. Research participants were provided with sharpened pencils and were read the formal instructions outlined in the manual (Witkin, Oltman, Raskin and Karp, 1971). A systematic effort was made by the investigator to be personable and responsive to the questions that some of the participants raised. All clarifying questions were answered.

The GEFT (like the HFT) are timed tasks. The total administration time for the former is 12 minutes, while the HFT takes a total of twenty minutes. As in both of these tests, verbal instructions were provided.

Upon completion of the study, subjects were thoroughly debriefed as to the exact purposes of the study and were briefly informed about the nature of the three psychological constructs.

CHAPTER FOUR

RESULTS

In assessing the interrelationship among field independence, the fear of success and the Protestant Ethic for the global sample, a Pearson Product-Moment correlation was performed. The revised version of the Statistical package for the Social Sciences (SPSSX) was utilized as the software for data analyses (SPSS Inc, 1984).

In confirmation of the first hypothesis, the fear of success (FOS) scale was significantly but negatively correlated with both the HFT ($r = -.20, p < .001$) and the GEFT ($r = -.27, p < .0001$) indicating that FDs endorsed more FOS items than FIs (See Table 1). The second a priori hypothesis that field independents would endorse more Protestant Ethic items was not confirmed, in that, statistically significant but low negative correlation coefficients emerged for the two measures of field independence/dependence when they were correlated with the two PE scales. The correlation between the HFT and the Blood PE scale was $-.12, p < .02$, while an almost similar finding was demonstrated when the HFT and the Mirels and Garrett PE measure were correlated ($r = -.13, p < .01$).

The GEFT was also correlated with the two PE scales. Even though the correlations here were low and comparable to

that of the HFT, statistically significant correlations were nevertheless revealed. The correlation of the GEFT with the Blood PE scale was $-.12$, $p < .02$, while the correlation with the Mirels and Garrett's PE scale and GEFT was $-.21$, $p < .0001$. This counterintuitive finding demonstrated that field dependents endorsed items reflecting a Protestant Ethic orientation compared to their field independent cohorts (See Table 1).

In terms of the third major hypothesis of this investigation, significant but positive relationships were evinced on the two Protestant Ethic scales (PE) when correlated with the FOS scale. The Blood Pro-Protestant Ethic scale (PEA) when correlated with the FOS scale produced a correlation coefficient of $.38$, $p < .0001$, while for the Mirels and Garrett PE scale (PEB), the correlation with the FOS scale was $.46$ $p < .0001$ (See Table 1). This finding failed to confirm the a priori hypothesis that high levels of FOS would be associated with low levels of Protestant Ethic endorsement (See Table 1).

The Hidden Figures Test (HFT) and the Group Embedded Figures Test (GEFT) were positively and significantly correlated with each other as predicted in the fourth hypothesis. A correlation coefficient of $.67$ emerged for the global sample ($p < .0001$) (See Table 1).

Water et al., (1975) reported a significant and positive correlation coefficient of .70, $p < .01$ when the Blood and the Mirels and Garrett PE scales were correlated with each other. Those statistically significant findings also find support in the present analysis ($r = .43$, $p < .0001$) and confirmed the fifth a priori hypothesis (See Table 1).

Further Pearson Product-Moment correlations were performed to ascertain whether these interrelationships would pan out for Afro-Caribbeans, Afro-Americans and among Blacks and whites as separate groups. For Afro-Caribbeans, the findings produced a correlation coefficient of .69 for the HFT and the GEFT ($p < .0001$). However, unlike that reported upon for the global sample, no significant differences emerged in the correlation with the HFT and either the Blood (1969) ($r = .06$, $p < .27$) or the Mirels and Garrett (1971) ($r = -.11$, $p < .15$) measures of the Protestant Ethic. Therefore, for Afro-Caribbeanites, field independence was uncorrelated with Protestant Ethic endorsement. Neither were significant results demonstrated when the HFT was correlated with the FOS scale ($r = .003$, $p < .49$) (See Table 2). The hypothesized negative relationship between field independence and FOS didn't pan out for Afro-Caribbeans as it did for the global sample.

Furthermore, there were no significant findings demonstrated when the GEFT was correlated with the Blood PE scale for the Afro-Caribbeans. The GEFT too was uncorrelated with

the FOS scale. However, a significant but negative correlation emerged when the GEFT was correlated with the Mirels and Garrett scale ($r = -.25, p < .009$) (See Table 2).

The Zukerman and Allison FOS scale was positively and significantly correlated with the two PE scales for the Afro-Caribbean sample as in the global sample once again indicating that high FOS scores were associated with elevated Protestant Ethic endorsement. For the Blood scale, a correlation coefficient of .43 ($p < .0001$) emerged, while for the Mirels and Garrett scale, a similar correlation was evinced ($r = .43, p < .0001$). Interestingly enough and in accordance with stated hypotheses, the two PE scales were significantly and positively correlated ($r = .39, p < .0001$) for Afro-Caribbeans.

Additional correlational analyses were performed to assess the interrelationships among the three constructs in this study for Afro-Americans. Significant and positive coefficients were obtained when the HFT and the GEFT were correlated ($r = .64, p < .0001$). The field independent measures and the two PE scales were uncorrelated. However, as anticipated, the two PE scales were significantly correlated with each other for this Black ethnic group ($r = .63, p < .0001$) (See Table 3).

An analysis of Afro-Americans' endorsement on the FOS scale revealed significant but negative correlation coefficients with the HFT ($r = -.20, p < .04$) and on the GEFT

($r = -.22, p < .02$). Therefore, this finding for Afro-Americans that field dependents endorsed more FOS items is supported in the global sample. On the other hand, significant and positive relationships emerged when the FOS scale was correlated with the Blood scale ($r = .29, p < .004$) and with the Mirels and Garrett PE scale ($r = .48, p < .0001$) (See Table 3).

For Blacks (Afro-Americans and Afro-Caribbeans combined), a Pearson correlation revealed a positive and significant correlation between the GEFT and the HFT ($r = .67, p < .0001$). No significant relations were evinced when the HFT was correlated with the two PE scales or the FOS scale. However, the GEFT was negatively but significantly correlated with the Mirels and Garrett PE scale ($r = -.16, p < .02$). No significant findings were evinced when the GEFT was correlated with the Blood PE scale. The FOS scale though was significantly correlated with the Blood PE scale ($r = .35, p < .0001$), with the Mirels and Garrett PE scale ($r = .46, p < .0001$) and with the GEFT ($r = -.16, p < .02$). Therefore, for Blacks, elevated FOS scores were associated with heightened Protestant Ethic endorsement as also evidenced in the findings for the global sample. The two PE scales were significantly correlated ($r = .49, p < .0001$) (See Table 4).

For whites (all ethnicities combined), the correlational analysis revealed a somewhat different pattern among some variables. As anticipated, significant findings emerged when the HFT and GEFT were correlated ($r = .54, p < .0001$).

Significant but negative findings emerged when the HFT was correlated with the Blood (1969) PE scale ($r = -.36$, $p < .0001$), the Mirels and Garrett (1971) scale ($r = -.26$, $p < .008$), and with the FOS scale ($r = -.29$, $p < .002$). For the GEFT, nonsignificant findings were found for the Blood scale ($r = -.14$, $p < .10$), while significant and negative findings were demonstrated when the GEFT was correlated with the Mirels and Garrett PE scale ($r = -.32$, $p < .001$), and with the FOS scale ($r = -.32$, $p < .001$). Here too, the two PE scales were significantly correlated ($r = .26$, $p < .008$). The FOS scale was significantly and positively correlated with the Blood scale ($r = .39$, $p < .0001$) and with the Mirels and Garrett scale ($r = .52$, $p < .0001$). (See Table 5).

To further illuminate the patterns of interrelationships among the three psychological constructs for Black males, Black females, white males, and white females, additional Pearson correlations were performed respectively. For Black males, the correlational matrix revealed some expected findings. Confirmedly, the HFT and the GEFT were positively and significantly correlated ($r = .66$, $p < .0001$). Also, the two Protestant Ethic scales, the Blood as well as the Mirels and Garrett scales were positively and significantly related ($r = .57$, $p < .0001$). Unexpectedly though, the third a priori hypothesis that high levels of fear of success would

be associated with low levels of Protestant Ethic endorsement was unconfirmed. The Pearson correlation revealed a positive but significant relationship between FOS and the Blood scale ($r = .29, p < .006$) and with the Mirels and Garrett scale ($r = .42, p < .0001$). Therefore, high endorsement on the FOS scale for Black males was associated with high PE endorsement.

However, the relationship between the FOS scale and field independence/dependence remains inconclusive. Partial support though was garnered for hypothesis one (FDs would endorse more FOS items) in terms of the direction of the correlation. The GEFT was significantly correlated with the FOS scale ($r = -.28, p < .007$), but an insignificant correlation was evinced when the HFT was correlated with the FOS scale ($r = -.10, p < .19$). No significant relationships emerged when measures of field independence were correlated with measures of the Protestant Ethic (See Table 5a).

For Black females, a similar array of positive and significant relationships emerged when the HFT and GEFT were correlated ($r = .62, p < .0001$), when the Blood and Mirels and Garrett scale were related ($r = .44, p < .0001$) and when the FOS scale was correlated with the Blood scale ($r = .38, p < .0001$) and with the Mirels and Garrett scale ($r = .51, p < .0001$). However, the FOS scale was uncorrelated with either the HFT or the GEFT. Another insignificant

relationship (parallels findings for Black males) was that measures of field independence were uncorrelated with measures of the Protestant Ethic (See Table 5b).

For white males too, the HFT and the GEFT were significantly correlated ($r = .63, p < .0001$). Expectedly, the two Protestant Ethic scales were correlated ($r = .50, p < .003$). Quite like the already mentioned patterns of relationship for Black males and Black females, significant relationships emerged when the FOS scale was correlated with the Blood scale ($r = .41, p < .01$), and for the Mirels and Garrett scale ($r = .70, p < .0001$), leaving unconfirmed the a priori hypothesis advanced in Chapter 3. Further, the results showed that field independence was associated with low FOS endorsement, even though the only significant relationship emerged when the GEFT was correlated with the FOS scale ($r = -.41, p < .01$). Rather than a positive correlation between FI and PE, a negative one emerged. Only the GEFT (not the HFT) was significantly correlated with the Blood scale ($r = -.40, p < .01$) and with the Mirels and Garrett scale ($r = -.38, p < .02$). (See Table 5c).

For white females, the HFT and GEFT were positively and significantly correlated ($r = .50, p < .0001$). Unexpectedly, the two Protestant Ethic scales were uncorrelated. However, as with Black males, Black females, and white males, FOS was

positively and significantly correlated with the Blood scale ($r = .37, p < .002$), and with the Mirels and Garrett scale ($r = .46, p < .0001$). Hypothesis one stating that FD would endorse more FOS items was unconfirmed among white females. The HFT was significantly correlated with FOS ($r = -.34, p < .004$) and with the GEFT ($r = -.28, p < .01$). Among this subsample, field independence was correlated with low PE endorsement. The only relationship that wasn't significant was the correlation between the GEFT and the Blood scale ($r = -.02, p < .45$). (See Table 5d).

Additional Pearson correlations performed revealed a low but significant correlation between the Blood (1969) scale and reported length of time in current job (LJOBM) ($r = .14, p < .03$), and on reported verbal score on the SAT (VERBAL) ($r = -.18, p < .02$). Also, the length of time on one's job was significantly correlated with endorsement on the Mirels and Garrett (1971) PE scale ($r = .13, p < .04$) (See Table 6).

Globally, significant relationships were obtained between the HFT and religion ($r = .17, p < .002$), and between the HFT and gender ($r = -.18, p < .001$). Marginally significant findings were revealed when race was correlated with the HFT ($r = .08, p < .08$) for the entire sample. On the other hand, for the GEFT, statistically significant findings emerged with

race ($r = .21, p < .0001$) and with gender ($r = -.18, p < .001$). Religion was negatively but significantly correlated with race ($r = -.14, p < .01$) (See Table 7).

Expectedly, significant correlations emerged when parental class (PACCLASS) was related to father's education (FAED) ($r = .52, p < .0001$), mother's education (MAED) ($r = .45, p < .0001$) and with mother's occupation (MAROCC) ($r = .12, p < .03$) (See Tables 8 and 9). Father's education was correlated with the number of brothers ($r = -.23, p < .0001$) and sisters in the family ($r = -.16, p < .003$) and with the FOS scale ($r = -.19, p < .001$) (See Table 10). Mother's education too was significantly and negatively correlated with the FOS scale ($r = -.25, p < .0001$) (See Table 10). Family income (FAMINC) was significantly correlated with whether subjects were currently working (CURWOR) ($r = .15, p < .009$) (See Table 11).

Table 12 demonstrated that gender was significantly and positively correlated with the reported verbal subtest of the SAT ($r = .19, p < .02$). In fact, the reported verbal subtest score of the SAT was significantly correlated with the reported quantitative subtest score ($r = .57, p < .0001$). The total number of children in subjects' family (TOTCHILD) was significantly correlated with the length of time on one's job ($r = .15, p < .02$) and with race ($r = -.13, p < .02$) (See Table 13).

The FOS scale was significantly correlated with year in college (YEAR1) ($r = -.15$, $p < .006$), GPA ($r = .16$, $p < .004$) and with number of sisters in one's family ($r = .24$, $p < .0001$). Year in college was significantly correlated with GPA ($r = -.26$, $p < .0001$) (See Table 14).

Number of brothers was correlated with the number of sisters ($r = .18$, $p < .001$). Unlike other empirical investigations, gender was uncorrelated with the FOS scale in this study ($r = -.07$, $p < .13$) (See Table 15).

A number of significant findings emerged when the FOS scale was correlated with rank in one's family (FAMRANK) ($r = .13$, $p < .02$), race ($r = -.16$, $p < .004$) and with college major (MAJOR) ($r = .20$, $p < .001$). Race was negatively but significantly correlated with college major chosen ($r = -.25$, $p < .0001$) (See Table 16).

Zero order partial correlations were computed. Father's education was significantly correlated with the Mirels and Garrett scale ($r = -.12$, $p < .05$) and with mother's education ($r = .62$, $p < .0001$) (See Table 17).

Further partial correlation controlling for father's and mother's education revealed a significant and positive correlation between the Blood (1969) Pro-Protestant Ethic and the Mirels and Garrett (1971) scales ($r = .42$, $p < .0001$). (See Table 18). Significant relations emerged too between the two PE scales when religion was controlled for ($r = .43$,

$p < .0001$), when parental social class was controlled for ($r = .43, p < .0001$) and when the respondents' total income was controlled for ($r = .42, p < .0001$) (See Tables 19, 20 and 21). When parental class and respondent's income were both controlled for, still a statistically significant correlation was revealed for the two Protestant Ethic scales ($r = .42, p < .0001$) (See Table 22).

Not surprisingly, zero-order partial correlations demonstrated a positive and significant correlation between parental social class and total income of respondents ($r = .15, p < .01$) (See Table 23).

Additional zero-order partial correlations revealed a low but significant correlation between parental social class and family rank ($r = .13, p < .02$) and between family rank and respondents' total income ($r = .22, p < .0001$). Father's occupation (PAROCC) was significantly correlated with respondents' reported annual income ($r = .21, p < .0001$) (See Table 24).

Simple t-tests were computed to assess differences between groups and sub-groups. Global means for Blacks and whites were computed for all measures. The mean score on the Blood (1969) PE scale for Blacks was 28.9 (SD = 5.1), while for whites as a group the mean was 27.5 (SD = 4.2). This difference was statistically significant at the .03 level in a two-tailed probability test ($T = 2.15, df = 274$). Signi-

ficant differences didn't emerge on the Mirrels and Garrett scale for these two groups. This result was substantiated earlier through the empirical research of Gonsalves and Bernard (1983a) (See Table 25).

Surprisingly, significant differences emerged on the FOS scale for Blacks and whites counter to the predicted direction. Blacks endorsed more items reflecting a fear of success vis-a-vis their white cohorts ($T = 3.99$, $df = 262$, $p < .0001$). The mean FOS score for Blacks was 114.1 ($SD = 18.0$), while for whites the mean was 105.1 ($SD = 16.5$) (See Table 25).

On the HFT, whites obtained a higher mean score ($\bar{X} = 11.2$, $SD = 6.75$) compared to their Black counterparts ($\bar{X} = 7.11$, $SD = 6.1$). This difference was significant at the .0001 level and indicated greater levels of differentiation (a more FI orientation) among whites as a group. On the GEFT, a similar trend emerged where the mean for Blacks was 7.7 ($SD = 4.8$) while for whites, the mean was 12.9 ($SD = 4.8$). This difference too was significant at the .0001 level ($T = -8.62$, $df = 277$) (See Table 25).

When assessing some ethnic group comparisons between Afro-Americans and Afro-Caribbeans, some insightful findings emerged. As hypothesized, no significant differences were revealed for these two Black ethnic groups on either of the two PE scales or on the FOS scale. However, a significant

difference was evinced on the HFT. Afro-Caribbeans emerged as more FI ($\bar{X} = 7.9$, $SD = 6.4$) compared to their Afro-American counterparts ($\bar{X} = 5.8$, $SD = 4.7$). This difference was significant at the .01 level ($T = -2.59$, $df = 181$). However, no statistically significant findings emerged on the GEFT even though the GEFT mean score for Afro-Caribbeans exceeded those of Afro-Americans (See Table 26).

To more fully explore some ethnic group differences, additional t-tests were performed. As hypothesized, Afro-Caribbeans were more FD ($\bar{X} = 7.9$, $SD = 6.4$) compared to Anglos ($\bar{X} = 16.0$, $SD = 7.1$) as evidenced from lower mean scores on the HFT. The significance level was .001 ($T = -3.38$, $df = 101$). On the GEFT, Afro-Caribbeans also obtained a lower mean score of 8.04 ($SD = 4.8$) while Anglos obtained a mean score of 13.9 ($SD = 4.1$). This too was significant at the .001 level ($T = -3.31$, $df = 101$). Significant findings were evinced on the FOS scale with Afro-Caribbeans and Anglos. Afro-Caribbeans had a higher mean FOS score suggesting greater levels of endorsement of items indicating anxiety about success than Anglos ($T = 2.17$, $df = 93$, $p < .03$). Significant relations emerged with these groups on the Mirels and Garrett PE scale with Afro-Caribbeans obtaining a higher mean score than Anglos ($T = 2.30$, $df = 92$, $p < .02$). However, no significant differences emerged on the Blood PE scale (See Table 27).

Other t-tests were performed to assess mean differences for Afro-Americans and Anglos. Statistically significant differences emerged on the HFT and the GEFT. Anglos obtained a higher score on the HFT ($\bar{X} = 16.0$, $SD = 7.05$) while Afro-Americans obtained a mean score of 5.75 ($SD = 4.7$) indicating greater FD for this latter group. This difference was significant at the .0001 level ($T = -5.66$, $df = 94$). On the GEFT, Afro-Americans obtained a mean score of 7.2 ($SD = 4.8$), while Anglos' mean score was 13.9 ($SD = 4.1$). This too was significant at the .0001 level. No statistically significant differences were evinced on the FOS scale or on the two measures of the Protestant Ethic respectively. (See Table 28).

Some more ethnic comparisons among Afro-Americans and Afro-Caribbeans were made with Jewish members of the sample. No significant differences emerged on any of the measures for these groups.

Global gender differences in endorsement patterns for the entire sample were assessed on the two measures of the Protestant Ethic, on the two measures of field independence and on the FOS scale. Expectedly, no gender differences emerged on either of the two PE scales. Previously, Mirels and Garrett (1971) and Gonsalves and Bernard (1983a) reported no gender differences in endorsement of PE items; therefore, this study provides further confirmatory evidence. Neither

did differences emerge on the FOS scale among males and females. Anticipated gender differences however emerged on the HFT and the GEFT in the expected direction. Males obtained higher mean HFT scores ($\bar{X} = 9.65$, $SD = 6.8$) indicating greater levels of psychological differentiation than females ($\bar{X} = 7.3$, $SD = 6.2$). On the GEFT, males obtained a higher mean score of 10.5 ($SD = 5.5$), while females obtained a mean score of 8.5 ($SD = 5.2$). On both measures of FI/FD, the findings were significant at the .002 level (See Table 29).

To assess whether gender differences existed for Afro-Caribbeans, further t-tests were performed. For the Blood scale, Afro-Caribbean males obtained a higher mean PE score compared to Afro-Caribbean females. Men's mean score was 30.2 ($SD = 4.7$), while that for women was 27.9 ($SD = 5.2$). This was significant using a two-tailed probability test at the .03 level. However, no statistically significant differences emerged on the Mirels and Garrett PE scale even though the males' score ($\bar{X} = 86.6$, $SD = 14.1$) exceeded that of females ($\bar{X} = 85.0$, $SD = 13.6$). Neither did significant differences emerge on the FOS scale. On the other hand, strong statistically significant differences emerged on both the HFT and the GEFT. Afro-Caribbean males were more FI and obtained higher means than women. On the HFT, the mean for males was 10.5 ($SD = 7.4$), while for females, the mean was

5.6 (SD = 4.4). This difference was significant at the .0001 level. For the GEFT, the mean for males (\bar{X} = 9.6, SD = 5.4) exceeded that of females (\bar{X} = 6.6, SD = 3.8) and was significant at the .002 level (See Table 30).

In assessing gender differences for Afro-Americans, t-tests were also performed. No significant differences emerged on either of the two PE scales, FOS scale or on the HFT. However, one significant difference was evinced; on the GEFT, males' mean score (\bar{X} = 8.53, SD = 5.3) exceeded those of females (\bar{X} = 6.25, SD = 4.2) with the difference being significant at the .03 level. Even though the findings were nonsignificant for the HFT, the mean for males (\bar{X} = 6.47, SD = 5.4) exceeded that of females (\bar{X} = 5.35, SD = 4.1) (See Table 31).

In an examination of gender differences among Blacks as a combined group (Afro-Americans and Afro-Caribbeans), statistically significant differences emerged. Black males (\bar{X} = 30.1, SD = 5.3) endorsed more PE items compared to Black females (\bar{X} = 27.9, SD = 4.7) on the Blood (1969) scale. This finding was significant at the .004 level ($T = 2.88$, $df = 180$). The only other significant finding that was demonstrated occurred on the HFT and on the GEFT. Black males had higher levels of psychological differentiation vis-a-vis Black females. On the HFT, Black males obtained a mean of 9.1 (SD = 7.1), while Black females

obtained a mean of 5.6 (SD = 4.6). Following a similar pattern on the GEFT, Black males obtained a mean of 9.3 (SD = 5.4), while Black females obtained a mean of 6.4 (SD = 3.9). These two findings were significant at the .0001 level respectively (See Table 32).

In assessing gender differences for whites as a group, t-tests revealed no significant differences (See Table 33).

Further, to assess same-sex comparisons in performance on the measures, other t-tests were computed. Differences in means for Afro-American and Afro-Caribbean females were examined. Here too, no statistically significant differences emerged on any of the variables (See Table 34). However, among Afro-American and Anglo females, significant differences were revealed on the HFT ($T = -5.97$, $df = 53$, $p < .0001$) and on the GEFT ($T = -2.69$, $df = 53$, $p < .009$) with Anglo females being more differentiated psychologically (See Table 35).

For Afro-Caribbean and Anglo females, differences also emerged on the HFT ($T = -5.51$, $df = 52$, $p < .0001$) and on the GEFT ($T = -2.78$, $df = 52$, $p < .007$) with Afro-Caribbean females scoring in the PD direction. Marginally significant differences emerged on the Mirals and Garrett PE scale with Afro-Caribbean females scoring higher than their Anglo cohorts ($T = 1.88$, $df = 50$, $p < .07$) (See Table 36).

Differences in the means on these variables were assessed for Jewish and Afro-American females and Jewish and Afro-Caribbean females. For the first group comparison, Jewish women obtained a higher HFT mean score ($\bar{X} = 9.0$, $SD = 5.5$) than their Afro-American counterparts ($\bar{X} = 5.35$, $SD = 4.1$). This difference was significant at the .05 level ($T = -2.00$, $df = 55$). On the GEFT, the findings approached significance with mean scores for Jews being 9.8 ($SD = 6.5$), while for Afro-Americans, the mean GEFT score was 6.25 ($SD = 4.2$) (See Table 37). For Jews and Afro-Caribbeans only marginally significant findings were demonstrated on the HFT ($T = -1.73$, $df = 54$, $p < .09$) and on the GEFT ($T = -1.79$, $df = 54$, $p < .08$) (See Table 38).

For the males, differences in means were assessed through t-tests. Statistically significant differences between Afro-American and Afro-Caribbean males were revealed only on the HFT. Afro-Caribbean males obtained a higher mean score ($\bar{X} = 10.47$, $SD = 7.4$) vis-a-vis Afro-American males ($\bar{X} = 6.47$, $SD = 5.4$). This difference was significant at the .008 level ($T = -2.70$, $df = 79$) (See Table 39).

For Afro-American and Anglo males, a number of significant findings emerged. Afro-American males were more fearful of succeeding, obtaining a mean score of 115.5 ($SD = 18.97$), while Anglo males obtained a mean score of 96.0 ($SD = 12.7$). This difference was significant at the .05 level ($T = 1.99$,

df = 35). Significant differences were also evinced on both the HFT ($T = -2.30$, $df = 38$, $p < .03$) and on the GEFT ($T = -2.58$, $df = 38$, $p < .01$) with Anglo males scoring in the FI direction (See Table 40).

For Anglo and Afro-Caribbean males, similar findings were demonstrated. Afro-Caribbean males obtained higher FOS scores ($\bar{X} = 116.1$, $SD = 16.49$) compared to their Anglo cohorts ($\bar{X} = 96.0$, $SD = 12.7$). This difference was significant at the .02 level ($T = 2.37$, $df = 44$). No significant differences emerged on the HFT, even though Anglos obtained a higher mean score. On the GEFT, significant differences did emerge though in the predicted direction. Anglo males obtained higher mean GEFT scores ($\bar{X} = 15.5$, $SD = 2.38$) compared to Afro-Caribbean males ($\bar{X} = 9.6$, $SD = 5.4$). This difference was significant at the .04 level (See Table 41).

No significant differences were evinced in comparisons among Jewish and Afro-Caribbean males or among Jewish and Afro-American males (See Tables 42 and 43).

Since Blood (1969) reported no reliability coefficient for his eight-item Pro-Protestant Ethic scale, a Cronbach reliability coefficient was computed to assess the scale's internal consistency (Cronbach, 1951). An alpha of .38 emerged for the entire sample. Additional reliability

analyses for the genders revealed an alpha of .38 and .39 for women and men respectively (See Tables 44, 45, 46, 47 and 48).

Mirels and Garrett (1971) reported a Kuder-Richardson reliability of .79 on their PE scale for the global sample. The present investigation wanted to assess the scale's internal consistency. Separate analyses were performed for men and women. The results revealed a Cronbach alpha of .76 for males and .71 for females. When the global sample was combined, a reliability coefficient of .73 emerged. These findings are comparable to that reported upon by Mirels and Garrett (1971) and further emphasizes the scale's usefulness as a Protestant Ethic measure (See Tables 48 a, b, c).

Separate factor analyses were performed to illuminate the underlying dimensions of the Blood (1969) Pro-Protestant Ethic and the Mirels and Garrett (1971) PE scales. The correlational matrix was subjected to a principal components factor analysis using a varimax rotation. Items loading less than .30 were discarded.

Three factors emerged on the Blood (1969) scale. Items 2, 6, 7 loaded on factor 1 at .68, .59 and .70 respectively. These items were regarded by Blood (1969) as descriptive of the Protestant Ethic along with item 4. Blood's (1969) factor analysis yielded two factors. However, the present factor analysis evinced three factors.

Items 1, 3 and 5 loaded on factor 2 at .71, .73, and .50 respectively. These items are referred to by Blood (1969) as descriptive of a non-Protestant Ethic orientation.

Items 4, 5 and 8 loaded on factor 3 at .74, -.48, and .63 respectively in this present investigation. In view of the foregoing, I would rename factor 1 as "Hardwork in employment" because of the emphasis on diligence in secular employment. This labelling would harmonize with Blood's (1969) descriptor, as it embraces characteristic features of the Protestant Ethic formulation.

Factor 2 renamed is "Leisure and relaxation". These items with their emphases on enjoyment and pleasure are anathematic to Protestant Ethic endorsement. Factor 3 which is similar to factor 2 has been named "Waste and idleness". These items too would find a comfortable niche under the non-Protestant Ethic umbrella. (See Tables 49, 50, 51, 52, 53, 54, 55, 56 and 57).

For the Mirels and Garrett PE scale, a varimax rotation yielded six factors. Factor 1 had the largest number of items loading on it. These items were 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 14, 16, 17, 19 and loaded .57, .54, .60, .42, .61, .54, .48, .47, .63, .43, .44, .38, .54 and .65 respectively.

On factor 2, items 2, 9, 15, 16 and 17 had the highest loading at -.44, .78, .79, .31, and .33 respectively. On

Factor 3, items 10, 13, 14 and 17 had the highest loadings at $-.57$, $.70$, $.42$ and $-.37$ respectively.

On factor 4, items, 4, 5, 12 and 18 loaded at $.78$, $.37$, $.31$ and $-.48$ respectively. On factor 5, items 2, 5, 6, and 18 loaded $-.32$, $.39$, $-.44$ and $.60$ respectively.

For the final factor, factor 6, four items obtained the highest loadings. Items 3, 12, 14 and 19 loaded $-.34$, $.36$, $-.42$, and $.35$ respectively. (See Tables 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77 and Appendix).

When a combined factor analysis of the Blood Pro-Protestant Ethic scale and the Mirels and Garrett PE scale was performed using a varimax rotation, nine factors emerged. Items 2, 4, and 6 of the Blood scale loaded $.31$, $.41$, and $.42$ on factor 1. However, items 19, 11, 6, 3, 2, 1, 17, 7, 10, 8, 12, 14, 16, 18 and 5 loaded $.63$, $.58$, $.56$, $.53$, $.51$, $.49$, $.49$, $.48$, $.44$, $.39$, $.38$, $.34$, $.34$, $.32$, and $.39$ respectively on factor 1.

Only three factors loaded on factor 2. They include items 15 and 9 from the Mirels and Garrett scale and item 3 from the Blood scale. These items loaded $.73$, $.72$ and $.32$ respectively. Items 10 and 18 from the Mirels and Garrett scale loaded $-.37$ and $.86$ respectively on factor 3. Factor 4 also had two items loading on it. Items 10 and 13 loaded $-.39$ and $.38$ respectively. Items 3 and 1 from the Blood

scale and item 5 from the Mirels and Garrett loaded .50, .31 and -.47 respectively on factor 5. One item, item 7 of the Blood scale loaded .36 on factor 6.

For factors 7, 8 and 9, only one item loaded on them. Item 5 from the Blood scale loaded .38, item 5 from the Mirels and Garrett scale loaded .32 and item 6 from the Blood scale loaded -.32 (See Table 77b).

Additionally, a factor analysis of the Zukerman and Allison fear of success scale was performed. A principal component varimax rotation yielded eight factors. Factor 1 had the highest number of items loading on it. Items 8, 13, 4, 10, 12, 20, 24 and 9 loaded .54, .53, .47, .43, .42, .31, .34 and .31 respectively. These items are connected in that they are undergirded by the notion of successful competition. This preoccupation with competition, interestingly enough was one of the factors that was evinced in Pappo's (1972) factor analytic study of the FOS scale he constructed. These items are antithetical for the fear of success construct in that high FOS scorers seem to exhibit anxiety within a competitive context.

Items 21, 20, 17, 18, 24, and 14 loaded .67, .52, .50, .38, .34 and .34 respectively on factor 2. These all seem to tap perceived external responses to success e.g. "Achievement commands respect". For Factor 3, items 11, 23, 25, 2, 16, 9 and 3 loaded .59, .47, .38, .38, .33, .32 and .32 respec-

tively. This set of items reflect negative affective reaction over success. The presence of this factor finds support in Pappo's (1972) results and is appropriately labelled "negative affect about success" by Horner (1968).

Factor 4 had items 26, 27, 1 and 19 loading .65, .40, .32 and -.37 respectively. These items seem to tap heightened self-confidence and anticipation of sure success. It is intuitive and consistent then that item 19 be negatively loaded as it veers in a direction opposite to self-assurance, hence in the fear of success direction. This particular item reads as follows "I sometimes feel better if I lose than if I win".

Factor 5 had items 22, 15 and 19 loading .58, .46 and .43 respectively. These items overlap, with another of Pappo's (1972) factors in that it taps self-doubt and negative self-evaluation. This too relates to empirical findings which indicate that high FOS participants are anxious about success and therefore are more likely to score lower on self-esteem scales.

Factor 6 had one item loading on it. Item 5 loaded .58. This item states "I enjoy telling my friends that I have done something especially well". Factor 7 too had one item, item 7 loading on it at .71. This item states "In my attempts to do better than others, I realize I may lose many of my friends". These two items not surprisingly are scored in

the opposite direction with the later being in the high FOS direction. In fact these two items are concerned with evaluation by friends and can thus be labelled.

Factor 8 too had one item loading on it. Item 6 loaded .53. This item reads "It is more important to play the game than to win it". This test item reflects a more cooperative and non-competitive orientation and is therefore a high FOS item (See Tables 77c, 77d, 77e, 77f, 77g).

A series of two-way ANOVAS were computed to assess main effects and interactions. In a 2 x 2 factorial design where the Blood (1969) PE scale was examined along with gender and race, significant main effects were evinced for gender ($F = 4.08, p < .04$) and race ($F = 4.18, p < .04$). Two-way interactions that were statistically significant emerged ($F = 5.91, p < .02$). (See Tables 78 and 79).

In another 2 x 2 factorial design with the Blood (1969) PE scale (PEA), student status (full-time, part-time, or three-fourth time) and current working status of respondents (full-time, part-time or not at all) were assessed. Statistically significant main effects emerged for student status ($F = 5.44, p < .005$). Two-way interactions were non-significant ($F = 0.77, p < .47$). (See Tables 80 and 81).

Other ANOVAS were generated. The HFT was examined in relation to gender and race. Significant main effects

emerged at the .0001 level respectively for gender ($F = 16.25$) and race ($F = 32.65$). (See Tables 82 and 83).

Similarly, when a 2 x 2 factorial design was computed for the GEFT, statistically significant main effects were also revealed for gender ($F = 18.9$, $p < .0001$) and race ($F = 86.75$, $p < .0001$). However, two-way interactions failed to approach statistical significance ($F = 0.71$, $p < .40$). (See Tables 84 and 85).

When GPA was examined in relation to the variables gender and race, a significant main effect was revealed for race ($F = 21.8$, $p < .0001$). No significant main effect was evinced for gender ($F = .013$, $p < .91$). Additionally, two-way interactions failed to reach appropriate statistical significance ($F = 0.039$, $p < .84$). (See Tables 86 and 87).

The Mirels and Garrett (1971) PE scale was examined in relationship to gender and race. The ANOVA yielded no significant main effects or two-way interactions (See Tables 88 and 89).

A series of stepwise multiple regression analyses were generated to assess the association between independent and dependent variables. In one regression analysis, FOS scores were used as a predictor (independent) variable, while the HFT and GPA served as the two dependent variables. In equation 1 with the HFT as the dependent variable, statistically significant but negative relations were evinced

($F = 11.03$, $p < .001$). In equation 2 when GPA was used as the dependent variable, positive and significant results emerged ($F = 6.97$, $p < .008$). (See Tables 90, 91, and 92).

In another multiple regression analysis the Mirels and Garrett (PEB) Protestant Ethic scale and the Blood Protestant Ethic scale (PEA) were used as predictors of GPA and total annual income of respondents' family. In equation 1 when GPA was used as the dependent variable, no statistically significant relations were evinced for either the Mirels and Garrett PE scale (PEB) ($T = 1.02$, $p < .31$) or for the Blood (1969) PE scale (PEA) ($T = .92$, $p < .36$). Neither did the Blood scale predict family income ($T = .12$, $p < .91$) nor did the Mirels and Garrett PE scale ($T = -1.14$, $p < .25$). (See Tables 93, 94 and 95).

A final stepwise multiple regression analysis was computed to ascertain whether race predicted HFT scores and GPA. Therefore, the HFT scores and GPA both served as dependent variables. In equation 1 with the HFT as the dependent variable, no significant findings emerged ($T = 1.44$, $p < .15$). Neither were significant results evinced when GPA served as the other dependent variable ($T = -.23$, $p < .82$). (See Tables 96, 97, 98).

CHAPTER FIVE

DISCUSSION

A number of a priori hypotheses advanced were confirmed. On the other hand, a few unexpected yet insightful findings emerged that warrant or beg explanation. A noteworthy point that can be made here in Chapter 5, is that, even though a particular finding may be statistically significant, it may not be of any theoretical, pragmatic, or social significance (Neale and Liebert, 1980). A concerted effort will be made to wade through the myriad of significant findings, and to further highlight the theoretical contributions of this empirical investigation through the patterns of correlational and multivariate analyses.

The findings demonstrated in confirmation of a major a priori hypothesis that field dependents did in fact endorse more FOS items than their field independent counterparts. Additional correlations revealed that this finding held sway even for different subgroups. Partial and full support for this hypothesis was garnered for Black males, white males and white females. The reader may recall that this hypothesis was generated through patterns of behavioral and personality correlates.

Apparently then, field dependents are more fearful of success. According to Horner's (1968) research, this intrapsychic motive is undergirded by a degree of self-doubt,

anxiety, and/or negative self-evaluation. These personality characteristics have been correlated with a field dependent orientation in previous empirical investigations. Indeed, a lowered self-concept accompanied by feelings of inadequacy may give rise to psychic stress about one's ability to succeed in a competitive, academic context. However, it is equally plausible that this inability to weather the competitive storm of collegiate life may engender anxiety and concomitant self-depreciation. Yet, one of the limitations of correlational analyses is the inability to imply causal relationship. Therefore, this question must remain the province of future empirical investigations.

Additionally, Horner (1968) in her scoring system indicated that some higher FOS scorers used denial as a defense mechanism in writing stories to the verbal protocol. Similarly, field dependents employ so called "primitive" defense mechanisms such as denial and repression. Since they do not have a differentiated higher-order system for orienting themselves to the world, they rely on others for cues and assessment. This in fact may add credence to the notion that field dependents are anxious, dependent individuals.

Yet, one finding that was counterintuitive that emerged was that field dependence was associated with high Protestant Ethic endorsement. This finding viewed holistically with the

former seem to indicate that although field dependents may be anxious about success, they cognitively understand and endorse the traditional methods or manner through which this success may be achieved as defined by the American capitalist system. In fact, since field dependents accept the visual field as given they may be passively accepting the larger societal values without engaging in any analytic restructuring of these value systems and orientation.

Besides this interpretation, another cogent issue that can be raised is that field dependents and high FOS scorers may really be ambivalent or in conflict about success in the American context. As discussed before, there is not an isomorphic relationship between hard work, diligence, self-sacrifice and success, especially for Blacks and other ethnic minority groups in this country. So even though they score consistently high (and higher than Anglos on the PE scale), the reality of their existence forces them to feel ambivalent, anxious and fearful about achieving success. These intrapsychic processes are inextricably linked to external/societal forces and underscores the interactive, dynamic interplay between the individual and his/her environment.

However, this particular interpretation illuminates some of the shortcomings of the FOS literature in that it fails to assess the behavioral link between endorsement of items on

the FOS scale to job performance and other domains. Thus far, researchers have failed to come up with hard-core empirical data on job performance of high FOS scorers. Fleming (1974) though assessed the relationship of FOS endorsement to anagram tasks in an experimental lab. Future investigations must attempt to wrestle with this issue and assess its behavioral linkages.

In interpreting the lower Protestant Ethic endorsement among white subjects, Gonsalves and Bernard (1983a) found that even though the American capitalistic institution places a heavy premium on competition, rugged individualism and other Protestant Ethic characteristics such as frugality and hard work "the promotion of and the orientation toward increased consumption as a primary mode of participation in this economic system goes counter to the Protestant Ethic...and may therefore reflect a common shift from existing values and a new orientation toward a consumer life-style" (Gonsalves and Bernard, 1983a, p. 23).

Even though significant correlations emerged when the FOS scale was related to the two PE scales, the correlations emerged counter to the predicted direction. Instead of a negative correlation, a positive one emerged. Evidently, high FOS endorsers were more likely to endorse PE items reflecting the values of the Protestant Ethic within the global sample, among Afro-Americans, Afro-Caribbeans, Blacks and whites.

In attempting to account for this finding, it seems evident that high FOS scorers even though experiencing conflict and anxiety over their own expectancy of success endorse the traditional assumptions and values as to how success can be acquired. Additionally, Horner (1968) posits that the inhibitory mechanism is dormant until aroused during competition. Essentially then, the avoidant motive operates on an unconscious level. To further underscore the above stated point, Horner (1972) posits that the motive to avoid success generates "a disposition to become anxious about achieving success because they expect negative consequences as a result of succeeding" (p. 159).

One finding that permeates Chapter 4 was the strong statistically significant relationship between the two measures of field independence viz. the HFT and the GEFT. If both tests purport to be measures of this stylistic orientation, then the results of this study are consistent with this general formulation. In fact, the HFT and the GEFT singly or combined as indices of a singular construct furnish evidence of the instruments' empirical usefulness not only for white samples, but for Black ones as well.

Expectedly, the two Protestant Ethic scales were positively and significantly correlated with each other for the global sample, among Afro-Caribbeans and Afro-Americans and among Black males, Black females and white males. The

correlations ranged from .39 to .57, and even though moderate, revealed that the scales were tapping a similar behavioral domain.

Water et al., (1975) reported a correlation of .70 when the Mirels and Garrett (1971) and the Blood (1969) scales were correlated. Yet, the modest correlation reported here in this present investigation was strongly significant for the global sample. Significant correlations also emerged for Black men, Black women and for white men. However, in cautiously interpreting this finding, it is not advocated in this view that the Blood (1969) scale be conceived of as a replacement of the Mirels and Garrett (1971) scale. Rather, for exploratory, research purposes it may be useful as a quick, short-version measure of the Protestant Ethic. Care though must be exercised in its more extensive usage and extrapolations.

To augment the validity of this claim that the Blood (1969) PE scale in its present form cannot be hailed as a solid index of the Protestant Ethic, an examination of the Cronbach reliability coefficient revealed a low alpha of .38. This estimate of internal consistency assesses how adequately the items are measuring a dispositional variable. The low coefficient alpha may be a function of the scale's length. Recall that the Blood (1969) scale was only comprised of eight items. In commenting on the direct rela-

tionship between test length and reliability, Graham and Lilly (1984) noted that "[I]n general, the longer a test is, the more reliable it will be. By adding items to a test we are sampling more and more of the domain of interest" (p. 37).

Another factor that Graham and Lilly (1984) advance as serving to reduce reliability is homogeneity of people (restriction of range). This sample was comprised entirely of college students. It has often been asserted by a number of investigators that these research participants represent a fairly homogeneous group.

An additional point made by Cronbach (1946) that sharpens our focus on this issue, is that, response styles can deflate reliability by lowering the correlations between items or reducing the range of scores.

The theoretical and empirical significance of this study is illuminated through the partial construct validity information evinced for the Blood (1969) PE scale. Among the procedures that Cronbach and Meehl (1955) outline for assessing or examining construct validity include examination of group differences, correlational matrices, factor analysis, and studies of internal structure. Three of these procedures were employed in this study.

However, Anastasi (1976) appropriately writes that construct validation is not rapidly achieved. It "requires

the gradual accumulation of information from a variety of sources. Any data throwing light on the nature of the trait under consideration and the conditions affecting its development and manifestations are grist for this validity mill" (Anastasi, 1976, p. 151). Additionally, the importance of construct validation is further emphasized in Messick's (1980) sophisticated article which argued that this type of validity has implications for prediction from and relevance of test scores. Relevant ethical issues concerning test usage were also raised.

One finding in partial support of construct validation for the Blood (1969) PE scale is achieved through the correlational matrix. Evidence for convergent validity was revealed because of the significant and positive correlation with the Mirels and Garrett (1971) scale. This latter scale has been shown to be a valid and reliable measure of the Protestant Ethic construct (Gonsalves and Bernard, 1983a; Heaven, 1980; Beit-Hallahmi, 1979; Merrens and Garrett, 1975; MacDonald, 1972). However, divergent validity was not successfully established in this investigation. Furthermore, according to Messick (1981) "construct validity implies a joint convergent and discriminant strategy" (p. 575).

Since the internal consistency or degree of homogeneity of the items on the Blood (1969) scale is fairly low, (even though significant) this finding failed to strongly augment

the construct validation of the Blood scale. Furthermore, Anastasi (1976) adds that "the contribution of internal consistency data to test validation is very limited. In the absence of data external to the test itself, little can be learned about what a test measures" (p. 155).

An inspection of factor analytic results of the Blood scale revealed that the measure seems to tap Protestant Ethic and non-Protestant Ethic values, with the three factors falling comfortably under the niche of these two broader rubrics. Neale and Liebert (1980) caution though that factor analyses are not always repeatable and that replication may be advisable before findings can be accepted confidently.

In view of the composite picture painted thus far, the Blood (1969) scale should be used with caution. Efforts should be implemented to add to its construct validation since only partial support was evinced in this study.

The results of tests of internal consistency of the Mirels and Garrett (1971) PE scale indicated that the test is reliable and a good measure of the Protestant Ethic scale. Therefore, the scale is not useful with a majority sample but with ethnically plural samples.

According to the author's research, this present investigation constitutes the second attempt (besides that of the test constructors') to factor analyze the Mirels and Garrett PE scale, and even more so with an ethnically plural sample.

Six factors emerged on this 19 item scale. Even a cursory examination of the items on this scale revealed that they were adequately sampling the behavioral domain of the Protestant Ethic such as hard work, asceticism, and a loathe of waste, idleness and leisure.

There was some degree of overlap in factors. Factor 1 had fourteen items that loaded on it and practically embraced all the characteristic features of the Protestant Ethic. Agreement with those items would therefore indicate a Protestant Ethic orientation. Factor 2 emphasized leisure and relaxation. This was anathematic to the Protestant Ethic formulation that Weber (1958) advanced. Factor 3 specifically emphasized the value of hard work. Factor 4 however emphasized conscientiousness (e.g. doing one's best at a job). Factor 5 underscored the loathe of idleness (i.e. "I feel uneasy when there is little work for me to do"). The items loading on factor 6 however, highlight the value of thrift (e.g. "The credit card is a ticket to careless spending").

The combined factor analysis of the two Protestant Ethic scales evinced nine underlying factors. Factor 1 had the highest number of items loading on it (18 items). The primary theme that undergirds these items is the emphasis on diligence, hard work and conscientiousness. This orientation fully embodies and reflects the salient features of the Protestant Ethic.

The three items loading on factor 2 of the combined factor analysis is concerned with the issue of leisure (i.e. "People should have more leisure time to spend in relaxation"). Endorsement of these items is antithetical to the Protestant Ethic values. True Protestantism was associated with a loathe of waste, idleness and/or leisure.

Items loading on factor 3 accentuate the necessity of hard work in order to achieve success. Factor 4 also have items loading on it that emphasized a similar value of hard work. On the other hand, factor 5 with its emphasis on leisure resembles factor 2. Factors 6, 7, 8 and 9 have one item loading on them. These items are concerned with the issue of time (loathe of time wasting), with conscientiousness and with the issue of relaxation.

The factor analysis of the Zukerman and Allison (1976) fear of success scale revealed that the measure tapped a number of underlying dimensions that were consistent with the theory and with Horner's (1968) formulation. The first 3 factors had the highest number of items loading on it. Preoccupation with competitive strivings, external responses to success, and negative affective reactions are all embraced within the construct. In fact, this study demonstrates that the scale is useful and a valid measure of the fear of success.

Before examining the interrelationship among the three major constructs in this particular investigation, an overall assessment of the performance of Afro-Americans and Afro-

Caribbeans vis-a-vis their white counterparts will be looked at. On the FI measures, Afro-Americans and Afro-Caribbeans scored in the FD direction. This finding constitutes confirmation of an a priori hypothesis. Earlier empirical research had provided consistent evidence that Afro-Americans are more FD compared to whites (Barclay and Cusumano, 1967; Schratz, 1976; Gill, Herdtner and Lough, 1968; Ramirez and Price-Williams, 1974; Ritzinger, 1971; Shade, 1981). Scant empirical evidence however, has appeared on the stylistic orientation among Afro-Caribbean college students with one exception (Stuart, Murgatroyd and Denmark, 1978). This present study therefore advances scientific knowledge about a Black ethnic group that is not only gaining in popularity and media attention, but in sheer numbers in predominantly urban centers. Additionally, this investigation represents one of the first psychological study conducted on Afro-Caribbeans on American soil. The effects of migration (which has been subjected to sociological analyses) on the shift or stability of this cognitive style as a function of changes in physical environment and cultural influences must remain the province of future empirical analyses.

A field dependent orientation among Afro-Americans finds a comfortable niche among a number of Afrocentrically-oriented Black psychologists who advance the notion that a legacy of the African ancestral past such as its emphases on

cooperation, communalism, and social-interpersonal interactions remain an essential feature of the Afro-American experiential reality (Nobles, 1980; White, 1984; Barnes, 1980; and Jones, 1980). The similar link of Afro-Caribbeans to the African past has also been supported by Green (1970) and Lawrence (1983). Therefore, it can be adduced from the foregoing evidence that threads or pockets of similarities bind Afro-Americans and Afro-Caribbeans both culturally and stylistically.

In the Caribbean context, Kerr (1952) and Clarke (1957) have alluded to the strict childrearing practices of Jamaican parents which represents in my view (and that of anthropological scholars) a microcosm of the total Afro-Caribbean experience. Berry (1966) had previously found that this type of environmental condition fostered a more FD orientation. Additionally, in terms of ontological development, agrarian and sedentary cultures seem to foster a more interpersonally-oriented style rather than individualism. The Caribbean societies can be characterized in essentially the foregoing ways. Therefore, the findings on Afro-Caribbeans are consistent and expected.

Gender differences in performance on both the HFT and GEFT demonstrate the consistency of this finding cross-ethnically and cross-culturally. Moreover, this finding underscores the nature of differential socialization patterns in which cultures foster, promote, and facilitate analytic

restructuring and spatial-visual abilities in boys. Sherman (1967) has used such evidence to account for gender differences in spatial abilities.

Very little empirical research is currently available on Afro-Caribbean women (Gonsalves, 1985; Gonzalez, 1981; Bilby and Steady, 1981; Sutton and Makiesky-Barrow, 1981; Moses, 1981; Mintz, 1981; and Latortue, 1981). Information that is presently available is filtered through the prisms of cultural anthropologists, and is riddled with discussions on the structural elements of the family and household. Other cogent issues that might be raised, is that, the anthropological literature is quite time-worn, is exploratory rather than definitive in nature and focuses only on working-class families. It is especially on this latter point that the deficit-deficiency models prevail with its attendant emphases on psychopathologies.

However, Justus (1981) has presented ethnographic evidence supporting the notion of gender differences in childrearing among Afro-Caribbeans. Boys are encouraged to take the initiative to explore their environment, while girls are encouraged to remain in close physical proximity to the home and interact with the maternal figure or maternal surrogates in religiously-oriented activities. Therefore, in view of the foregoing, the gender differences among Afro-Caribbeans on the HFT and GEFT is consistent with this general notion.

In commenting on the gender differences among Afro-Americans, the findings in the present investigation revealed higher mean HFT scores (even though not statistically significant) for males and higher mean GEFT scores for males, significant at the .03 level. This result confirms and underscores a clear cut gender difference in performance on measures of field independence. Also, it demonstrates that traditional sex-role standards may indeed be operative among Afro-Americans (Gump, 1978).

In continuing our discussion on gender differences, no statistically significant differences emerged on the Zukerman and Allison (1976) FOS scale for Afro-Caribbeans, Afro-Americans or among the global sample. This finding provides further validity to the claim that this inhibitory mechanism or predisposition is not only germane to woman as Horner (1968) posited. Previously, Tresemer (1974) and Paludi (1981) had found comparable median levels of the motive to avoid success in males and females.

The surprising result that emerged was that Blacks obtained higher FOS scores than whites. Previous studies had demonstrated that Black women had lower levels of the avoidant motive compared to white women (Weston and Mednick, 1970; Esposito, 1977; Savage, Stearns and Friedman, 1979; Fleming, 1978). In trying to account for this finding, a careful examination of the Zukerman and Allison (1976) scale

was made. The test constructors stated "[O]f the 27 items, sixteen are worded so that agreement reflects high fear of success. Agreement with the remaining eleven items reflects low fear of success" (Zukerman and Allison, 1976, p. 424).

Therefore, since the scale was not equitably balanced to control for acquiescence response style and it has been shown that Blacks and other ethnic minorities have a proclivity to use extreme response anchors on personality tests, then it is speculated that this might account for higher rates of endorsement (Soueif, 1958; Berg and Collier, 1953). Likert-type response formats are adversely affected by response style and this might have inflated the test scores for Blacks.

Another more obvious explanation is to assert that Blacks in this sample were simply more fearful of success. This assertion may be valid in light of reality testing. In fact, the elevated FOS scores may be accounted for in terms of the fear of negative consequences of achievement for men and women as they attempt to claim a fair share of the American pie. The path to success is not a smooth one in spite of the advances in Civil Rights and the ongoing struggle for equality. It is true that more Blacks have moved into occupations and corporations that were systematically denied access to them by the gatekeepers. Yet, in spite of the gains, institutional racism, racial discrimination and oppression

have not dissipated. Achievement then is freighted with disappointment, anger, frustration and hostile competition. The poisonous sting of racism can be said to lie in the fact that a Black person could be ignored irrespective of his/her achievements. The legitimacy of these accomplishments could be disdainfully swept under the social rug. Blacks do not necessarily experience the isomorphic relationship between success (i.e. college graduation) and positive consequences such as job guarantee and mobility through hierarchical systems. Horner (1968) had demonstrated that high FOS subjects wrote stories that were freighted with negative affect and unfavorable consequences because of success. Perhaps Blacks might have endorsed more FOS items because of the reality of their existence in America.

No gender differences were evinced in the global sample on the Mirels and Garrett (1971) PE scale. This finding found support in previous empirical investigations (Gonsalves and Bernard, 1983a; Mirels and Garrett, 1971). Neither did gender differences emerge for Afro-Americans or Afro-Caribbeans on the Blood (1969) or on Mirels and Garrett (1971) scales.

Black males obtained higher mean scores on the Blood (1969) scale vis-a-vis Black females. This finding flies in the face of the deficit-deficiency models in the social scientific literature which paints the Black male in an

unfavorable light. Additionally, they obtained higher mean PE scores than Anglos. This finding indicates that Black males were endorsing values reflecting diligence, conscientiousness, frugality and secular asceticism even more so than Black females. Whether the endorsement of these items have implications for greater levels of achievement motivation and other personality or behavioral correlates must remain the province of further empirical investigations.

As demonstrated from two-way ANOVAS, both gender and race separately and together affected heightened performance on the Blood (1969) PE scale. Males obtained higher mean PE scores. Also Blacks obtained higher mean PE scores than whites, while Black males in terms of the interaction effect obtained the highest mean scores. Yet, significant findings were not confirmed on the Mirels and Garrett (1971) scale. Additionally, student status affected performance on the Blood scale, with part-time students obtaining the highest mean PE scores.

For the GEFT and the HFT, gender and race emerged as statistically significant main effects. Males and whites obtained the highest mean scores. Yet, no significant interaction was revealed, even though white males obtained the highest mean FI scores.

The results that were demonstrated for the stepwise multiple regression analyses revealed that HFT and GPA could be predicted from performance on the FOS scale.

A noteworthy methodological issue that can be appropriately made here is to state that correlational analyses have built in limitations in that, one cannot imply causal relationships. A tighter and more rigorous study would have used an experimental design with a probability sample. Additionally, many psychologists have argued quite convincingly that college students represent a homogeneous group. Therefore, I would submit that using research participants from the general population could add valuable information especially in the behavioral linkage of the fear of success to actual job performance. Also, since on some levels this study is exploratory rather than definitive in nature, it underscores the need for more research on other ethnic groups (i.e. Indians, Koreans, Japanese, Hispanics) within a majority culture to assess the nature of these relationships.

Conclusively, it is hoped that this investigation will elicit interest and initiate a momentum to conduct other empirical investigations on Afro-Americans and Afro-Caribbeans from an Afro-centric and introspectively sensitive approach. Comparisons of these two Black ethnic groups with each other have sometimes placed the Afro-American in an unfavorable light (Sowell, 1981). The emphasis here in this study has been to bridge the gap empirically by highlighting their cultural and stylistic similarities. Interwoven throughout the discussion are a number of issues that need to

be addressed through further empirical analyses. However, one final issue that can be raised here, is the need to assess the relationship between field independence and other stylistic dimensions such as leveling-sharpening, category width and constricted versus flexible control etc. among these two groups. Additionally, an attempt should be made to fill this void in the psychometric literature.

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APPENDIX B
TABLE 1

GLOBAL PEARSON CORRELATION COEFFICIENTS FOR CONSTRUCTS

	FOS	HFT	GEFT	PEA	PEB
FOS	1.0000 (0) P=.....	-0.1950 (281) P=0.001	-0.2718 (281) P=0.000	0.3822 (279) P=0.000	0.4589 (268) P=0.000
HFT	-0.1950 (281) P=0.001	1.0000 (0) P=.....	0.6702 (301) P=0.000	-0.1206 (298) P=0.019	-0.1344 (277) P=0.013
GEFT	-0.2718 (281) P=0.000	0.6702 (301) P=0.000	1.0000 (0) P=.....	-0.1180 (298) P=0.021	-0.2067 (277) P=0.000
PEA	0.3822 (279) P=0.000	-0.1206 (298) P=0.019	-0.1180 (298) P=0.021	1.0000 (0) P=.....	0.4277 (275) P=0.000
PEB	0.4589 (268) P=0.000	-0.1344 (277) P=0.013	-0.2067 (277) P=0.000	0.4277 (275) P=0.000	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 2
PEARSON CORRELATION COEFFICIENTS
AMONG CONSTRUCTS FOR AFRO-CARIBBEANS

	FOS	HFT	GEFT	PEA	PEB
FOS	1.0000 (0) P=.....	0.0034 (87) P=0.487	-0.1089 (87) P=0.158	0.4256 (86) P=0.000	0.4347 (88) P=0.000
HFT	0.0034 (87) P=0.487	1.0000 (0) P=.....	0.6897 (95) P=0.000	0.0636 (94) P=0.271	-0.1080 (91) P=0.154
GEFT	-0.1089 (87) P=0.158	0.6897 (95) P=0.000	1.0000 (0) P=.....	-0.0405 (94) P=0.349	-0.2490 (91) P=0.009
PEA	0.4256 (86) P=0.000	0.0636 (94) P=0.271	-0.0405 (94) P=0.349	1.0000 (0) P=.....	0.3910 (90) P=0.000
PEB	0.4347 (88) P=0.000	-0.1080 (91) P=0.154	-0.2490 (91) P=0.009	0.3910 (90) P=0.000	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

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TABLE 3
PEARSON CORRELATION COEFFICIENTS
AMONG CONSTRUCTS FOR AFRO-AMERICANS

	FOS	HFT	GEFT	PEA	PEB
FOS	1.0000 (0) P=#####	-0.1952 (82) P=0.039	-0.2243 (82) P=0.021	0.2923 (82) P=0.004	0.4828 (77) P=0.000
HFT	-0.1952 (82) P=0.039	1.0000 (0) P=#####	0.6378 (88) P=0.000	-0.0359 (87) P=0.371	-0.0589 (80) P=0.302
GEFT	-0.2243 (82) P=0.021	0.6378 (88) P=0.000	1.0000 (0) P=#####	0.0221 (87) P=0.419	-0.1163 (80) P=0.152
PEA	0.2923 (82) P=0.004	-0.0359 (87) P=0.371	0.0221 (87) P=0.419	1.0000 (0) P=#####	0.6306 (80) P=0.000
PEB	0.4828 (77) P=0.000	-0.0589 (80) P=0.302	-0.1163 (80) P=0.152	0.6306 (80) P=0.000	1.0000 (0) P=#####

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 4
PEARSON CORRELATION COEFFICIENTS FOR BLACKS

	HFT	GEFT	FOS	PEA	PEB
HFT	1.0000 (0) P=.....	0.6734 (185) P=0.000	-0.0731 (171) P=0.171	0.0687 (183) P=0.178	-0.0486 (173) P=0.263
GEFT	0.6734 (185) P=0.000	1.0000 (0) P=.....	-0.1601 (171) P=0.018	0.0077 (183) P=0.459	-0.1583 (173) P=0.019
FOS	-0.0731 (171) P=0.171	-0.1601 (171) P=0.018	1.0000 (0) P=.....	0.3485 (170) P=0.000	0.4576 (165) P=0.000
PEA	0.0687 (183) P=0.178	0.0077 (183) P=0.459	0.3485 (170) P=0.000	1.0000 (0) P=.....	0.4867 (172) P=0.000
PEB	-0.0486 (173) P=0.263	-0.1583 (173) P=0.019	0.4576 (165) P=0.000	0.4867 (172) P=0.000	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 5
PEARSON CORRELATION COEFFICIENT FOR WHITES

	HFT	GEFT	FOS	PEA	PEB
HFT	1.0000 (0) P=.....	0.5366 (94) P=0.000	-0.2912 (93) P=0.002	-0.3551 (93) P=0.000	-0.2579 (88) P=0.008
GEFT	0.5366 (94) P=0.000	1.0000 (0) P=.....	-0.3195 (93) P=0.001	-0.1358 (93) P=0.097	-0.3219 (88) P=0.001
FOS	-0.2912 (93) P=0.002	-0.3195 (93) P=0.001	1.0000 (0) P=.....	0.3870 (92) P=0.000	0.5242 (88) P=0.000
PEA	-0.3551 (93) P=0.000	-0.1358 (93) P=0.097	0.3870 (92) P=0.000	1.0000 (0) P=.....	0.2588 (87) P=0.008
PEB	-0.2579 (88) P=0.008	-0.3219 (88) P=0.001	0.5242 (88) P=0.000	0.2588 (87) P=0.008	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 5A
PEARSON CORRELATION COEFFICIENTS
FOR BLACK MALES

	HFT	GEFT	PEA	PEB	FOS
HFT	1.0000 (0) P= .	.6601 (82) P= .000	.0738 (82) P= .255	.0186 (77) P= .436	-.1025 (76) P= .189
GEFT	.6601 (82) P= .000	1.0000 (0) P= .	-.0215 (82) P= .424	-.1743 (77) P= .066	-.2812 (76) P= .007
PEA	.0738 (82) P= .255	-.0215 (82) P= .424	1.0000 (0) P= .	.5710 (77) P= .000	.2853 (76) P= .006
PEB	.0186 (77) P= .436	-.1743 (77) P= .066	.5710 (77) P= .000	1.0000 (0) P= .	.4182 (74) P= .000
FOS	-.1025 (76) P= .189	-.2812 (76) P= .007	.2853 (76) P= .006	.4182 (74) P= .000	1.0000 (0) P= .

(COEFFICIENT / (CASES) / SIGNIFICANCE)
COEFFICIENT CANNOT BE COMPUTED

" . " IS PRINTED IF A

TABLE 5B
PEARSON CORRELATION COEFFICIENTS
FOR BLACK FEMALES

	HFT	GEFT	PEA	PEB	FOS
HFT	1.0000 (0) Pz .	.6193 (102) Pz .000	-.1051 (100) Pz .157	-.1354 (98) Pz .094	-.1332 (94) Pz .100
GEFT	.6193 (102) Pz .000	1.0000 (0) Pz .	-.1051 (100) Pz .149	-.1446 (98) Pz .080	-.1281 (94) Pz .100
PEA	-.1051 (100) Pz .157	-.1051 (100) Pz .149	1.0000 (0) Pz .	.4370 (95) Pz .000	.3753 (93) Pz .000
PEB	-.1354 (98) Pz .094	-.1446 (98) Pz .080	.4370 (95) Pz .000	1.000 (0) Pz .	.5121 (90) Pz .000
FOS	-.1332 (94) Pz .100	-.1281 (94) Pz .100	.3753 (93) Pz .000	.5121 (91) Pz .000	1.0000 (0) Pz .

(COEFFICIENT / (CASES) / SIGNIFICANCE)
 COEFFICIENT CANNOT BE COMPUTED

* . . * IS PRINTED IF A

TABLE 5C
PEARSON CORRELATION COEFFICIENTS
FOR WHITE MALES

	HFT	GEFT	PEA	PEB	FOS
HFT	1.0000 (0) P=.	.6292 (30) P= .000	-.1278 (30) P= .250	-.1601 (28) P= .208	-.1638 (30) P= .194
GEFT	.6292 (30) P= .000	1.0000 (0) P=.	-.4033 (30) P= .013	-.3805 (28) P= .023	-.4089 (30) P= .012
PEA	-.1278 (30) P= .250	-.4033 (30) P= .013	1.0000 (0) P=.	.5003 (28) P= .003	.4120 (0) P= .012
PEB	-.1601 (28) P= .208	-.3805 (28) P= .023	.5003 (28) P= .003	1.0000 (0) P=.	.7014 (28) P= .000
FOS	-.1638 (30) P= .194	-.4089 (30) P= .012	.4120 (30) P= .012	.7014 (28) P= .000	1.0000 (0) P=.

(COEFFICIENT / (CASES) / SIGNIFICANCE)
 COEFFICIENT CANNOT BE COMPUTED

* .* IS PRINTED IF A

TABLE 5D
PEARSON CORRELATION COEFFICIENTS
FOR WHITE FEMALES

	HFT	GEFT	PEA	PEB	FOS
HFT	1.0000 (0) Pz .	.4952 (63) Pz .000	-.4112 (62) Pz .000	-.2830 (60) Pz .014	-.3376 (62) Pz .004
GEFT	.4952 (63) Pz .000	1.0000 (0) Pz .	-.0154 (62) Pz .453	-.2997 (60) Pz .010	-.2829 (62) Pz .013
PEA	-.4112 (62) Pz .000	-.0154 (62) Pz .453	1.0000 (0) Pz .	.1723 (59) Pz .096	.3708 (61) Pz .002
PEB	-.2830 (60) Pz .014	-.2997 (60) Pz .010	.1723 (59) Pz .096	1.0000 (0) Pz .	.4551 (60) Pz .000
FOS	-.3376 (62) Pz .004	-.2829 (62) Pz .013	.3708 (61) Pz .002	.4551 (60) Pz .000	1.0000 (0) Pz .

(COEFFICIENT / (CASES) / SIGNIFICANCE)
 COEFFICIENT CANNOT BE COMPUTED

" " IS PRINTED IF A

TABLE 6

PEARSON CORRELATION COEFFICIENTS

	PEA	PEB	LJOBM	VERBAL
PEA	1.0000 (0) P=.....	0.4277 (275) P=0.000	0.1374 (190) P=0.029	-0.1838 (130) P=0.018
PEB	0.4277 (275) P=0.000	1.0000 (0) P=.....	0.1326 (177) P=0.039	-0.0036 (123) P=0.484
LJOBM	0.1374 (190) P=0.029	0.1326 (177) P=0.039	1.0000 (0) P=.....	-0.0080 (81) P=0.472
VERBAL	-0.1838 (130) P=0.018	-0.0036 (123) P=0.484	-0.0080 (81) P=0.472	1.0000 (0) P=.....

(COEFFICIENT / (CASES) /SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 7
PEARSON CORRELATION COEFFICIENTS

	HFT	GEFT	RELIG	RACE	GENDER
HFT	1.0000 (0) P=.....	0.6702 (301) P=0.000	0.1735 (262) P=0.002	0.0830 (299) P=0.076	-0.1759 (299) P=0.001
GEFT	0.6702 (301) P=0.000	1.0000 (0) P=.....	0.0159 (262) P=0.399	0.2065 (299) P=0.000	-0.1781 (299) P=0.001
RELIG	0.1735 (262) P=0.002	0.0159 (262) P=0.399	1.0000 (0) P=.....	-0.1376 (260) P=0.013	-0.0710 (260) P=0.127
RACE	0.0830 (299) P=0.076	0.2065 (299) P=0.000	-0.1376 (260) P=0.013	1.0000 (0) P=.....	0.0518 (297) P=0.187
GENDER	-0.1759 (299) P=0.001	-0.1781 (299) P=0.001	-0.0710 (260) P=0.127	0.0518 (297) P=0.187	1.0000 (0) P=.....

(COEFFICIENT / (CASES) /SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 8

PEARSON CORRELATION COEFFICIENTS

	FOS	PACCLASS	FAED	MAED
FOS	1.0000 (0) P=.....	-0.1058 (275) P=0.040	-0.1943 (270) P=0.001	-0.2476 (273) P=0.000
PACCLASS	-0.1058 (275) P=0.040	1.0000 (0) P=.....	0.5220 (279) P=0.000	0.4525 (285) P=0.000
FAED	-0.1943 (270) P=0.001	0.5220 (279) P=0.000	1.0000 (0) P=.....	0.6562 (283) P=0.000
MAED	-0.2476 (273) P=0.000	0.4525 (285) P=0.000	0.6562 (283) P=0.000	1.0000 (0) P=.....

(COEFFICIENT/(CASES)/SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 9

PEARSON CORRELATION COEFFICIENTS

	PACCLASS
FOS	0.1058 (275) P=0.040
MAROCC	0.1170 (270) P=0.027

(COEFFICIENT/ (CASES)/ SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 10

PEARSON CORRELATION COEFFICIENTS

	FAED		MAED
FOS	0.1943 (270) P=0.001	FOS	-0.2476 (273) P=0.000
BROTHER	-0.2340 (286) P=0.000	PACCLASS	0.4525 (285) P=0.000
SISTER	-0.1642 (285) P=0.000		

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 11

PEARSON CORRELATION COEFFICIENTS

	CURWOR
FAMINC	0.1478 (259) P=0.009

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 12

PEARSON CORRELATION COEFFICIENTS

	GENDER	VERBAL	QUANT
GENDER	1.0000 (0) P=.....	0.1879 (130) P=0.016	0.1231 (118) P=0.092
VERBAL	0.1879 (130) P=0.016	1.0000 (0) P=.....	0.5699 (117) P=0.000
QUANT	0.1231 (118) P=0.092	0.5699 (117) P=0.000	1.0000 (0) P=.....

(COEFFICIENT /(CASES) /SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 13

PEARSON CORRELATION COEFFICIENTS

	TOTCHILD
TOTCHILD	1.0000 (0) P=.....
LJOBM	0.1510 (190) P=0.019
RACE	-0.1256 (292) P=0.016

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 14

PEARSON CORRELATION COEFFICIENTS

	FOS	YEAR1	GPA	BROTHER	SISTER
FOS	1.0000 (0) P=.....	-0.1511 (274) P=0.006	0.1561 (281) P=0.004	0.0822 (281) P=0.085	0.2371 (280) P=0.000
YEAR 1	-0.1511 (274) P=0.006	1.0000 (0) P=.....	-0.2535 (292) P=0.000	-0.0118 (292) P=0.421	-0.0191 (291) P=0.373
GPA	0.1561 (281) P=0.004	-0.2586 (292) P=0.000	1.0000 (0) P=.....	0.0862 (301) P=0.068	0.0216 (300) P=0.355
BROTHER	0.0822 (281) P=0.085	-0.0118 (292) P=0.421	0.0862 (301) P=0.068	1.0000 (0) P=.....	0.1776 (300) P=0.001
SISTER	0.2371 (280) P=0.000	-0.0191 (291) P=0.373	0.0216 (300) P=0.355	0.1776 (300) P=0.001	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 15

PEARSON CORRELATION COEFFICIENTS

	FOS	MAROCC	PAROCC	GENDER
FOS	1.0000 (0) P=.....	0.0447 (258) P=0.237	-0.0861 (251) P=0.087	-0.0677 (279) P=0.130
MAROCC	0.0447 (258) P=0.237	1.0000 (0) P=.....	0.0340 (255) P=0.294	-0.0534 (274) P=0.189
PAROCC	-0.0861 (251) P=0.087	0.0340 (255) P=0.294	1.0000 (0) P=.....	-0.0453 (264) P=0.232
GENDER	-0.0677 (279) P=0.130	-0.0534 (274) P=0.189	-0.0453 (264) P=0.232	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 16

PEARSON CORRELATION COEFFICIENTS

	FOS	FAMRANK	RACE	MAJOR
FOS	1.0000 (0) P=.....	0.1269 (279) P=0.017	-0.1581 (279) P=0.004	0.2020 (251) P=0.001
FAMRANK	0.1269 (279) P=0.017	1.0000 (0) P=.....	-0.0552 (297) P=0.171	0.0642 (265) P=0.149
RACE	-0.1581 (279) P=0.004	-0.0552 (297) P=0.171	1.0000 (0) P=.....	-0.2452 (264) P=0.000
MAJOR	0.2020 (251) P=0.001	0.0642 (265) P=0.149	-0.2452 (264) P=0.000	1.0000 (0) P=.....

(COEFFICIENT / (CASES) / SIGNIFICANCE)

(A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 17

PARTIAL CORRELATION COEFFICIENTS

ZERO ORDER PARTIALS

	PEA	PEB	FAED	MAED
PEA	1.0000 (0) P= .	.4277 (273) P= .000	-.0935 (273) P= .122	-.0875 (273) P= .148
PEB	.4277 (273) P= .000	1.0000 (0) P= .	-.1179 (273) P= .051	-.0939 (273) P= .120
FAED	-.0935 (273) P= .122	-.1179 (273) P= .051	1.0000 (0) P= .	.6197 (273) P= .000
MAED	-.0875 (273) P= .148	-.0939 (273) P= .120	.6197 (273) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(* . * IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 18

PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR.. FAED MAED

	PEA	PEB
PEA	1.0000 (0) P= .	.4209 (271) P= .000
PEB	.4209 (271) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(" . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 19

PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR .. RELIG

	PEA	PEB
PEA	1.0000 (0) P= .	.4281 (272) P= .000
PEB	.4281 (272) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(" . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 20

PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR.. PACCLASS

	PEA	PEB
PEA	1.0000 (0) P= .	.4279 (272) P= .000
PEB	.4279 (272) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(" . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 21

PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR.. CURTOT

	PEA	PEB
PEA	1.0000 (0) P= .	.4246 (272) P= .000
PEB	.4246 (272) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) /SIGNIFICANCE)

(" . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 22

PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR.. RELIG PACLASS

	PEA	PEB
PEA	1.0000 (0) P= .	.4283 (271) P= .000
PEB	.4283 (271) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(" . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 23
PARTIAL CORRELATION COEFFICIENTS

ZERO ORDER PARTIALS

	PEA	PEB	RELIG	PACCLASS	CURTOT
PEA	1.0000 (0) Pz .	.4277 (273) Pz .000	.0073 (273) Pz .904	-.0167 (273) Pz .783	.0770 (273) Pz .203
PEB	.4277 (273) Pz .000	1.0000 (0) Pz .	-.0296 (273) Pz .625	.0083 (273) Pz .890	.0704 (273) Pz .245
RELIG	.0073 (273) Pz .904	-.0296 (273) Pz .625	1.0000 (0) Pz .	-.0847 (273) Pz .161	.0084 (273) Pz .877
PACCLASS	-.0167 (273) Pz .783	.0083 (273) Pz .890	-.0847 (273) Pz .161	1.0000 (0) Pz .	.1530 (273) Pz .011
CURTOT	.0770 (273) Pz .203	.0704 (273) Pz .245	.0084 (273) Pz .877	.1530 (273) Pz .011	1.0000 (0) Pz .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

(* . * IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 24

PARTIAL CORRELATION COEFFICIENTS

ZERO ORDER PARTIALS

	FAMRANK	PAROCC	PACCLASS	CURTOT
FAMRANK	1.0000 (0) P= .	-.0374 (299) P= .519	.1340 (299) P= .020	.2159 (299) P= .000
PAROCC	-.0374 (299) P= .519	1.0000 (0) P= .	.0729 (299) P= .207	.2131 (299) P= .000
PACCLASS	.1340 (299) P= .020	.0729 (299) P= .207	1.0000 (0) P= .	.2274 (299) P= .000
CURTOT	.2159 (299) P= .000	.2131 (299) P= .000	.2274 (299) P= .000	1.0000 (0) P= .

(COEFFICIENT / (D.F.) / SIGNIFICANCE)

. . . IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

TABLE 25
T-TEST FOR BLACKS AND WHITES

GROUP 1-RACE EQ 1.BLACK
GROUP 2-RACE EQ 2.WHITE

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	183	28.8525	5.082	1.49	0.033	2.15	274	0.032	2.30	220.23	0.023
	GROUP2	93	27.5376	4.164								
PEB	GROUP1	173	84.3699	15.381	1.38	0.098	0.71	259	0.480	0.75	201.42	0.457
	GROUP2	88	83.0114	13.116								
FOS	GROUP1	171	114.0819	18.046	1.19	0.355	3.99	262	0.000	4.09	203.54	0.000
	GROUP2	93	105.0753	16.539								
HFT	GROUP1	185	7.1135	6.080	1.23	0.235	-5.17	277	0.000	-4.99	170.85	0.000
	GROUP2	94	11.2447	6.748								
GEFT	GROUP1	185	7.6865	4.790	1.01	0.966	-8.62	277	0.000	-8.63	188.03	0.000
	GROUP2	94	12.9043	4.763								

TABLE 26

T-TEST FOR AFRO-AMERICANS AND AFRO-CARIBBEANS

GROUP 1-ETHNICI EQ 3.AFRO-AMERICANS
 GROUP 2-ETHNICI EQ 9.AFRO-CARIBBEANS

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	87	28.4598	5.137	0.551	1.02	0.932	-0.71	179	0.479	-0.71	177.67	0.479
	GROUP2	94	29.0000	5.093	0.525								
PEB	GROUP1	80	82.6500	17.197	1.923	1.55	0.043	-1.30	169	0.195	-1.28	151.17	0.201
	GROUP2	91	85.7363	13.792	1.446								
FOS	GROUP1	82	113.3537	19.408	2.143	1.30	0.226	-0.38	167	0.703	-0.38	161.12	0.704
	GROUP2	87	114.4253	16.994	1.822								
HFT	GROUP1	88	5.7500	4.689	0.500	1.89	0.003	-2.59	181	0.010	-2.63	171.56	0.009
	GROUP2	95	7.9263	6.447	0.661								
GEFT	GROUP1	88	7.1818	4.782	0.510	1.02	0.928	-1.21	181	0.228	-1.21	180.19	0.228
	GROUP2	95	8.0421	4.829	0.495								

TABLE 27

T-TEST FOR AFRO-CARIBBEANS AND ANGLOS

GROUP 1 - ETHNICI EQ 9.AFRO-CARIBBEAN
 GROUP 2 - ETHNICI EQ 19.ANGLO

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP 1	94	29.0000	5.093	8.25	0.007	1.38	100	0.172	3.06	19.56	0.007
	GROUP 2	8	26.5000	1.773								
PEB	GROUP 1	91	85.7383	13.792	2.06	0.313	2.30	97	0.023	3.11	9.74	0.015
	GROUP 2	8	74.2500	9.603								
FOS	GROUP 1	87	114.4253	16.994	1.16	0.916	2.17	93	0.033	2.31	8.57	0.056
	GROUP 2	8	100.8750	15.752								
HFT	GROUP 1	95	7.9263	6.447	1.20	0.625	-3.38	101	0.001	-3.13	8.02	0.014
	GROUP 2	8	16.0000	7.051								
GEFT	GROUP 1	95	8.0421	4.829	1.40	0.683	-3.31	101	0.001	-3.82	8.73	0.006
	GROUP 2	8	13.8750	4.086								

TABLE 28

T-TEST FOR AFRO-AMERICANS AND ANGLOS

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 19. ANGLOS

VARIABLE	NUMBER OF CASES	STANDARD MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE		SEPARATE VARIANCE ESTIMATE			
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	87	28.4598	5.137	8.40	0.006	1.07	93	0.288	2.35	20.97	0.033
	GROUP2	8	28.5000	1.773								
PEB	GROUP1	80	82.8500	17.197	3.21	0.107	1.36	86	0.179	2.15	12.10	0.053
	GROUP2	8	74.2500	9.603								
FOS	GROUP1	82	113.3537	19.408	1.52	0.588	1.76	88	0.082	2.09	9.21	0.069
	GROUP2	8	100.8750	15.752								
HFT	GROUP1	88	5.7500	4.689	2.26	0.073	-5.66	94	0.000	-4.03	7.57	0.006
	GROUP2	8	16.0000	7.051								
GEFT	GROUP1	88	7.1818	4.782	1.37	0.706	-3.83	94	0.000	-4.37	8.84	0.003
	GROUP2	8	13.8750	4.086								

TABLE 29

T-TEST FOR THE GLOBAL SAMPLE

GROUP 1-GENDER EQ 1. MALE
 GROUP 2-GENDER EQ 2. FEMALE

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	122	28.8934	5.274	1.31	0.108	1.37	294	0.173	1.33	237.79	0.183
	GROUP2	174	28.1034	4.613								
PEB	GROUP1	112	83.8161	15.102	1.12	0.509	-0.44	275	0.662	-0.43	229.35	0.665
	GROUP2	165	84.4000	14.274								
FOS	GROUP1	114	112.2982	17.673	1.05	0.781	1.13	277	0.260	1.13	246.99	0.258
	GROUP2	165	109.8303	18.121								
HFT	GROUP1	122	9.6475	6.820	1.22	0.233	3.08	297	0.002	3.02	243.20	0.003
	GROUP2	177	7.3107	6.181								
GEFT	GROUP1	122	10.4508	5.476	1.09	0.590	3.12	297	0.002	3.09	252.72	0.002
	GROUP2	177	8.4915	5.240								

TABLE 30

T-TEST FOR AFRO-CARIBBEANS

GROUP 1- GENDER EQ 1.MALE
 GROUP 2- GENDER EQ 2.FEMALE

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	45	30.1558	4.724	1.23	0.494	2.15	92	0.034	2.16	91.98	0.034
	GROUP2	49	27.9388	5.234								
PEB	GROUP1	43	86.5581	14.149	1.09	0.778	0.54	89	0.593	0.53	86.97	0.594
	GROUP2	48	85.0000	13.571								
FOS	GROUP1	42	116.0952	16.397	1.15	0.657	0.89	86	0.379	0.89	85.00	0.378
	GROUP2	45	112.8667	17.571								
HFT	GROUP1	45	10.4667	7.418	2.89	0.000	3.91	93	0.000	3.81	89.62	0.000
	GROUP2	50	5.6400	4.365								
GEFT	GROUP1	45	9.6000	5.395	2.03	0.017	3.12	93	0.002	3.06	77.94	0.003
	GROUP2	50	6.6400	3.789								

TABLE 31

T-TEST FOR AFRO-AMERICANS

GROUP 1- GENDER EQ 1.MALE

GROUP 2- GENDER EQ 2.FEMALE

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	36	29.3333	6.160	1.025	2.15	0.014	1.23	84	0.222	1.16	57.78	0.251
	GROUP2	50	27.9600	4.199	0.594								
PEB	GROUP1	33	81.1516	18.147	3.159	1.19	0.575	-0.65	78	0.517	-0.64	65.07	0.524
	GROUP2	47	83.7021	16.616	2.424								
FOS	GROUP1	33	115.5152	18.972	3.303	1.11	0.773	0.80	79	0.427	0.81	71.16	0.422
	GROUP2	48	111.9792	19.956	2.880								
HFT	GROUP1	36	6.4722	5.412	0.902	1.77	0.063	1.10	85	0.274	1.05	61.63	0.298
	GROUP2	51	5.3529	4.069	0.570								
GEFT	GROUP1	36	8.5278	5.300	0.883	1.57	0.143	2.22	85	0.029	2.14	64.46	0.036
	GROUP2	51	6.2549	4.232	0.593								

TABLE 32

T-TEST FOR BLACKS

GROUP 1-GENDER EQ 1.MALES
 GROUP 2-GENDER EQ 2.FEMALES

VARIABLES	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T	DEGREES OF FREEDOM	2-TAIL PROB.	T	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP 1	82	30.0810	5.283	1.28	0.268	2.85	180	0.004	2.84	163.84	0.005
	GROUP 2	100	27.9300	4.702								
PEB	GROUP 1	77	84.0779	16.176	1.20	0.407	-0.22	171	0.824	-0.22	156.00	0.825
	GROUP 2	98	84.6042	14.793								
FOS	GROUP 1	78	116.3421	17.226	1.17	0.473	1.45	168	0.150	1.46	165.03	0.147
	GROUP 2	94	112.3191	18.662								
HFT	GROUP 1	82	9.0976	7.074	2.38	0.000	4.06	182	0.000	3.88	133.13	0.000
	GROUP 2	102	5.5882	4.602								
GEFT	GROUP 1	82	9.2561	5.351	1.88	0.003	4.12	182	0.000	3.89	143.89	0.000
	GROUP 2	102	6.4412	3.904								

TABLE 33

T-TEST FOR WHITES

GROUP 1- GENDER EQ 1.FEMALES

GROUP 2- GENDER EQ 2.MALES

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	30	26.8667	3.866	1.24	0.531	-1.01	90	0.314	-1.05	63.42	0.297
	GROUP2	62	27.8065	4.307								
PEB	GROUP1	28	82.2500	11.781	1.37	0.376	-0.37	86	0.712	-0.39	61.07	0.697
	GROUP2	60	83.3667	13.775								
FOS	GROUP1	30	104.3000	17.151	1.09	0.763	-0.26	90	0.793	-0.26	55.33	0.797
	GROUP2	62	105.2742	16.444								
HFT	GROUP1	30	12.6667	5.376	1.89	0.063	1.37	91	0.174	1.53	75.86	0.131
	GROUP2	63	10.6190	7.314								
GEFT	GROUP1	30	14.1333	4.058	1.53	0.211	1.65	91	0.096	1.82	69.39	0.074
	GROUP2	63	12.3651	5.017								

TABLE 34

T-TEST FOR FEMALES

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 9. AFRO-CARIBBEANS

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	50	27.9600	4.199	1.55	0.128	0.02	97	0.982	0.02	91.85	0.982
	GROUP2	49	27.9388	5.234								
PEB	GROUP1	47	83.7021	16.616	1.50	0.171	-0.42	93	0.677	-0.42	88.69	0.678
	GROUP2	48	85.0000	13.571								
FOS	GROUP1	48	111.9792	19.956	1.29	0.397	-0.23	91	0.821	-0.23	90.65	0.820
	GROUP2	45	112.8667	17.571								
HFT	GROUP1	51	5.3529	4.069	1.15	0.622	-0.34	99	0.733	-0.34	98.20	0.733
	GROUP2	50	5.6400	4.385								
GEFT	GROUP1	51	6.2549	4.232	1.25	0.440	-0.48	99	0.631	-0.48	98.20	0.631
	GROUP2	50	6.6400	3.789								

TABLE 35

T-TEST FOR FEMALES

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 19. ANGLOS

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	50	27.9600	4.199	2.82	0.428	0.57	52	0.574	0.87	4.49	0.456
	GROUP2	4	26.7500	2.500								
PEB	GROUP1	47	83.7021	16.616	1.56	0.815	1.40	49	0.169	1.69	3.85	0.233
	GROUP2	4	71.7500	13.301								
FOS	GROUP1	48	111.9792	19.956	1.12	1.000	0.60	50	0.550	0.83	3.59	0.604
	GROUP2	4	105.7500	18.839								
HFT	GROUP1	51	8.3529	4.069	3.99	0.025	-5.97	53	0.000	-3.33	3.12	0.047
	GROUP2	4	19.0000	8.124								
GEFT	GROUP1	51	6.2549	4.232	1.47	0.470	-2.69	53	0.009	-2.28	3.33	0.119
	GROUP2	4	12.2500	5.123								

TABLE 36

T-TEST FOR FEMALES

GROUP 1- ETHNICI EQ 9. AFRO-CARIBBEANS
 GROUP 2- ETHNICI EQ 19. ANGLOS

VARIABLE	NUMBER OF CASES	STANDARD MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	49	27.9388	5.234	4.38	0.247	0.45	51	0.667	0.82	5.49	0.471
	GROUP2	4	26.7500	2.500								
PEB	GROUP1	48	85.0000	13.571	1.04	1.000	1.88	50	0.066	1.91	3.54	0.177
	GROUP2	4	71.7500	13.301								
FOS	GROUP1	45	112.8667	17.571	1.15	0.680	0.77	47	0.444	0.73	3.48	0.548
	GROUP2	4	105.7500	18.839								
HFT	GROUP1	50	5.6400	4.365	3.46	0.046	-5.51	52	0.000	-3.25	3.14	0.050
	GROUP2	4	19.0000	8.124								
GEFT	GROUP1	50	6.6400	3.789	1.83	0.309	-2.78	52	0.007	-2.14	3.27	0.132
	GROUP2	4	12.2500	5.123								

TABLE 37

T-TEST FOR FEMALES

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 2. JEWS

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	50	27.9500	4.199	0.594	1.25	0.603	0.52	54	0.603	0.48	6.00	0.649
	GROUP2	6	27.0000	4.690	1.915								
PEB	GROUP1	47	83.7021	16.616	2.424	1.02	0.816	0.24	50	0.809	0.24	4.87	0.938
	GROUP2	5	81.8000	16.769	7.499								
FOS	GROUP1	48	111.9792	19.958	2.880	9.09	0.043	0.62	51	0.540	1.35	14.09	0.199
	GROUP2	5	106.4000	6.618	2.960								
HFT	GROUP1	51	5.3528	4.069	0.570	1.86	0.236	-2.00	55	0.050	-1.56	5.65	0.202
	GROUP2	6	9.0000	5.550	2.266								
GEFT	GROUP1	51	6.2549	4.232	0.593	2.38	0.104	-1.85	55	0.070	-1.31	5.51	0.267
	GROUP2	6	9.8333	6.524	2.664								

TABLE 38

T-TEST FOR AFRO-CARIBBEANS AND JEWS

GROUP 1- ETHNIC EQ 9. AFRO-CARIBBEANS
 GROUP 2- ETHNIC EQ 2. JEWS

VARIABLE		NUMBER OF CASES	STANDARD MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE		SEPARATE VARIANCE ESTIMATE			
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	49	27.9388	5.234	0.748	1.25	0.894	0.42	53	0.677	0.48	6.62	0.679
	GROUP2	6	27.0000	4.690	1.915								
PEB	GROUP1	48	85.0000	13.571	1.959	1.53	0.419	0.49	51	0.625	0.41	4.56	0.719
	GROUP2	5	81.8000	16.769	7.499								
FOS	GROUP1	45	112.8667	17.571	2.619	7.05	0.069	0.81	48	0.422	1.84	12.05	0.128
	GROUP2	5	108.4000	6.618	2.960								
HFT	GROUP1	50	6.6400	4.365	0.617	1.62	0.346	-1.73	54	0.089	-1.43	5.77	0.240
	GROUP2	6	9.0000	5.550	2.266								
GEFT	GROUP1	50	6.6400	3.789	0.536	2.96	0.041	-1.79	54	0.078	-1.18	5.41	0.310
	GROUP2	6	9.8333	6.524	2.664								

TABLE 39

T-TEST FOR MALES

GROUP 1-ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2-ETHNICI EQ 9. AFRO-CARIBBEANS

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	36	29.3333	6.150	1.025	1.70	0.098	-0.68	79	0.498	-0.66	64.42	0.511
	GROUP2	45	30.1556	4.724	0.704								
PEB	GROUP1	33	81.1515	18.147	3.159	1.64	0.130	-1.46	74	0.149	-1.41	59.03	0.163
	GROUP2	43	86.5581	14.149	2.158								
FOS	GROUP1	33	115.5152	18.972	3.303	1.34	0.376	-0.14	73	0.838	-0.14	63.51	0.890
	GROUP2	42	116.0952	16.397	2.530								
HFT	GROUP1	36	6.4722	5.412	0.902	1.88	0.057	-2.70	79	0.006	-2.80	78.40	0.006
	GROUP2	45	10.4667	7.418	1.106								
GEFT	GROUP1	36	8.5278	5.300	0.883	1.04	0.921	-0.90	79	0.373	-0.90	75.70	0.372
	GROUP2	45	9.6000	5.395	0.804								

TABLE 40

T-TEST FOR MALES

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 19. ANGLOS

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	36	29.3333	6.160	41.27	0.010	0.99	38	0.328	2.73	33.40	0.010
	GROUP2	4	26.2500	0.957								
PEB	GROUP1	33	81.1515	18.147	15.26	0.045	0.48	35	0.636	1.12	18.44	0.282
	GROUP2	4	76.7500	4.648								
FOS	GROUP1	33	115.5152	18.972	2.24	0.557	1.99	35	0.054	2.73	4.82	0.068
	GROUP2	4	96.0000	12.675								
HFT	GROUP1	36	6.4722	5.412	1.13	1.000	-2.30	38	0.027	-2.41	3.79	0.121
	GROUP2	4	13.0000	5.099								
GEFT	GROUP1	36	8.5278	5.300	4.96	0.211	-2.58	38	0.014	-4.70	7.03	0.002
	GROUP2	4	15.5000	2.380								

TABLE 41

T-TEST FOR MALES

GROUP 1- ETHNICI EQ 9. AFRO-CARIBBEANS
 GROUP 2- ETHNICI EQ 10. ANGLOS

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	45	30.1556	4.724	24.34	0.022	1.64	47	0.109	4.59	22.76	0.000
	GROUP2	4	26.2500	0.957								
PEB	GROUP1	43	86.5581	14.149	9.28	0.000	1.37	45	0.178	3.09	9.89	0.016
	GROUP2	4	76.7500	4.846								
FOS	GROUP1	42	116.0952	16.397	1.67	0.760	2.37	44	0.022	2.94	4.02	0.043
	GROUP2	4	96.0000	12.675								
HFT	GROUP1	45	10.4667	7.418	2.12	0.594	-0.67	47	0.509	-0.91	4.22	0.425
	GROUP2	4	13.0000	5.099								
GEFT	GROUP1	45	9.600	5.395	5.14	0.201	-2.15	47	0.037	-4.11	6.28	0.007
	GROUP2	4	15.5000	2.380								

TABLE 42

T-TEST FOR MALES

GROUP 1- ETHNIC EQ 9. AFRO-CARIBBEANS
 GROUP 2- ETHNIC EQ 2. JEWS

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
								T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	45	30.1556	4.724	0.704	4.96	0.689	-0.99	45	0.326	-2.02	1.49	0.346
	GROUP2	2	33.5000	2.121	1.500								
PEB	GROUP1	43	86.5581	14.149	2.158	400.41	0.079	-0.29	43	0.773	-1.33	41.59	0.191
	GROUP2	2	89.5000	0.707	0.500								
FOS	GROUP1	42	116.0952	16.397	2.530	3.18	0.844	0.90	42	0.373	1.52	1.33	0.413
	GROUP2	2	105.5000	9.192	6.500								
HFT	GROUP1	45	10.4667	7.418	1.106	27.51	0.301	0.65	45	0.517	2.33	4.78	0.101
	GROUP2	2	7.0000	1.414	1.000								
GEFT	GROUP1	45	9.8000	5.395	0.804	58.22	0.207	-0.75	45	0.456	-3.06	11.17	0.011
	GROUP2	2	12.5000	0.707	0.500								

TABLE 43

T-TEST FOR MALES

GROUP 1- ETHNICI EQ 3. AFRO-AMERICANS
 GROUP 2- ETHNICI EQ 2. JEWS

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE			SEPARATE VARIANCE ESTIMATE		
							T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
PEA	GROUP1	36	29.3333	6.150	8.41	0.536	-0.94	36	0.351	-2.29	2.14	0.157
	GROUP2	2	33.5000	2.121								
PEB	GROUP1	33	81.1518	18.147	658.64	0.062	-0.64	33	0.526	-2.61	32.96	0.014
	GROUP2	2	89.5000	0.707								
FOS	GROUP1	33	115.5152	18.972	4.26	0.737	0.73	33	0.468	1.37	1.58	0.472
	GROUP2	2	105.5000	9.192								
HFT	GROUP1	36	6.4722	5.412	14.64	0.409	-0.14	36	0.893	-0.39	3.23	0.731
	GROUP2	2	7.0000	1.414								
GEFT	GROUP1	36	8.5278	5.300	56.17	0.211	-1.05	36	0.302	-3.91	13.28	0.002
	GROUP2	2	12.5000	0.707								

TABLE 44

RELIABILITY ANALYSIS FOR THE BLOOD PRO-PROTESTANT ETHIC SCALE

1. PE1
2. PE2
3. PE3
4. PE4
5. PE5
6. PE6
7. PE7
8. PE8

		MEANS	STD DEV	CASES
1.	PE1	4.24832	1.18864	298.0
2.	PE2	3.77852	1.35759	298.0
3.	PE3	3.16443	1.43893	298.0
4.	PE4	3.98658	1.59328	298.0
5.	PE5	3.23490	1.57587	298.0
6.	PE6	3.39262	1.45998	298.0
7.	PE7	3.92953	1.36764	298.0
8.	PE8	2.68121	1.27487	298.0

COVARIANCE MATRIX

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	1.4129							
PE2	-.0021	1.8430						
PE3	.4035	.2655	2.0705					
PE4	.0976	.2125	.3995	2.5385				
PE5	.2243	-.0892	.2876	-.3504	2.4834			
PE6	-.1113	.3128	.0800	.6652	.0522	2.1315		
PE7	-.2181	.4119	-.0321	.2953	-.0238	.3544	1.8704	
PE8	.0020	.0167	.1873	.3997	-.0326	.1054	.1391	1.6253

TABLE 45

RELIABILITY INDEX FOR THE BLOOD PRO-PROTESTANT ETHIC SCALE

CORRELATION MATRIX

PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
1.00000							
-.00127	1.00000						
.23590	.13591	1.00000					
.05155	.09825	.17426	1.00000				
.11975	-.04170	.11803	-.13955	1.00000			
-.06413	.15784	.03808	.28598	.02271	1.00000		
-.13418	.22187	-.01633	.13554	-.01104	.17747	1.00000	
.00131	.00985	.10209	.19680	-.01623	.05862	.07976	1.00000

OF CASES -- 298.0

STATISTICS FOR SCALE	MEAN 28.41611	VARIANCE 24.04176		STD DEV 4.90324	# OF VARIABLES 8	
	MEAN	MINIMUM	MAXIMUM	RANGE	MAX/MIN	VARIANCE
ITEM MEANS	3.55201	2.68121	4.24832	1.56711	1.56448	.27172
ITEM VARIANCES	1.99695	1.41268	2.53854	1.12586	1.79672	.16320
INTER-ITEM COVARIANCES	.14404	-.35037	.66522	1.01559	-1.69881	.04871
INTER-ITEM CORRELATIONS	.07125	-.13955	.28598	.42552	-2.04932	.01140

TABLE 46

RELIABILITY ANALYSIS FOR THE BLOOD PRO-PROTESTANT ETHIC SCALE

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PE1	24.16779	21.83707	.07128	.08791	.38864
PE2	24.63758	19.94229	.18610	.08623	.33988
PE3	25.25168	18.82870	.25165	.11782	.30508
PE4	24.42953	18.06404	.25394	.17154	.29883
PE5	25.18121	21.46200	.00660	.05898	.43323
PE6	25.02349	18.99271	.22927	.12164	.31627
PE7	24.48658	20.31800	.15032	.09839	.35674
PE8	25.73490	20.78134	.14067	.04799	.36104

RELIABILITY COEFFICIENTS 8 ITEMS

ALPHA = .38344 STANDARDIZED ITEM ALPHA = .38031

TABLE 47**RELIABILITY ANALYSIS FOR THE BLOOD PRO-PROTESTANT ETHIC SCALE
FOR WOMEN**

1. PE1
2. PE2
3. PE3
4. PE4
5. PE5
6. PE6
7. PE7
8. PE8

RELIABILITY COEFFICIENTS**N OF CASES = 174.0****N OF ITEMS = 8****ALPHA = 0.38044**

TABLE 48

RELIABILITY ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE FOR MEN

1. PE1
2. PE2
3. PE3
4. PE4
5. PE5
6. PE6
7. PE7
8. PE8

RELIABILITY COEFFICIENTS**N OF CASES = 122.0 N OF ITEMS = 8****ALPHA = 0 . 38927**

TABLE 48A
RELIABILITY ANALYSIS OF THE MIRELS AND GARRETT SCALE FOR MALES

1. PE21
2. PE22
3. PE23
4. PE24
5. PE25
6. PE26
7. PE27
8. PE28
9. PE29
10. PE30
11. PE31
12. PE32
13. PE33
14. PE34
15. PE35
16. PE36
17. PE37
18. PE38
19. PE39

RELIABILITY COEFFICIENTS

ALPHA = .7600

19 ITEMS

STANDARD ITEM ALPHA = .7610

TABLE 48B

RELIABILITY ANALYSIS OF THE MIRELS AND GARRETT PE SCALE FOR FEMALES

1.	PE21
2.	PE22
3.	PE23
4.	PE24
5.	PE25
6.	PE26
7.	PE27
8.	PE28
9.	PE29
10.	PE30
11.	PE31
12.	PE32
13.	PE33
14.	PE34
15.	PE35
16.	PE36
17.	PE37
18.	PE38
19.	PE39

RELIABILITY COEFFICIENTS**ALPHA = .7107****19 ITEMS****STANDARDIZED ITEM ALPHA = .7072**

TABLE 48C

RELIABILITY ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

1. PE21
2. PE22
3. PE23
4. PE24
5. PE25
6. PE26
7. PE27
8. PE28
9. PE29
10. PE30
11. PE31
12. PE32
13. PE33
14. PE34
15. PE35
16. PE36
17. PE37
18. PE38
19. PE39

RELIABILITY COEFFICIENTS

ALPHA² .7305

19 ITEMS

STANDARDIZED ITEM = .7291

TABLE 49
FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE
ANALYSIS NUMBER 1 LISTWISE DELETION OF CASES WITH MISSING VALUES

	MEAN	STD DEV	LABEL
PE1	4.24832	1.18864	
PE2	3.77862	1.35759	
PE3	3.16443	1.43893	
PE4	3.98858	1.59328	
PE5	3.23490	1.57587	
PE6	3.39262	1.45998	
PE7	3.92953	1.36764	
PE8	2.68121	1.27487	

NUMBER OF CASES = 298

CORRELATION MATRIX:

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	1.00000							
PE2	-.00127	1.00000						
PE3	.23590	.13591	1.00000					
PE4	.05155	.09825	.17426	1.00000				
PE5	.11975	-.04170	.11803	-.13955	1.00000			
PE6	-.06413	.15784	.03808	-.28598	.02271	1.00000		
PE7	-.13418	.22187	-.01633	.13554	-.01104	.17747	1.00000	
PE8	.00131	.00965	.10209	.19680	-.01623	.05662	.07976	1.00000

DETERMINANT OF CORRELATION MATRIX = .6479685

TABLE 50

FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE

INVERSE OF CORRELATION MATRIX

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	1.09638							
PE2	-.00753	1.09437						
PE3	-.23357	-.15488	1.13356					
PE4	-.07643	-.01084	-.18494	1.20706				
PE5	-.11464	-.06428	-.13935	.20199	1.06268			
PE6	.07915	-.12779	.01853	-.31732	-.08838	1.13849		
PE7	.13841	-.22417	.04853	-.10084	-.03178	-.12117	1.10913	
PE8	.02014	.03356	-.08471	-.18918	-.00121	.00546	-.06525	1.05040

TABLE 51

FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE

ANTI-IMAGE COVARIANCE MATRIX:

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	.91209							
PE2	-.00027	.91377						
PE3	-.18794	-.12488	.88218					
PE4	-.05775	.00821	-.13516	.82846				
PE5	-.09839	.05527	-.11568	.15747	.94102			
PE6	.06341	-.10257	.01436	-.23091	-.07305	.87836		
PE7	.11382	-.18468	.03880	-.07532	-.02697	-.09596	.90161	
PE8	.01749	.02919	-.07114	-.14921	-.00108	.00456	-.05601	.95201

ANTI-IMAGE CORRELATION MATRIX:

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	.53989							
PE2	-.00887	.57006						
PE3	-.20952	-.13905	.53711					
PE4	-.08644	-.00944	-.15810	.54124				
PE5	-.10621	.05960	-.12697	.17835	.41827			
PE6	.07084	-.11449	.01631	-.27068	-.08035	.57328		
PE7	.12551	-.20347	.04328	-.08715	-.02928	-.10783	.58943	
PE8	.01876	.03130	-.07763	-.16801	-.00114	.00499	-.08045	.60074

MEASURES OF SAMPLING ADEQUACY (MSA) ARE PRINTED ON THE DIAGONAL.

TABLE 52

FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE

CORRELATION SIGNIFICANCE MATRIX:

(.) IS PRINTED FOR DIAGONAL ELEMENTS

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	.							
PE2	.49126	.						
PE3	.00002	.00946	.					
PE4	.18763	.04523	.00127	.				
PE5	.01942	.23664	.02087	.00796	.			
PE6	.13489	.00316	.25627	.00000	.34812	.		
PE7	.01025	.00006	.38943	.00982	.42473	.00105	.	
PE8	.49100	.43413	.03924	.00032	.39011	.16501	.08482	.

EXTRACTION 1 FOR ANALYSIS 1, PRINCIPAL-COMPONENTS ANALYSIS (PC)

INITIAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
PE1	1.00000	1	1.65571	20.7	20.7
PE2	1.00000	2	1.36574	17.1	37.8
PE3	1.00000	3	1.08476	13.6	51.3
PE4	1.00000	4	.96265	12.0	63.4
PE5	1.00000	5	.90449	11.3	74.7
PE6	1.00000	6	.74143	9.3	83.9
PE7	1.00000	7	.70395	8.8	92.7
PE8	1.00000	8	.58129	7.3	100.0

PC EXTRACTED 3 FACTORS.

TABLE 53

FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE

FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3
PE4	.68266		-.40026
PE6	.61233		
PE7	.52191	-.34770	.35914
PE2	.51092		.47363
PE1		.74395	
PE3	.34579	.68049	
PE5		.43197	.55118
PE8	.38542		-.49698

TABLE 54

FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE

FINAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
PE1	.55387	1	1.65571	20.7	20.7
PE2	.48706	2	1.36574	17.1	37.8
PE3	.58487	3	1.08476	13.6	51.3
PE4	.63358				
PE5	.50350				
PE6	.41062				
PE7	.52227				
PE8	.41043				

REPRODUCED CORRELATION MATRIX:

	PE1	PE2	PE3	PE4	PE5	PE6	PE7	PE8
PE1	.55387*	.04271	-.26615	-.01264	-.19302	.04340	.13590	-.09446
PE2	-.04398	.48706*	-.03513	-.05743	-.22650	-.22386	-.22921	.05315
PE3	.50205	.17104	.58487*	-.10119	-.16243	-.08924	.02281	-.09070
PE4	.06418	.15567	.27546	.63358*	.12216	-.06706	-.04719	-.27569
PE5	.31277	.18479	.28046	-.26170	.50350*	.07665	.00093	.24910
PE6	-.10753	.38170	.12732	.35304	-.05395	.41062*	-.23652	-.09664
PE7	-.27009	.45108	-.03914	.18273	-.01197	.41399	.52227*	-.09952
PE8	.09578	-.04350	.19279	.47249	-.26533	.15325	-.01975	.41043*

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX;
THE DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN
THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE 21 (75.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05

TABLE 55**FACTOR ANALYSIS OF THE BLOOD SCALE****VARIMAX ROTATION 1 FOR EXTRACTION 1 IN ANALYSIS 1 - KAISER NORMALIZATION****VARIMAX CONVERGED IN 5 ITERATIONS.****ROTATED FACTOR MATRIX :**

	FACTOR 1	FACTOR 2	FACTOR 3
PE7	.70004		
PE2	.68105		
PE6	.58538		
PE3		.72535	
PE1		.71408	
PE5		.50430	-.48381
PE4			.73714
PE8			.63431

TABLE 56**FACTOR ANALYSIS OF THE BLOOD PRO-PROTESTANT ETHIC SCALE****FACTOR TRANSFORMATION MATRIX:**

	FACTOR 1	FACTOR 2	FACTOR 3
FACTOR 1	.77448	.16908	.60959
FACTOR 2	-.25108	.96663	.05089
FACTOR 3	.58064	.19247	-.79108

TABLE 57

FACTOR ANALYSIS OF THE BLOOD SCALE

FACTOR SCORE COEFFICIENT MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3
PE1	-.15076	.52242	.03699
PE2	.50009	.10705	-.15883
PE3	.06197	.52533	.11817
PE4	.08931	.05937	.54643
PE5	.16209	.39185	-.42800
PE6	.38254	-.00812	.12293
PE7	.50029	-.12907	-.08271
PE8	-.10817	.03753	.50888

TABLE 58
FACTOR ANALYSIS
OF THE MIRELS AND GARRETT PE SCALE

ANALYSIS NUMBER 1 LISTWISE DELETION OF CASES WITH MISSING VALUES

	MEAN	STD DEV	LABEL
PE21	4.12274	1.85510	
PE22	2.87365	1.79833	
PE23	4.48375	1.99925	
PE24	5.37184	1.78226	
PE25	4.94224	1.96627	
PE26	2.79061	1.90333	
PE27	4.48570	2.09115	
PE28	4.89892	1.96451	
PE29	4.58484	1.75827	
PE30	5.85199	1.46571	
PE31	3.74729	1.85947	
PE32	4.92780	1.97131	
PE33	3.25632	1.96233	
PE34	4.20217	2.03117	
PE35	3.69314	1.74135	
PE36	5.32852	1.58926	
PE37	5.61011	1.49139	
PE38	4.70758	1.91042	
PE39	4.22383	2.00192	

NUMBER OF CASES = 277

TABLE 59
FACTOR ANALYSIS OF THE MIRELS & GARRETT PE SCALE

CORRELATION MATRIX:

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28	PE29	PE30
PE21	1.00000									
PE22	.28161	1.00000								
PE23	.31413	.36171	1.00000							
PE24	.00587	-.06781	.01543	1.00000						
PE25	.19664	.09015	.23571	.18708	1.00000					
PE26	.30591	.40190	.28285	.07430	.17296	1.00000				
PE27	.17761	.17179	.29431	-.01358	.24889	.24397	1.00000			
PE28	.27384	.17175	.22190	.01284	.19452	.20459	.19230	1.00000		
PE29	-.11984	-.30858	-.09727	.00435	.07269	-.11052	-.04478	-.06044	1.00000	
PE30	.18260	.15096	.21123	.04889	.13657	.13171	.33938	.21247	.00700	1.00000
PE31	.26006	.24938	.30395	.02190	.09311	.39346	.28755	.23400	-.04107	.29066
PE32	.14906	.14050	.19460	.13864	.18774	.21130	.17870	.17213	-.10171	.18062
PE33	-.03853	.01434	-.04280	-.00145	.04705	.05128	-.01860	.02366	.09606	-.27524
PE34	.24340	.27980	.32201	.02420	.22520	.27622	.10059	.17948	-.06772	.06485
PE35	-.09036	-.20102	-.08313	.04157	-.01366	-.00962	-.01832	-.04405	.56294	-.00224
PE36	.19028	.05641	.12855	.04370	.17074	.16416	.11733	.21492	.05417	.11272
PE37	.20725	.16934	.19108	.08200	.14797	.22897	.28381	.16581	.05273	.39616
PE38	.14920	.07463	.09978	-.10309	.13052	-.00594	.12853	.10601	-.06432	-.02198
PE39	.30575	.28263	.26253	.00705	.23249	.36798	.32380	.23609	-.10938	.17433

TABLE 60

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE31	PE32	PE33	PE34	PE35	PE36	PE37	PE38	PE39
PE31	1.00000								
PE32	.23124	1.00000							
PE33	-.06559	-.00363	1.00000						
PE34	.17090	.11405	.06058	1.00000					
PE35	.08227	-.00542	.07930	-.00084	1.00000				
PE36	.19003	.16719	-.03872	.15332	.15177	1.00000			
PE37	.39549	.17401	-.17372	.06798	.10444	.21933	1.00000		
PE38	.11477	.08096	.01330	.12360	.01432	.11648	.12643	1.00000	
PE39	.41431	.23272	.01209	.16348	-.03531	.23759	.32786	.24549	1.00000

DETERMINANT OF CORRELATION MATRIX = .0309775

TABLE 61
FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

INVERSE OF CORRELATION MATRIX:

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28
PE21	1.31235							
PE22	-.09217	1.49621						
PE23	-.16440	-.28192	1.40931					
PE24	.01807	.13590	-.00071	1.10045				
PE25	-.07248	.03908	-.12274	-.22570	1.27959			
PE26	-.15968	-.36514	-.00987	-.08250	-.04257	1.52200		
PE27	.04172	.04283	-.19660	.08889	-.18847	-.11673	1.34938	
PE28	-.15736	-.00839	-.05447	.02190	-.08615	-.03138	-.02964	1.20881
PE29	.02722	.31595	-.05263	.09244	-.22167	.03803	.04684	.01177
PE30	-.06730	-.08848	-.04008	-.01968	-.03254	.10205	-.31832	-.15453
PE31	-.04635	-.01384	-.16929	.01340	.14796	-.30390	-.07694	-.08970
PE32	.01049	.00437	-.07285	-.12580	-.09867	-.07550	-.02797	-.05462
PE33	.02728	-.08345	.05656	-.01144	-.05067	-.06948	-.08246	-.08504
PE34	-.09706	-.17165	-.24262	-.00333	-.16701	-.16730	.07069	-.05655
PE35	.07860	.08665	.07361	-.06197	.13700	-.06581	-.00015	.05648
PE36	-.08933	.06287	.00441	.00099	-.08074	-.03781	.02345	-.14720
PE37	-.04852	-.09245	.01633	-.09687	-.01697	-.04915	-.10564	.01227
PE38	-.08854	.00366	.00051	.13597	-.09796	.20942	-.07231	-.03426
PE39	-.12426	-.10696	-.00798	.03127	-.13090	-.22036	-.18178	-.04986

TABLE 62

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE29	PE30	PE31	PE32	PE33	PE34	PE35	PE36
PE29	1.64713							
PE30	-.09371	1.44648						
PE31	.04217	-.14799	1.54295					
PE32	.13290	-.10343	-.09463	1.16927				
PE33	.13232	.32288	.02525	-.03792	1.15166			
PE34	.03842	.00277	-.02430	.01063	-.05632	1.25560		
PE35	-.85318	.03620	-.15998	-.04990	-.06062	-.07471	1.57494	
PE36	.01099	.02179	-.01413	-.08547	.05594	-.08308	-.18358	1.18080
PE37	-.10769	-.34657	-.28186	-.01422	.15206	.07778	-.08801	-.11911
PE38	.10530	.15419	-.02963	-.03140	.00093	-.09347	-.08028	-.03631
PE39	.05528	.05631	-.29981	-.08245	-.05802	.05405	.05068	-.13478

	PE37	PE38	PE39
PE37	1.45845		
PE38	-.10016	1.15431	
PE39	-.18352	-.22310	1.53250

KAISER-MEYER-OLKIN MEASURE OF SAMPLING ADEQUACY = .79788

BARTLETT TEST OF SPHERICITY = 934.05988, SIGNIFICANCE = .00000

THERE ARE 54 (15.8%) OFF-DIAGONAL ELEMENTS OF AIC MATRIX > 0.00

TABLE 63

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

ANTI-IMAGE COVARIANCE MATRIX:

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28
PE21	.76199							
PE22	-.04694	.66836						
PE23	-.08889	-.13370	.70957					
PE24	.01251	.08254	-.00045	.90872				
PE25	-.04314	.02041	-.06806	-.16028	.78150			
PE26	-.07994	-.16034	-.00460	-.04926	-.02186	.65703		
PE27	.02356	.02121	-.10338	.05986	-.10916	-.05684	.74108	
PE28	-.09919	-.00464	-.03197	.01646	-.05570	-.01706	-.01817	.82726
PE29	.01259	.12820	-.02267	.05100	-.10517	.01517	.02107	.00591
PE30	-.03545	-.04088	-.01966	-.01236	-.01758	.04636	-.16309	-.08838
PE31	-.02289	-.00599	-.07785	.00789	.07494	-.12941	-.03696	-.04810
PE32	.00683	.00250	-.04421	-.09777	-.06595	-.04242	-.01773	-.03864
PE33	.01805	-.04843	.03485	-.00902	-.03438	-.03964	-.05306	-.06109
PE34	-.05891	-.09137	-.13711	-.00241	-.10395	-.08755	.04172	-.03726
PE35	.03803	.03677	.03316	-.03576	.06798	-.02745	-.00007	.02967
PE36	-.05765	.03559	.00265	.00076	-.05343	-.02104	.01472	-.10313
PE37	-.02535	-.04237	.00795	-.06036	-.00910	-.02214	-.05368	.00696
PE38	-.05844	.00212	.00031	.10704	-.06632	.11920	-.04642	-.02455
PE39	-.06179	-.04665	-.00370	.01854	-.06675	-.09448	-.08790	-.02692

TABLE 64

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE29	PE30	PE31	PE32	PE33	PE34	PE35	PE36
PE29	.60712							
PE30	-.03933	.69133						
PE31	.01659	-.06631	.64811					
PE32	.06900	-.06115	-.05245	.85523				
PE33	.06976	.19382	.01421	-.02816	.86831			
PE34	.01858	.00152	-.01255	.00724	-.03895	.79643		
PE35	-.32889	.01589	-.06584	-.02710	-.03342	-.03778	.63495	
PE36	.00565	.01276	-.00776	-.06191	.04113	-.05604	-.09872	.84689
PE37	-.04483	-.16428	-.12525	-.00834	.09053	.04247	-.03831	-.06917
PE38	.05538	.09235	-.01663	-.02327	.00070	-.06449	-.04416	-.02664
PE39	.02190	.02540	-.12679	-.04601	-.03287	.02809	.02100	-.07448
	PE37	PE38	PE39					
PE37	.68566							
PE38	-.05949	.86632						
PE39	-.08211	-.12612	.65253					

TABLE 65
FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

ANTI-IMAGE CORRELATION MATRIX :

	PE21	PE22	PE23	PE24	PE25	PE26	PE27
PE21	.90695						
PE22	-.06578	.82076					
PE23	-.12088	-.19414	.86989				
PE24	.01804	.10591	-.00057	.47718			
PE25	-.05591	.02824	-.09140	-.19020	.75633		
PE26	-.11298	-.24198	-.00674	-.06375	-.03050	.83384	
PE27	.03135	.03914	-.14257	.07295	-.14343	-.08146	.84133
PE28	-.12493	-.00824	-.04173	.01899	-.06927	-.02313	-.02321
PE29	.01852	.20126	-.03455	.06866	-.15269	.02402	.03142
PE30	-.04886	-.06015	-.02907	-.01560	-.02392	.06878	-.22784
PE31	-.03257	-.00911	-.11480	.01029	.10530	-.19831	-.05333
PE32	.00847	.00331	-.05675	-.11090	-.08067	-.05659	-.02227
PE33	.02219	-.06357	.04439	-.01016	-.04174	-.05248	-.06614
PE34	-.07561	-.12523	-.18239	-.00283	-.13176	-.12102	.05431
PE35	.05467	.05645	.04941	-.04707	.09651	-.04251	-.00011
	PE28	PE29	PE30	PE31			
PE28	.89189						
PE29	.00834	.56596					
PE30	-.11687	-.06071	.74887				
PE31	-.06568	.02645	-.09906	.86231			
PE32	-.04594	.09576	-.07953	-.07045			
PE33	-.07208	-.09607	.25016	.01894			
PE34	-.04590	.02672	.00206	-.01746			
PE35	.04093	-.52972	.02398	-.10263			

TABLE 66
FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28	PE29
PE36	-.07176	.04730	.00342	.00087	-.06568	-.02821	.01858	-.12321	.00788
PE37	-.03507	-.06258	.01139	-.07647	-.01242	-.03299	-.07530	.00924	-.06948
PE38	-.07193	.00279	.00040	.12064	-.08061	.15800	-.05794	-.02900	.07637
PE39	-.08762	-.07063	-.00543	.02408	-.09348	-.14429	-.12641	-.03663	.03479
	PE30	PE31	PE32	PE33	PE34	PE35	PE36	PE37	PE38
PE32			.88521						
PE33			-.03268	.54759					
PE34			.00877	-.04684	.82542				
PE35			-.03677	-.04501	-.05313	.55015			
PE36	.01668	-.01047	-.07274	.04797	-.06823	-.13462	.84296		
PE37	-.23861	-.18789	-.01089	.11733	.05747	-.05807	-.09077	.83916	
PE38	.11933	-.02220	-.02703	.00080	-.07764	-.05954	-.03110	-.07719	.64772
PE39	.03782	-.19497	-.06160	-.04367	.03896	.03262	-.10020	-.12276	-.16774
	PE39								
PE39	.87270								

MEASURES OF SAMPLING ADEQUACY (MSA) ARE PRINTED ON THE DIAGONAL.

TABLE 67

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

CORRELATION SIGNIFICANCE MATRIX:

'. ' IS PRINTED FOR DIAGONAL ELEMENTS.

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28
PE21	.							
PE22	.00000	.						
PE23	.00000	.00000	.					
PE24	.46126	.13034	.39911	.				
PE25	.00050	.06724	.00004	.00088	.			
PE26	.00000	.00000	.00000	.10883	.00194	.		
PE27	.00151	.00207	.00000	.41100	.00001	.00002	.	
PE28	.00000	.00207	.00010	.41574	.00057	.00031	.00065	.
PE29	.02315	.00090	.05312	.47128	.11393	.03313	.22895	.15808
PE30	.00114	.00594	.00020	.20885	.01150	.01420	.00000	.00018
PE31	.00001	.00001	.00000	.35836	.06105	.00000	.00000	.00004
PE32	.00650	.00965	.00057	.01049	.00085	.00020	.00142	.00203
PE33	.26152	.40607	.23901	.49041	.21773	.19759	.37897	.34749
PE34	.00002	.00000	.00000	.34422	.00008	.00000	.04738	.00136
PE35	.06678	.00038	.08383	.24541	.41047	.43670	.38072	.23263
PE36	.00073	.17479	.01764	.23442	.00219	.00309	.02555	.00016
PE37	.00026	.00235	.00070	.08677	.00685	.00006	.00000	.00283
PE38	.00646	.10782	.04873	.04339	.01493	.46081	.01624	.03908
PE39	.00000	.00000	.00000	.45348	.00005	.00000	.00000	.00004

TABLE 68

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE29	PE30	PE31	PE32	PE33	PE34	PE35	PE36
PE29	.							
PE30	.45384	.						
PE31	.24801	.00000	.					
PE32	.04555	.00127	.00005	.				
PE33	.05533	.00000	.13832	.47603	.			
PE34	.13068	.14104	.00217	.02899	.15753	.		
PE35	.00000	.48517	.08608	.46421	.09411	.49448	.	
PE36	.18454	.03050	.00074	.00264	.26053	.00530	.00572	.
PE37	.19100	.00000	.00000	.00183	.00186	.12975	.04136	.00012
PE38	.14305	.35783	.02820	.08954	.41279	.01990	.40625	.02640
PE39	.03456	.00180	.00000	.00005	.42062	.00320	.27920	.00003
	PE37	PE38	PE39					
PE37	.							
PE38	.01773	.						
PE39	.00000	.00002	.					

EXTRACTION 1 FOR ANALYSIS 1, PRINCIPAL-COMPONENTS ANALYSIS (PC)

TABLE 69

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

INITIAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
PE21	1.00000	1	4.01842	21.1	21.1
PE22	1.00000	2	1.82621	9.6	30.8
PE23	1.00000	3	1.44086	7.6	38.3
PE24	1.00000	4	1.20422	6.3	44.7
PE25	1.00000	5	1.10951	5.8	50.5
PE26	1.00000	6	1.00649	5.3	55.8
PE27	1.00000	7	.96926	5.1	60.9
PE28	1.00000	8	.88148	4.6	65.6
PE29	1.00000	9	.80744	4.2	69.8
PE30	1.00000	10	.74865	3.9	73.8
PE31	1.00000	11	.69568	3.7	77.4
PE32	1.00000	12	.64483	3.4	80.8
PE33	1.00000	13	.63625	3.3	84.2
PE34	1.00000	14	.60834	3.2	87.4
PE35	1.00000	15	.57726	3.0	90.4
PE36	1.00000	16	.51175	2.7	93.1
PE37	1.00000	17	.49545	2.6	95.7
PE38	1.00000	18	.44438	2.3	98.0
PE39	1.00000	19	.37352	2.0	100.0

TABLE 70

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
PE39	.65024					.35046
PE31	.63439					
PE26	.60703				-.43553	
PE23	.59735					-.34123
PE21	.56703					
PE37	.54078	.33179	-.36942			
PE27	.53979					
PE22	.53875	-.43814			-.31546	
PE28	.48267					
PE34	.43581		.42116			-.42270
PE32	.43239			.30746		.36035
PE25	.41914			.37197		
PE36	.38222	.31493			.38732	
PE35		.78537				
PE29		.78490				
PE33			.69738			
PE30	.46902		-.57129			
PE24				.78021		
PE38				-.47933	.59550	

TABLE 71

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

FINAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
PE21	.39080	1	4.01842	21.1	21.1
PE22	.59522	2	1.82621	9.6	30.8
PE23	.51280	3	1.44086	7.6	38.3
PE24	.68996	4	1.20422	6.3	44.7
PE25	.60966	5	1.10951	5.8	50.5
PE26	.64065	6	1.00649	5.3	55.8
PE27	.34214				
PE28	.29650				
PE29	.75765				
PE30	.65217				
PE31	.60119				
PE32	.43916				
PE33	.59451				
PE34	.57447				
PE35	.74296				
PE36	.30938				
PE37	.56195				
PE38	.69985				
PE39	.59467				

TABLE 72

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

220

REPRODUCED CORRELATION MATRIX:

	PE21	PE22	PE23	PE24	PE25	PE26	PE27	PE28
PE21	.39080	-.08583	-.10985	.06457	-.08183	-.00871	-.10337	-.04304
PE22	.36744	.59522	-.06729	.05861	.06207	-.09931	-.03297	-.03621
PE23	.42398	.42900	.51280	.03096	-.06436	-.09191	.01610	-.10636
PE24	-.05870	-.12642	-.01553	.68996	-.15702	-.03074	-.03907	-.02255
PE25	.27846	.02808	.30008	.34410	.60966	.06630	.03256	-.14137
PE26	.31462	.50121	.37475	.10505	.10666	.64065	-.00063	.00131
PE27	.28098	.20476	.27821	.02549	.21633	.24480	.34214	-.06996
PE28	.31688	.20795	.32827	.03540	.33589	.20328	.26226	.29650
PE29	-.14400	-.36742	-.11417	.01450	.95528	-.12272	-.05830	-.05425
PE30	.21863	.12930	.28994	.05517	.15340	.14061	.35942	.20923
PE31	.27879	.35159	.28383	-.02047	.04062	.49908	.36598	.21067
PE32	.16478	.12219	.12377	.36643	.28722	.28517	.23985	.18487
PE33	-.03508	.03660	-.07471	.05207	.03764	.18196	-.16925	-.04139
PE34	.36005	.35994	.47202	-.02114	.34844	.31878	.13738	.29502
PE35	-.11076	-.27933	-.10126	-.00048	.01267	.01610	-.00260	-.03963
PE36	.19836	.01562	.16545	.06881	.30435	.13884	.24175	.23526
PE37	.20811	.13013	.20506	.04720	.11378	.26420	.39112	.20827
PE38	.19877	-.00067	.05043	-.28409	.19111	-.08792	.19277	.22591
PE39	.31991	.31928	.25305	-.01510	.18252	.41582	.36461	.28030
	PE29	PE30	PE31	PE32	PE33	PE34	PE35	PE36
PE21	.02416	-.03703	-.01874	-.00572	-.00348	-.13665	.02039	-.00808
PE22	.06086	.02166	-.10221	.01832	-.02226	-.08014	.07831	.04079
PE23	.01691	-.07871	.02011	.07083	.03191	-.15001	.01813	-.03890
PE24	-.01015	-.03628	.04237	-.22779	-.05352	.04534	.04205	-.02511

TABLE 73

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE29	PE30	PE31	PE32	PE33	PE34	PE35	PE36
PE25	.01741	-.01683	.05249	-.09949	.00940	-.12324	-.02633	-.13362
PE26	.01220	-.00889	-.10559	-.07388	-.13068	-.04256	-.02572	.02532
PE27	.01352	-.02004	-.07844	-.06115	.15065	-.03677	-.01572	-.12442
PE28	-.00619	.00325	.02333	-.01275	.06506	-.11555	-.00442	-.02036
PE29	.75765	-.00774	-.02322	.05650	-.00572	-.07358	-.15749	-.11121
PE30	.01474	.65217	-.04808	.03021	.22860	.01521	-.00869	-.03912
PE31	-.01785	.33874	.60119	-.05116	-.02532	.05415	-.04812	-.04277
PE32	-.15821	.15041	.28240	.43916	-.05572	.08171	.06960	-.04179
PE33	.10178	-.50384	-.04027	.05210	.59451	.08530	-.09436	-.08032
PE34	.00586	.04964	.11675	.03235	.14589	.57447	.00741	.00252
PE35	.72043	.00645	.13039	-.07502	.17366	-.00825	.74296	-.05254
PE36	.16539	.15184	.23280	.20899	.04161	.15081	.20431	.30938
PE37	.07959	.49678	.49499	.26274	-.26444	-.00986	.16354	.26361
PE38	-.08767	-.07184	.08444	.09513	.07141	.05695	-.04716	.27773
PE39	-.16427	.17081	.50058	.36557	.08132	.13770	-.01655	.30168

TABLE 74

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

	PE37	PE38	PE39
PE21	-.00086	-.04956	-.01417
PE22	.03922	.07530	-.03665
PE23	-.01399	.04936	.00948
PE24	.03481	.18099	.02215
PE25	.03419	-.06059	.04997
PE26	-.03523	.08199	-.04785
PE27	-.10730	-.06424	-.04101
PE28	-.04246	-.11990	-.04421
PE29	-.02686	.02336	.05489
PE30	-.10062	.04986	.00351
PE31	-.09950	.03034	-.08627
PE32	-.08872	-.01417	-.13265
PE33	.09072	-.05810	-.06923
PE34	.07784	.06666	.02578
PE35	-.05910	.06147	-.01876
PE36	-.04428	-.16125	-.06409
PE37	.56195	.01906	-.06361
PE38	.10737	.69985	-.11732
PE39	.39147	.36281	.59467

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX; THE DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE 77 (45.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05

TABLE 75

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

VARMAX ROTATION 1 FOR FOR EXTRACTION 1 IN ANALYSIS 1 - KAISER NORMALIZATION.
VARMAX CONVERGED IN 13 ITERATIONS.

ROTATED FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
PE31	.72510					
PE26	.66826	.37744				
PE39	.61831				.41560	
PE37	.50325			.49000		
PE27	.34524			.32363		
PE34		.74521				
PE23		.65501				
PE21		.52037				
PE22	.44985	.48084	-.35059			
PE28		.40551				
PE29			.86118			
PE35			.84813			
PE30				.74697		
PE33				-.74137		
PE38					.81699	
PE36					.37561	
PE24						.80286
PE25		.46323			.30721	.52892
PE32	.37413					.50280

TABLE 76

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

FACTOR TRANSFORMATION MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
FACTOR 1	.65561	.59581	-.08983	.28312	.29488	.20000
FACTOR 2	.07157	-.18498	.92046	.20383	.14752	.22384
FACTOR 3	-.07478	.40830	.22889	-.85824	.17773	.08450
FACTOR 4	-.17446	.09540	-.11096	.02344	-.44751	.86448
FACTOR 5	-.43880	-.10764	-.21766	.12468	.79959	.30593
FACTOR 6	.58006	-.65069	-.18056	-.35443	.14171	.24866

TABLE 77

FACTOR ANALYSIS OF THE MIRELS AND GARRETT PE SCALE

FACTOR SCORE COEFFICIENT MATRIX :

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
PE21	-.03473	.24360	-.02410	.03387	.06685	-.06365
PE22	.18456	.19122	-.14552	-.08263	-.18832	-.17506
PE23	-.07150	.36211	.01339	.08243	-.09937	-.06524
PE24	-.01240	-.07286	-.03212	-.02787	-.18552	.65559
PE25	-.27237	.25382	.04573	.01910	.18676	.37637
PE26	.35887	.07166	.01613	-.18741	-.25741	.01747
PE27	.07468	.00465	.00137	.15494	.11879	.01915
PE28	-.08485	.18038	.00686	.05423	.14790	.04963
PE29	-.05374	.08684	.50392	.01982	-.04374	-.05236
PE30	-.02406	.05016	.04094	.47798	-.10614	.01125
PE31	.38757	-.10740	.06472	.02014	-.05263	-.08300
PE32	.17390	-.16496	-.10410	-.06758	.08592	.38159
PE33	.16732	.00686	.08438	-.53827	.03352	.07661
PE34	-.16463	.48416	.09168	-.09498	-.08623	-.05764
PE35	.11250	-.00769	.49392	-.06269	-.03637	-.07107
PE36	.00602	.02288	.13073	-.00217	.24240	.09208
PE37	.21337	-.13899	.08923	.24838	.04964	.00276
PE38	-.07523	-.06827	-.06256	-.07547	.66515	-.12975
PE39	.29596	-.13843	-.05635	-.10627	.24449	.01595

TABLE 77C
FACTOR ANALYSIS
OF THE FEAR OF SUCCESS SCALE

ANALYSIS NUMBER 1 REPLACEMENT OF MISSING VALUES WITH THE MEAN
EXTRACTION 1 FOR ANALYSIS 1 UNWEIGHTED LEAST SQUARES (ULS)

INITIAL STATISTICS :

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
FOS 1	.17745	1	4.18628	15.5	15.5
FOS 2	.20296	2	2.25333	8.3	23.9
FOS 3	.17932	3	1.74641	6.5	30.3
FOS 4	.31815	4	1.45588	5.4	35.7
FOS 5	.22274	5	1.40340	5.2	40.9
FOS 6	.15918	6	1.38664	5.1	46.0
FOS 7	.25739	7	1.05887	3.9	50.0
FOS 8	.36827	8	1.01772	3.8	53.7
FOS 9	.27581	9	.98142	3.6	57.4
FOS 10	.24414	10	.93673	3.5	60.9
FOS 11	.24134	11	.91667	3.4	64.2
FOS 12	.21582	12	.85322	3.2	67.4
FOS 13	.31123	13	.81437	3.0	70.4
FOS 14	.23314	14	.76536	2.8	73.2
FOS 15	.19856	15	.73122	2.7	76.0
FOS 16	.21554	16	.70848	2.6	78.6
FOS 17	.37455	17	.67801	2.5	81.1
FOS 18	.26487	18	.65885	2.4	83.5
FOS 19	.28089	19	.60429	2.2	85.8
FOS 20	.36503	20	.57020	2.1	87.9
FOS 21	.36877	21	.54597	2.0	89.9
FOS 22	.25067	22	.52332	1.9	91.8
FOS 23	.25241	23	.51592	1.9	93.6
FOS 24	.32327	24	.48280	1.7	95.5
FOS 25	.25160	25	.46030	1.7	97.2
FOS 26	.26998	26	.42725	1.6	98.8
FOS 27	.18628	27	.33731	1.2	100.0

ULS EXTRACTED 8 FACTORS. 7 ITERATIONS REQUIRED.

TABLE 770
FACTOR ANALYSIS OF THE FOS SCALE

FINAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
FOS1	.23710	1	3.56395	13.2	13.2
FOS2	.24541	2	1.61593	6.0	19.2
FOS3	.22284	3	1.12862	4.2	23.4
FOS4	.38765	4	.84223	3.1	26.5
FOS5	.37062	5	.77063	2.9	29.3
FOS6	.31253	6	.74628	2.8	32.1
FOS7	.59689	7	.48860	1.8	33.9
FOS8	.46418	8	.39067	1.4	35.4
FOS9	.26646				
FOS10	.36451				
FOS11	.43719				
FOS12	.23834				
FOS13	.46746				
FOS14	.28990				
FOS15	.22830				
FOS16	.23459				
FOS17	.41936				
FOS18	.27986				
FOS19	.48004				
FOS20	.45064				

TABLE 77D

FACTOR ANALYSIS OF THE FOS SCALE

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	PCT OF VAR	COM PCT
FOS 21	.53172				
FOS 22	.43418				
FOS 23	.26887				
FOS 24	.38427				
FOS 25	.24846				
FOS 26	.46276				
FOS 27	.22278				

VARIMAX ROTATION 1 FOR EXTRACTION 1 IN ANALYSIS 1- KAISER NORMALIZATION.

VARIMAX CONVERGED IN 25 ITERATIONS.

TABLE 77E
FACTOR ANALYSIS OF THE FOS SCALE

FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8
FOS 20	.54567			-.32875				
FOS 8	.53010							
FOS 17	.52543							
FOS 24	.51558							
FOS 13	.47373							
FOS 4	.46946					-.32769		
FOS 18	.44605							
FOS 21	.42193		.37771	-.35252				
FOS 9	.41629							
FOS 12	.39917							
FOS 14	.38162							
FOS 26	.35696			.33150				.30383
FOS 10	.35385							
FOS 16	.33153							
FOS 3	.32165							
FOS 1	.30807							
FOS 27								
FOS 19		.55705						
FOS 11		.43849				.31235		
FOS 25		.43722						
FOS 23		.35389						
FOS 2		.32023						
FOS 22		.32205						
FOS 15			.48366					
			.30052					
FOS 6						-.38509		
FOS 5						-.32815		
FOS 7	.46423						-.49335	

TABLE 77G
FACTOR ANALYSIS
OF THE FOS SCALE

FACTOR TRANSFORMATION MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
FACTOR 1	.60063	.53087	.32902	.31981	-.08140	.23533
FACTOR 2	-.05688	-.10323	.72536	-.34735	.41416	-.03250
FACTOR 3	-.29178	-.29209	-.15949	.35452	.65978	.40428
FACTOR 4	-.09541	-.64892	.22071	.63841	-.09897	.23506
FACTOR 5	-.52584	.37709	.33624	.37026	-.20200	-.52971
FACTOR 6	.33818	-.23354	.09515	.10461	.48997	-.45081
FACTOR 7	.19304	-.07937	.30769	.04440	-.28717	.14916
FACTOR 8	.33711	-.02565	-.27652	.30628	.11574	-.46776

	FACTOR 7	FACTOR 8
FACTOR 1	.28486	-.06111
FACTOR 2	.09486	.39714
FACTOR 3	-.27833	.04702
FACTOR 4	.22187	.04288
FACTOR 5	-.03778	-.09125
FACTOR 6	-.10949	-.59800
FACTOR 7	-.86895	.00311
FACTOR 8	-.12113	.68451

TABLE 78
ANOVA CELL MEANS

PEA
BY GENDER
RACE

TOTAL POPULATION

28.42
(274)

GENDER

	1	2
	29.21	27.98
	(112)	(162)

RACE

	1	2
	28.89	27.50
	(162)	(82)

RACE

	1	2
GENDER		
1	30.06	26.87
	(82)	(30)
2	27.98	27.81
	(100)	(62)

TABLE 79
ANALYSIS OF VARIANCE

PEA BY GENDER RACE					
SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OFF
MAIN EFFECTS	208.949	2	104.475	4.690	0.010
GENDER	90.861	1	90.861	4.079	0.044
RACE	93.107	1	93.107	4.180	0.042
2-WAY INTERACTIONS	131.592	1	131.592	5.908	0.016
GENDER RACE	131.592	1	131.592	5.908	0.016
EXPLAINED	340.541	3	113.514	5.096	0.002
RESIDUAL	6014.349	270	22.275		
TOTAL	6354.891	273	23.278		

301 CASES WERE PROCESSED.
27 CASES (9.0 PCT) WERE MISSING.

TABLE 80
ANOVA CELL MEANS

PEA			
BY CURWOR			
STUDENT			
TOTAL POPULATION			
28.36			
(294)			
CURWOR			
	1	2	3
	28.21	27.54	28.70
	(140)	(26)	(118)
STUDENT			
	1	2	3
	28.28	29.50	14.00
	(253)	(30)	(1)
STUDENT			
CURWOR	1	2	3
1	28.12	28.84	0.0
	(124)	(16)	(0)
2	26.31	30.00	14.00
	(13)	(12)	(1)
3	28.66	31.00	0.0
	(116)	(2)	(0)

TABLE 81
ANALYSIS OF VARIANCE

PEA
BY CURWOR
STUDENT

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	293.736	4	73.434	3.083	0.017
CURWOR	46.788	2	23.394	0.982	0.376
STUDENT	259.307	2	129.653	5.443	0.005
2-WAY INTERACTIONS	36.565	2	18.282	0.767	0.465
CURWOR STUDENT	36.565	2	18.282	0.767	0.465
EXPLAINED	330.301	6	55.050	2.311	0.034
RESIDUAL	6593.780	277	23.822		
TOTAL	6929.081	283	24.484		

301 CASES WERE PROCESSED.
17 CASES (5.6 PCT) WERE MISSING.

TABLE 82
ANOVA CELL MEANS

HFT
BY GENDER
RACE

TOTAL POPULATION

8.54
(277)

GENDER

	1	2
	10.05	7.51
	(112)	(165)

RACE

	1	2
	7.15	11.28
	(184)	(93)

RACE

		1	2
GENDER			
	1	9.10	12.87
		(82)	(30)
	2	5.59	10.62
		(102)	(63)

TABLE 83
ANALYSIS OF VARIANCE

HFT					
BY					
GENDER					
RACE					
SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1667.397	2	833.698	22.030	0.000
GENDER	615.015	1	615.015	16.251	0.000
RACE	1235.460	1	1235.460	32.646	0.000
2-WAY INTERACTIONS	30.006	1	30.006	0.793	0.374
GENDER RACE	30.006	1	30.006	0.793	0.374
EXPLAINED	1697.403	3	565.801	14.951	0.000
RESIDUAL	10331.449	273	37.844		
TOTAL	12028.852	276	43.583		

TABLE 84
ANOVA CELL MEANS

GEFT
BY GENDER
RACE

TOTAL POPULATION

9.45
(277)

GENDER

	1	2
	10.56	8.70
	(112)	(165)

RACE

	1	2
	7.70	12.94
	(184)	(93)

RACE

		1	2
GENDER	1	9.26	14.13
		(82)	(30)
	2	6.44	12.37
		(102)	(63)

TABLE 85
ANALYSIS OF VARIANCE

GEFT
BY GENDER
RACE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2104.462	2	1052.231	48.714	0.000
GENDER	408.345	1	408.345	18.905	0.000
RACE	1873.787	1	1873.787	86.749	0.000
2-WAY INTERACTIONS	15.385	1	15.385	0.712	0.399
GENDER RACE	15.385	1	15.385	0.712	0.399
EXPLAINED	2119.847	3	706.616	32.713	0.000
RESIDUAL	5896.839	273	21.600		
TOTAL	8016.686	276	29.046		

TABLE 86
ANOVA CELL MEANS

GPA
BY GENDER
RACE

TOTAL POPULATION

4.40
(277)

GENDER

1	2
4.49	4.33
(112)	(165)

RACE

1	2
4.97	3.26
(104)	(93)

RACE

	1	2
GENDER		
1	4.97	3.17
	(82)	(30)
2	4.87	3.31
	(102)	(83)

TABLE 87
ANALYSIS OF VARIANCE

GPA					
BY GENDER					
RACE					
SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	179.666	2	89.833	11.005	0.000
GENDER	0.106	1	0.106	0.013	0.909
RACE	178.069	1	178.069	21.814	0.000
2-WAY INTERACTIONS	0.317	1	0.317	0.039	0.844
GENDER RACE	0.317	1	0.317	0.039	0.844
EXPLAINED	179.983	3	59.994	7.350	0.000
RESIDUAL	2228.466	273	8.163		
TOTAL	2408.449	276	8.726		

301 CASES WERE PROCESSED.

24 CASES (8.0 PCT) WERE MISSING.

TABLE 88
ANOVA CELL MEANS

PER
BY GENDER
RACE

TOTAL POPULATION

83.91
(261)

GENDER

	1	2
	83.59	84.13
	(106)	(156)

RACE

	1	2
	84.37	83.01
	(173)	(88)

RACE

		1	2
GENDER			
	1	84.08	82.26
		(77)	(28)
	2	84.60	83.37
		(96)	(60)

TABLE 89
ANALYSIS OF VARIANCE

PEA
BY GENDER
RACE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	138.699	2	69.350	0.320	0.726
GENDER	31.038	1	31.038	0.143	0.705
RACE	120.552	1	120.552	0.557	0.456
2-WAY INTERACTIONS	4.600	1	4.600	0.021	0.884
GENDER RACE	4.600	1	4.600	0.021	0.884
EXPLAINED	143.299	3	47.766	0.221	0.882
RESIDUAL	55619.674	257	216.419		
TOTAL	55762.973	260	214.473		

301 CASES WERE PROCESSED.
40 CASES (13.3 PCT) WERE MISSING.

TABLE 90
MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA

	MEAN	STD DEV	LABEL
FOS	110.847	17.888	
HFT	8.486	6.585	
GPA	4.538	3.063	

N OF CASES = 281

CORRELATION, COVARIANCE, SIGNIFICANCE:

	FOS	HFT	GPA
FOS	1.000 310.873 .000	-.195 -22.975 .001	.156 8.550 .000
HFT	-.195 -22.975 .001	1.000 43.364 .000	-.218 -4.402 .000
GPA	.156 8.550 .000	-.218 -4.402 .000	1.000 9.380 .000

TABLE 91

MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA

EQUATION NUMBER 1 DEPENDENT VARIABLE.. HFT

BEGINNING BLOCK NUMBER 1. METHOD: STEPWISE

VARIABLE(S) ENTERED ON STEP NUMBER 1.. FOS

MULTIPLE R	.19504	ANALYSIS OF VARIANCE			
R SQUARE	.03804		DF	SUM OF SQUARES	MI
ADJUSTED R SQUARE	.03459	REGRESSION	1	461.90173	
STANDARD ERROR	6.47023	RESIDUAL	279	11680.02710	
		F _a	11.03341	SIGNIF F _a	.0010

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
FOS	-.07180	.02162	-.19504	-3.322	.0010
(CONSTANT)	16.42527	2.42701		6.768	.0000

FOR BLOCK NUMBER 1 POUT \geq 0.100 LIMITS REACHED.

TABLE 92

MULTIPLE REGRESSION

EQUATION NUMBER 2 DEPENDENT VARIABLE .. GPA

BEGINNING BLOCK NUMBER 1. METHOD: STEPWISE

VARIABLE(S) ENTERED ON STEP NUMBER 1. FOS

MULTIPLE R	.15607	ANALYSIS OF VARIANCE			
R SQUARE	.02436		DF	SUM OF SQUARES	MEAN SQUARE
ADJUSTED R SQUARE	.02006	REGRESSION	1	63.97314	63.97314
STANDARD ERROR	3.03052	RESIDUAL	279	2662.35170	9.18406
		F=	6.96567	SIGNIF F=.0008	

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
FOS	.02672	.01012	.15607	2.639	.0088
(CONSTANT)	1.57443	1.13678		1.386	.1672

FOR BLOCK NUMBER 1 POUT = 0.100 LIMITS REACHED.

BEGINNING BLOCK NUMBER 2. METHOD: ENTER

NO VARIABLES ENTERED FOR THIS BLOCK

TABLE 93
MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA

	MEAN	STD DEV	LABEL
PEA	28.402	4.785	
PEB	84.205	14.388	
GPA	4.317	2.925	
FAMNC	30432.831	21839.551	

N OF CASES = 249

CORRELATION, COVARIANCE, SIGNIFICANCE

	PEA	PEB	GPA	FAMNC
PEA	1.000 22.895 .999	.435 29.901 .000	.096 1.341 .132	-.027 -2771.726 .674
PEB	.435 29.901 .000	1.000 206.446 .999	.100 4.192 .116	-.077 -23940.315 .226
GPA	.096 1.341 .132	.100 4.192 .116	1.000 8.553 .999	-.258 -16333.926 .000
FAMNC	-.027 -2771.726 .674	-.077 -23940.315 .226	-.258 -16333.926 .000	1.000 468270169.000 .999

TABLE 94
MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA

EQUATION NUMBER 1 DEPENDENT VARIABLE . . GPA

DESCRIPTIVE STATISTICS ARE PRINTED ON PAGE 2

BEGINNING BLOCK NUMBER 1. METHOD: STEPWISE

**FOR BLOCK NUMBER 1 FWH: 0.050 LIMITS REACHED.
NO VARIABLES ENTERED/REMOVED FOR THIS BLOCK.**

BEGINNING BLOCK NUMBER 2. METHOD: ENTER

**VARIABLE(S) ENTERED ON STEP NUMBER 1.. PEB
2.. PEA**

MULTIPLE R	.11551	ANALYSIS OF VARIANCE			
R SQUARE	.01934		DF	SUM OF SQUARES	MEAN SQUARE
ADJUSTED R SQUARE	.00532	REGRESSION	2	28.30182	14.15091
STANDARD ERROR	2.91675	RESIDUAL	246	2092.82125	8.50740
		F_x	1.66336	SIGNIF F_x	.1916

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
PEB	.01459	.01432	.07163	1.018	.3095
PEA	.03953	.04299	.08467	.920	.3587
(CONSTANT)	1.98840	1.30294		1.509	.1325

FOR BLOCK NUMBER 2 ALL REQUESTED VARIABLES ENTERED.

TABLE 96
MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA

	MEAN	STD DEV	LABEL
RACE	1.475	.720	
HFT	8.271	6.543	
GPA	4.810	3.098	

N OF CASES = 299

CORRELATION, COVARIANCE, SIGNIFICANCE:

	RACE	HFT	GPA
RACE	1.000	.083	-.013
	.519	.391	-.030
	.999	.152	.818
HFT	.083	1.000	-.214
	.391	42.816	-4.332
	.152	.999	.000
GPA	-.013	-.214	1.000
	-.030	-4.332	9.600
	.818	.000	.999

TABLE 97
MULTIPLE REGRESSION

VARIABLE LIST NUMBER 1 LISTWISE DELETION OF MISSING DATA
EQUATION NUMBER 1 DEPENDENT VARIABLE.. HFT
DESCRIPTIVE STATISTICS ARE PRINTED ON PAGE 2
BEGINNING BLOCK NUMBER 1. METHOD: STEPWISE

FOR BLOCK NUMBER 1 FIN = 0.050 LIMITS REACHED.
NO VARIABLES ENTERED/REMOVED FOR THIS BLOCK.

BEGINNING BLOCK NUMBER 2. METHOD 1: ENTER
VARIABLE(S) ENTERED ON STEP NUMBER 1.. RACE

MULTIPLE R	0.06298	ANALYSIS OF VARIANCE			
R SQUARE	.00689		DF	SUM OF SQUARES	MEAN SQUARE
ADJUSTED R SQUARE	.00354	REGRESSION	1	87.85802	87.85802
STANDARD ERROR	6.53177	RESIDUAL	287	12671.19784	42.86367
		F:	2.205833	SIGNIF F:	.1523

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
RACE	.75385	.52539	.06298	1.435	.1523
(CONSTANT)	7.15889	.86207		8.304	.0000

FOR BLOCK NUMBER 2 ALL REQUESTED VARIABLES ENTERED.

**TABLE 98
MULTIPLE REGRESSION**

**EQUATION NUMBER 2 DEPENDENT VARIABLE.. GPA
DESCRIPTIVE STATISTICS ARE PRINTED ON PAGE 2
BEGINNING BLOCK NUMBER 1. METHOD: STEPWISE
FOR BLOCK NUMBER 1 PIN= 0.050 LIMITS REACHED.
NO VARIABLES ENTERED/REMOVED FOR THIS BLOCK.**

**BEGINNING BLOCK NUMBER 2. METHOD: ENTER
VARIABLE(S) ENTERED ON STEP NUMBER 1.. RACE**

MULTIPLE R	.91337	ANALYSIS OF VARIANCE			
R SQUARE	.83418		DF	SUM OF SQUARES	MEAN SQUARE
ADJUSTED R SQUARE	-.00319	REGRESSION	1	.51104	.51104
STANDARD ERROR	3.10330	RESIDUAL	297	2000.25008	6.73000
		F = .06308		SIGNIF F = .8100	

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
RACE	-.06750	.24002	-.01337	-.230	.8100
(CONSTANT)	4.00614	.40000		11.400	.0000

FOR BLOCK NUMBER 2 ALL REQUESTED VARIABLES ENTERED.

REFERENCES

- Adejumo, D. (1983). Effect of cognitive styles on strategies for comprehension of prose. Perceptual and Motor Skills, 56, 859-863.
- Adevai, G., & McGough, W. E. (1968). Retest reliability of rod-and-frame scores during early adulthood. Perceptual and Motor Skills, 26, 1306.
- Albee, G. W. (1977). The Protestant ethic, sex and psychotherapy. American Psychologist, 32, 150-161.
- Alexrod, S., & Cohen, L. D. (1961). Senescence and embedded-figures performance in vision and touch. Perceptual and Motor Skills, 12, 283-288.
- Allen, M. J., and Cholet, M. E. (1978). Strength of association between sex and field dependence. Perceptual and Motor Skills, 47, 419-421.
- Alper, T. G. (1973). The relationship between role orientation and achievement motivation in college women. Journal of Personality, 41, 9-31.
- Alpert, R., & Haber, R. N. (1960). Anxiety in academic achievement situations. Journal of Abnormal and Social Psychology, 61, 207-215.
- Arbuthnot, J., & Gruenfeld, L. (1969). Field independence and education-vocational interests. Journal of Consulting and Clinical Psychology, 33, 631.
- Atkinson, J. W., & Litwin, G. B. (1960). Achievement motive and test anxiety conceived as motive to approach success and motive to avoid failure. Journal of Abnormal and Social Psychology, 60, 52-63.
- Bailey, K. B. (1982). Methods of Social Research. London: The Free Press (second edition).
- Bailey, W., Hustmeyer, F. E., & Kristofferson, A. B. (1961). Alcoholism, brain damage and perceptual dependence. Quarterly Journal of Studies on Alcohol, 22, 387-393.

- Barclay, A., & Cusumano, D. R. (1967). Father absence, cross-sex identity, and field dependent behavior in male adolescents. Child Development, 38, 243-250.
- Bard, C. (1972). The relation between perceptual style and physical activities. International Journal of Sport Psychology, 3, 107-113.
- Barnes, E. J. (1980). The Black community as the source of positive self-concept for Black children: A theoretical perspective. In R. L. Jones (ed). Black Psychology, New York: Harper & Row (second edition).
- Barrett, G. V., & Thornton, C. L. (1968). Relationship between perceptual style and driver reaction to an emergency situation. Journal of Applied Psychology, 52, 169-176.
- Barrett, G. V., Thornton, C. L., & Cabe, P. A. (1969). Relation between Embedded Figures Test performance and simulator behavior. Journal of Applied Psychology, 53, 253-254.
- Beck, R. C. (1971). Performance of introverts and extraverts on various tests of cognitive control. Dissertation Abstracts International, 31, 6251-6252B.
- Beit-Hallahmi, B. (1979). Personal and social components of the Protestant Ethic. Journal of Social Psychology, 109, 263-267.
- Beldner, J. (1975). Fear of success in college women and its relation to performance in achievement situations. Unpublished doctoral dissertation, New York University.
- Bellah, R. (1979). Reflection on the Protestant ethic analogy in Asia. Journal of Social Issues, 109, 263-267.
- Berger, E., & Goldberger, L. (1979). Field dependence and short-term memory. Perceptual and Motor Skills, 49, 87-96.
- Bergman, H. (1979). Reliability of the Karolinska Rod-and-Frame Test. Perceptual and Motor Skills, 49, 355-358.
- Bergman, H., & Engelbrektson, K. (1973). An examination of factor structure of rod-and-frame test and embedded-figures test. Perceptual and Motor Skills, 37, 939-947.

- Berry, J. W. (1966). Tenne and Eskimo perceptual skills. International Journal of Psychology, 1, 207-229.
- Bieri, J. (1971). Cognitive structures in personality. In H. M. Schroder and P. Suedfeld (Eds.), Personality theory and information processing. New York: Ronald.
- Bieri, J., Bradburn, W., & Galinsky, M. D. (1958). Sex differences in perceptual behavior. Journal of Personality, 26, 1-12.
- Bilby, K., & Steady, F. C. (1981). Black women and survival: A maroon case. In F. C. Steady (Ed.) The Black Woman Cross-Culturally. Mass: Schenkman Publishing Company, Inc.
- Blake, J. (1962). Family structure in Jamaica; the social context of reproduction. New York Free Press.
- Blanton, R. L., & Nunnally, J. C. (1964). Semantic habits and cognitive style processes in the deaf. Journal of Abnormal and Social Psychology, 68, 397-402.
- Blood, M. R. (1969). Work values and job satisfaction. Journal of Applied Psychology, 53, 456-459.
- Bloomberg, M. (1965). Anagram solutions of field-independent and field-dependent persons. Perceptual and Motor Skills, 21, 766.
- Bloomberg, M. (1967). An inquiry into the relationship between field independence-dependence and creativity. Journal of Psychology, 67, 127-140.
- Blowers, G. H., & O'Connor, K. P. (1978). Relation of eye movements to errors on the rod-and-frame test. Perceptual and Motor Skills, 46, 719-725.
- Boersma, F. (1968). Test-retest reliability of the Cf-1 Hidden Figures Test. Educational and Psychological Measurement, 28, 555-559.
- Boersma, F. J., Muir, W. Wilton, K., & Barham, R. (1969). Eye movements during embedded figure tasks. Perceptual and Motor Skills, 28, 271-274.

- Bogo, N., Winget, C., & Gleser, G. C. (1970). Ego defenses and perceptual styles. Perceptual and Motor Skills, 30, 599-605.
- Bone, R. N., & Choban, M. C. (1972). Sensation-seeking scale, Form IV, and field independence. Perceptual and Motor Skills, 34, 634.
- Bone, R. N., Thomas, T. A., & Kinsolving, D. L. (1972). Relationship of rod-and-frame scores to dream recall. Psychological Reports, 30, 58.
- Boss, M. V., & Amin, M. E. (1978). Psychological differentiation and performance on conditional reasoning tasks. Perceptual and Motor Skills, 47, 935-940.
- Bowd, A. D. (1974). Retest reliability of the Children's Embedded Figures Test for young children. Perceptual and Motor Skills, 39, 442.
- Breskin, S., & Gorman, B. S. (1969). On rigidity and field-dependence. Perceptual and Motor Skills, 29, 401-402.
- Breslow, R., Grand, S., & Freedman, N. (1980). Effect of vocal feedback on Stroop Color-Word interference. Perceptual and Motor Skills, 50, 447-451.
- Bright, M. V. (1970). Factors related to the traditionality or innovativeness of career choices in Black college women. Unpublished Master's thesis, Howard University.
- Brinton, G., & Rouleau, R. A. (1969). Automating the Hidden and Embedded Figures Test. Perceptual and Motor Skills, 29, 401-402.
- Brody, N. (1972). Personality: Research and Theory. New York: Academic Press.
- Busch, J. C., & De Ridder, L. M. (1971). Note on control for intelligence in studies of field dependence with young children. Perceptual and Motor Skills, 32, 337-338.
- Busch, J. C., & Simon, L. H. (1972). Methodological variables in the study of field dependent behavior in young children. Paper presented at the American Education Research Association, Chicago.

- Bush, D. F., & Ecker, S. L. (1980). The solution of achromatic and chromatic Embedded Figures revisited. Perceptual and Motor Skills, 50, 25-26.
- Cabe, P. A. (1968). Note on response sets on the rod-and-frame test. Perceptual and Motor Skills, 26, 94.
- Campbell, D. R., Dyer, F. N., & Boersma, F. J. (1967). Field dependency and picture recognition ability. Perceptual and Motor Skills, 25, 713-716.
- Canavaan-Gumpert, D., Garner, K., & Gumpert, P. (1978). The success-fearing personality. Lexington, MA: Lexington Books.
- Cancro, R., & Voth, H. M. (1969). Autokinesis and psychological differentiation. Perceptual and Motor Skills, 28, 99-103.
- Caracena, F. K., & King, G. (1962). Generality of individual differences in complexity. Journal of Clinical Psychology, 18, 234-236.
- Carter, H., & Loo, R. (1979). Relationships between field dependence and Eysenck's personality dimensions. Journal of Psychology, 103, 45-49.
- Carter, H., & Loo, R. (1980). Group Embedded-Figures Test: Psychometric data. Perceptual and Motor Skills, 50, 32-34.
- Cattell, R. B. (1963). The theory of fluid and crystallized intelligence: A critical experiment. Journal of Educational Psychology, 54, 1-22.
- Cattell, R. B. (1969). Is field independence an expression of the general personality source trait of independence, U. I. 197. Perceptual and Motor Skills, 28, 865-866.
- Cattell, R. B., & Hundleby, J. H. (1968). Conceptual and experimental requirements in relating independence (U.I. 19) and field independence in L-and Q-data media: A comment on Dr. Ohnmacht's research. Perceptual and Motor Skills, 27, 733-734.
- Chatterjea, R. G., & Paul, B. (1982). Field independence, intelligence, ecology, and geometrical figure recognition. Journal of Social Psychology, 118, 133-134.

- Cherry, F., & Deaux, V. (1978). Fear of success vs. fear of gender inappropriate behavior. Sex Roles, 4, 97-101.
- Cionini, L., Smith, P., Magaro, P., & Velecogna, F. (1979). Relationship between sex, age, education and field dependence: A cross-cultural comparison. Perceptual and Motor Skills, 49, 581-582.
- Clar, P. N. (1971). The relationship of psychological differentiation to client behavior in vocational choice counseling. Dissertation Abstracts International, 32, 1837B.
- Clarke, E. (1957). My mother who fathered me. London: George Allen and Unwin.
- Coates, S. W. (1972). The Preschool Embedded Figures Test Manual. Palo Alto: Consulting Psychologists Press.
- Coates, S. (1974). Sex differences in field dependence-independence between the ages of 3 and 6. Perceptual and Motor Skills, 39, 1307-1310.
- Coates, S. (1975). Field independence and intellectual functioning in preschool children. Perceptual and Motor Skills, 41, 241-254.
- Cohen, J. (1959). The factorial structure of the WISC at ages 7-6, 10-6, and 13-6. Journal of Consulting Psychology, 23, 285-299.
- Cohen, N. E. (1974). Explorations in the fear of success. Ph.D. dissertation, Columbia University.
- Comalli, P. E., Jr. (1962). Differential effects of context on perception in a young and aged group. Paper read at 15th Annual Meeting of Gerontological Society, Miami Beach, Florida.
- Comalli, P. E., Jr. (1965). Cognitive functioning in a group of 80 to 90-year old men. Journal of Gerontology, 20, 14-17.
- Condry, J., & Dyer, S. (1976). Fear of success: Attribution of cause to the victim. Journal of Social Issues. 32, 63-83.

- Conklin, R. C., Muir, W., and Boersma, F. J. (1968). Field dependency-independency and eye movement patterns. Perceptual and Motor Skills, 26, 59-65.
- Cooperman, E. W. (1980a). Voluntary subjects participation in research: cognitive style as a possible biasing factor. Perceptual and Motor Skills, 50, 542.
- Cooperman, E. W. (1980). Field differentiation and intelligence. Journal of Psychology, 105, 29-33.
- Copeland, B. D. (1983). Cognitive style of female university students of visual art. Perceptual and Motor Skills, 56, 439-442.
- Cromack, T. R., & Stone, M. K. (1980). Validation of a Group Embedded Figures Test for young children. Perceptual and Motor Skills, 51, 483-486.
- Culver, C. M. (1967). Anisometropia and the rod-and-frame task. Perceptual and Motor Skills, 25, 377-384.
- Dana, R. H., & Goocher, B. (1959). Embedded-figures and personality. Perceptual and Motor Skills, 9, 99-102.
- Daniels, J. L., Alcorn, J. D., and Kazelskis, R. (1981). Factor analysis of the Cohen fear of success scale. Psychological Reports, 49, 839-842.
- Dargel, R. & Kirk, R. E. (1971). Manifest anxiety, field dependency and task performance. Perceptual and Motor Skills, 32, 383-393.
- Dargel, R., & Kirk, R. E. (1973). Note on relation of anxiety to field dependency. Perceptual and Motor Skills, 37, 218.
- De Boeck, P., & Claeys, W. (1978). Field independence and recognition of trait names in an incidental learning paradigm. Perceptual and Motor Skills, 47, 307-311.
- De Koninck, J. M., & Crabbe-Decleve, G. (1971). Field dependence and Rorschach white-space figure-ground reversal responses. Perceptual and Motor Skills, 33, 1191-1194.
- Denmark, F. L., Baxter, B. K., & Shirk, E. J. (1975). The future goals of college women. In F. L. Denmark (Ed.) Women-Vol. 1: A PDI Research Reference Work, New York: Psychological Dimensions, Inc.

- Denmark, F. L., Havlena, R. A., & Murgatroyd, D. (1971). Re-evaluation of some measures of cognitive styles. Perceptual and Motor Skills, 33, 133-134.
- Dershowits, E., (1971). Jewish subcultural patterns and psychological differentiation. International Journal of Psychology, 6, 223-231.
- De Russy, E. A., and Futch, E. (1971). Field dependence-independence as related to college curricula. Perceptual and Motor Skills, 33, 1235-1237.
- De Sanctis, G., & Dunikoski, R. (1983). Group Embedded-Figures Test: Psychometric data for a sample of business students. Perceptual and Motor Skills, 56, 707-710.
- De Witt, G. W., & Averill, J. R. (1976). Lateral eye movements, hypnotic susceptibility and field independence-dependence. Perceptual and Motor Skills, 43, 1179-1184.
- Dickstein, L. S. (1968). Field independence in concept attainment. Perceptual and Motor Skills, 27, 635-642.
- Di Maria, F., and Di Nuovo, S. (1983). About some psychological variables correlated with dogmatism. Psychological Reports, 53, 427-432.
- Di Nuovo, S. (1984). Administration times for Witkin's Group Embedded Figures Test. Perceptual and Motor Skills, 58, 134.
- Docherty, D., & Boyd, D. G. (1982). Relationship of disembedding and ability to performance in volleyball, tennis and badminton. Perceptual and Motor Skills, 54, 1219-1224.
- Doyle, J. (1975). Field-independence and self-actualization. Psychological Reports, 36, 363-366.
- Doyle, J. A. (1976). Field-dependent introverts, extraverts and psychological health. Perceptual and Motor Skills, 42, 196.
- Dreyer, A. S., Dreyer, C. A., & Nebelkopf, E. B. (1971). Portable rod-and-frame test as a measure of cognitive style in kindergarten children. Perceptual and Motor Skills, 33, 775-781.

- Dreyer, A. S., Nebelkopf, E. B., & Dreyer, C. A. (1969). A note concerning stability of cognitive style measures in young children. Perceptual and Motor Skills, 20, 933-934.
- Duke, R. B. (1969). Relation of field dependence to the "philosophies of human nature." Psychological Reports, 24, 197-198.
- Duncan, O. D., & Featherman, D. L. (1972). Psychological and cultural factors in the process of occupational achievement. Social Science Research, 1, 121-145.
- Du Preez, P. (1967). Field dependence and accuracy of comparison of time intervals. Perceptual and Motor Skills, 24, 467-472.
- Du Preez, P. D. (1968). Social change and field dependence in South Africa. Journal of Social Psychology, 76, 265-266.
- Dyk, R. B., and Witkin, H. A. (1965). Family experiences related to the development of differentiation in children. Child Development, 30, 21-55.
- Eagle, M., Fitzgibbons, D., & Goldberger, L. (1966). Field dependence and memory for relevant and irrelevant incidental stimuli. Perceptual and Motor Skills, 23, 1035-1038.
- Eagle, M., Goldberger, L., and Breitman, M. (1969). Field dependence and memory for social vs. neutral and relevant vs. irrelevant incidental stimuli. Perceptual and Motor Skills, 29, 903-910.
- Elkind, D., Kogler, R. R., & Go, E. (1963). Field independence and concept formation. Perceptual and Motor Skills, 17, 383-386.
- Epstein, C. F. (1976). Bringing women in: Rewards, punishments and the structure of achievement. In F. L. Denmark (Ed.) Women-Volume I: A PDI research reference work. Psychological Dimensions, Inc., New York.
- Erds, G. (1979). Sex differences in feedback: Effects on rod-and-frame performance. Perceptual and Motor Skills, 48, 1279-1285.
- Erez, M. (1980). Correlates of leadership style: Field dependence and social intelligence versus social orientation. Perceptual and Motor Skills, 50, 231-238.

- Esposito, R. P. (1977). The relationship between the motive to avoid success and vocational choice. Journal of Vocational Behavior, 10, 347-357.
- Evans, F. J. (1967). Field dependence and the Maudsley personality inventory. Perceptual and Motor Skills, 24, 526.
- Evans, F. J. (1969). Effects of practice on the validity of a group-administered embedded figures test. Acta Psychologica (Amsterdam), 29, 172-180.
- Farley, F. H. (1974). Sensation-seeking motive and field independence. Perceptual and Motor Skills, 38, 330.
- Feather, N. T., & Raphelson, A. C. (1974). Fear of success in Australian and American student groups: Motive or sex role stereotype? Journal of Personality, 42, 190-201.
- Fenchel, C. H. (1958). Cognitive rigidity as a behavioral variable manifested in intellectual and perceptual tasks by an outpatient population. Unpublished doctoral dissertation, New York University.
- Fernandez-Ballesteros, R., and Manning, L. (1984). Rod and Frame Test Scores and verbalized strategies. Perceptual and Motor Skills, 58, 255-258.
- Fiebert, M. (1967). Cognitive styles in the deaf. Perceptual and Motor Skills, 24, 319-329.
- Fine, B. (1972). Field-dependent introvert and neuroticism: Eysenck and Witkin united. Psychological Report, 1972, 31, 939-956.
- Fine, B. J. (1980). Announcing the great frame-tilt judging contest. Perceptual and Motor Skills, 50, 661-662.
- Fine, B. J., & Danforth A. V. (1975). Field-dependence, extraversion and perception of the vertical: Empirical and theoretical perspectives of the rod-and-frame test. Perceptual and Motor Skills, 40, 683-693.
- Fitzgerald, D., & Hunt, D. (1977). The Hidden Figures Test. Armidale: University of New England.

- Flemenbaum, A., & Anderson, R. P. (1978). Field dependence and blood cholesterol: An expansion. Perceptual and Motor Skills, 46, 867-874.
- Fleming, J. (1978). Fear of success, achievement-related motives and behavior in black college women. Journal of Personality, 46, 694-716.
- Fleming, J. (1982). Fear of success in black male and female graduate students - a pilot study. Psychology of Women Quarterly, 6, 327-341.
- Folman, R. Z. (1973). Therapist-patient perceptual style, interpersonal attraction, initial interview behavior, and premature termination. Dissertation Abstracts International, 34, 1746B.
- Forbes, G. B., and King, S. (1983). Fear of success and sex-roles: There are reliable relationships. Psychological Reports, 53, 735-738.
- Frank, B. M., & Davis, J. K. (1982). Effect of field-independence match or mismatch on a communication task. Journal of Educational Psychology, 74, 23-31.
- French, W., Ekstrom, B., & Price, A. (1963). Manual for Kit of Reference Tests for Cognitive Factors. Princeton, N. J.: Educational Testing Service.
- Furnham, A. (1982). The Protestant work ethic and attitudes to unemployment. Journal of Occupational Psychology, 55, 277-285.
- Furnham, A., & Muhiudeen, C. (1984). The Protestant work ethic in Britain and Malaysia. Journal of Social Psychology, 122, 157-161.
- Gaines, R. (1975). Developmental perception and cognitive styles: From young children to master artists. Perceptual and Motor Skills, 40, 983-998.
- Gardner, R. W., & Long, R. I. (1962). Cognitive controls of attention and inhibition: A study of individual consistencies. British Journal of Psychology, 53, 381-388.
- Giddens, Antony. Introduction. In Max Weber's The Protestant Ethic & The Spirit of Capitalism. Talcott Parsons (Trans.), New York: Charles Scribner's Sons, 1976.

- Gill, N. T., Herdtner, T., & Lough, L. (1968). Perceptual and socioeconomic variables in body orientation and predicted academic success in young children. Perceptual and Motor Skills, 26, 1175-1184.
- Goldberger, L., & Bendich, S. (1972). Field-dependence and social responsiveness as determinants of spontaneously produced words. Perceptual and Motor Skills, 34, 883-886.
- Goldstein, K. M., & Blackman, S. (1978). Cognitive Style: Five approaches and relevant research. New York: John Wiley & Sons.
- Goldstein, A. G., & Chance, J. E. (1965). Effects of practice on sex-related differences in performance of Embedded figures. Psychonomic Science, 3, 361-362.
- Goldstein, G., & Chotlos, J. W. (1966). Stability of field dependence in chronic alcoholic patients. Journal of Abnormal Psychology, 71, 420.
- Goldstein, G., Neuringer, C., Reiff, C., & Shelly, C. H. (1968). Generalizability of field dependency in alcoholics. Journal of Consulting and Clinical Psychology, 32, 560-564.
- Gonsalves, S. V. (1983). Bibliography on fear of success in Black women: 1970-1982. Psychological Reports, 53, 1249-1250.
- Gonsalves, S. V., and Bernard, G. A. (1983a). The Protestant ethic and Conservatism scales: Correlation and validation among different ethnic groups. Unpublished manuscript.
- Gonsalves, S. V., and Bernard, G. A. (1983b). The relationship between the Protestant ethic and social class for Afro-Caribbeans and Afro-Americans. Psychological Reports, 53, 645-646.
- Gonzalez, N. S. (1981). Household and family in the Caribbean: Some definitions and concepts. In F. C. Steady (Ed.), The Black Woman Cross-Culturally. MA: Schenkman Publishing Company, Inc.
- Good, L. R., & Good, K. C. (1973). An objective measure of the motive to avoid success. Psychological Reports, 33, 10009-10010.

- Goodenough, D. R. (1976a). A review of individual differences in field dependence as a factor in auto safety. Human Factors, 18, 53-62.
- Goodenough, D. R. (1976). The role of individual differences in field dependence as a factor in learning and memory. Psychological Bulletin, 83, 675-694.
- Goodenough, D. R. (1978). Field Dependence. In H. London and J. Exner (Eds.) Dimensions of Personality. New York: Wiley.
- Goodenough, D. R., & Eagle, C. T. (1963). A modification of the Embedded Figures Test for use with young children. Journal of Genetic Psychology, 103, 67-74.
- Goodenough, D. R., & Karp, S. A. (1961). Field dependence and intellectual functioning. Journal of Abnormal and Social Psychology, 63, 241-246.
- Goodenough, D. R., & Witkin, H. A. (1977). Origins of the field-dependent and field-independent cognitive styles. (ETS-RB-77-9). Princeton: Education Testing Service.
- Goodmonson, C. W. (1973). The motive to avoid success in college students: Effects of counseling. Unpublished doctoral dissertation, University of Oregon.
- Gorman, B. S. (1968). Field dependence and visual maze learning. Perceptual and Motor Skills, 27, 142.
- Gottschaldt, K. (1926). Über den Einfluss der Erfahrung auf die Wahrnehmung von Figuren, I; Über den Einfluss gehaufter Einprägung von Figuren auf ihre Sichtbarkeit in umfassenden Konfigurationen. Psychologische Forschun, 8, 261-317.
- Green, H. B. (1970). Caribbean Blacks and West African Blacks: A study in attitude similarity and change. Interamerican Journal of Psychology, 4, 189-201.
- Green, R. W. (Ed.) (1959). Protestantism and Capitalism: The Weber Thesis and Its Critics. Boston: D. C. Heath & Company.
- Griffore, R. J., & Lewis, J. (1980). Early team sports competition and graduate students' fear of success. Perceptual and Motor Skills, 51, 156.

- Gruenfeld, L., & Arbuthnot, J. (1968). Field independence, achievement values and the evaluation of a competency related dimension on the least preferred coworker (LPC) measure. Perceptual and Motor Skills, 27, 991-1002.
- Gruenfeld, L. W., & Weissenberg, P. (1974). Relationship between supervisory cognitive style and social orientation. Journal of Applied Psychology, 59, 386-388.
- Guilford, J. P. (1956). The structure of the intellect. Psychological Bulletin, 53, 267-293.
- Guilford, J. P. (1967). Creativity, yesterday, today and tomorrow? Journal of Creative Behavior, 1, 3-14.
- Gul, F., & Zaid, O. (1981). Field dependence and accountants' confidence in decisions. Psychological Reports, 49, 949-950.
- Gump, J. P. (1972). Sex-role attitudes and psychological well-being. Journal of Social Issues, 28, 79-92.
- Gundlach, R. H., & Gesell, G. P. (1979). Extent of psychological differentiation and creativity. Perceptual and Motor Skills, 48, 319-333.
- Guyot, G. W., Fairchild, L., & Hill, M. (1980). Physical fitness and embedded figures test performance of elementary school children. Perceptual and Motor Skills, 50, 411-414.
- Guyot, G. W., Fairchild, L., & Johnson, B. (1984). Embedded-figures test performance and self-concept of elementary school children. Perceptual and Motor Skills, 58, 61-62.
- Haer, J. L. (1971). Field dependency in relation to altered states of consciousness produced by sensory overload. Perceptual and Motor Skills, 33, 192-194.
- Handel, A. (1972). Perception of verticality of a modified portable rod-and-frame test. Perceptual and Motor Skills, 34, 459-468.
- Harano, R. M. (1963). The relationship between field dependence and motor vehicle accident involvement. Unpublished Master's thesis, Sacramento State College.

- Harano, R. M. (1970). Relationship of field dependence and motor-vehicle accident involvement. Perceptual and Motor Skills, 31, 272-274.
- Baronian, F., & Sugarman, A. A. (1966). Field independence and resistance to reversal of perspective. Perceptual and Motor Skills, 22, 543-546.
- Heaven, P. C. (1980). The Protestant Ethic scale in South Africa. Psychological Reports, 47, 618.
- Bellkamp, D. T., & Marr, J. N. (1965). Dogmatism and field-dependency. Perceptual and Motor Skills, 20, 1046-1048.
- Henry, F., & Wilson, P. (1975). Status of women in Caribbean societies: An overview of their social, economic and sexual roles. Social and Economic Studies, 24, 165-198.
- Herkowitz, J. (1972). Moving Embedded Figures Test. Research Quarterly, 43, 479-488.
- Hill, D. (1980). Relation of field independence to development of conservation. Perceptual and Motor Skills, 50, 1247-1250.
- Hochman, S. H. (1971). Field independence and Stroop color-word performance. Perceptual and Motor Skills, 33, 782.
- Hoffman, L. W. (1974). Fear of success in males and females: 1965 and 1971. Journal of Consulting and Clinical Psychology, 42, 353-358.
- Hoffman, L. W. (1977). Fear of success in 1965 and 1974: A follow-up study. Journal of Consulting and Clinical Psychology, 45, 310-321.
- Holm, L., Bergman, H., & Borg, S. (1980). Field dependence in patients with exclusive abuse of hypnotics or sedatives. Perceptual and Motor Skills, 50, 987-992.
- Horner, M. S. (1968). Sex differences in achievement motivation and performance in competitive and non-competitive situations. Ph.D. dissertation, University of Michigan. Ann Arbor: University Microfilms, No. 69-12, 135.
- Horner, M. S. (1972). Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 28, 157-175.

- Horner, M. S., & Walsh, M. R. (1974). Psychological barriers to success in women. In R.B. Kundsia (Ed.) Women and Success. New York: William Morrow & Company.
- Horner, M. S., & Fleming, J. (1977). Revised scoring manual for an empirically-derived scoring system for the motive to avoid success. Unpublished manuscript, Harvard University.
- Hudson, W. S. (1959). Puritanism and the Spirit of Capitalism. In R. W. Green's (Ed.) Protestantism and Capitalism: The Weber Thesis and Its Critics. Boston: D. C. Heath & Co. Pp. 56-62.
- Hughes, R. N. (1978). Sex differences in field dependence: Effects of unlimited time on Group Embedded Figures test performance. Perceptual and Motor Skills, 47, 1246.
- Hughes, R., Hall, C. J., & Chambers, R. I (1978). Field dependence and the Eysenck Personality Inventory: A replication. Perceptual and Motor Skills, 47, 1132.
- Hulfish, S. (1978). Relationship of role identification, self-esteem and intelligence to sex differences in field dependence. Perceptual and Motor Skills, 47, 835-842.
- Hurley, J. T. (1972). Development of group measures of the rod-and-frame test and the slanting disc effect. Psychology, 9, 49-52.
- Hyma, A. (1959). The economic views of the Protestant reformers. In R. W. Green (Ed.), Protestantism and Capitalism: The Weber thesis and its critics. Boston: D. C. Heath and Company. Pp. 94-106.
- Irving, D., & Henderson, D. (1971). On the validity of the portable rod-and-frame test. Perceptual and Motor Skills, 32, 434.
- Jackson, D. N. (1956). A short form of Witkin's Embedded Figures Test. Journal of Abnormal and Social Psychology, 53, 254-255.
- Jackson, D. N. (1957). Intellectual ability and mode of perception. Journal of Consulting Psychology, 21, 458.

- Jackson, D. N., Messick, S., & Myers, C. (1964). Evaluation of group and individual forms of embedded figures measurements of field-independence. Educational and Psychological Measurement, 24, 177-192.
- Jegede, R. O., & Bamgboye, E. A. (1982). Psychological differentiation in Nigerian children as measured from their drawings. Perceptual and Motor Skills, 54, 55-58.
- Johnson, D. T., Neville, C. W., & Workman, S. N. (1969). Field independence and the sixteen personality factor questionnaire: A further note. Perceptual and Motor Skills, 28, 670.
- Jones, R. L. (1980) (Ed.) Black Psychology. New York: Harper & Row (second edition).
- Justus, J. B. (1981). Women's role in West Indian Society. In F. C. Steady (Ed.), The Black Woman Cross-Culturally. MA: Schenkman Publishing Company, Inc.
- Kagan, S. (1974). Field dependence and conformity of rural Mexican and urban Anglo-American children. Child Development, 45, 765-771.
- Kagan, J., & Kogan, N. (1970). Individual variation in cognitive processes. In P.H. Mussen (Ed.), Carnichael's Manual of Child Psychology, Vol. 1. New York: Wiley.
- Karp, S. A. (1963). Field dependence and overcoming embeddedness. Journal of Consulting Psychology, 27, 294-302.
- Karp, S. A. (1967). Field dependence and occupational activity in the aged. Perceptual and Motor Skills, 24, 603-609.
- Karp, S. A., & Konstadt, W. (1963). Manual for the Children's Embedded-figures test: Cognitive tests. Unpublished manuscript.
- Karp, S. A., Silberman, L., & Winters, S. (1969). Psychological differentiation and socioeconomic status. Perceptual and Motor Skills, 28, 55-60.
- Karp, S. A., Witkin, H. A., & Goodenough, D. R. (1965). Alcoholism and psychological differentiation: Effect of alcohol on field dependence. Journal of Abnormal Psychology, 70, 262-265.

- Kato, N. (1965). The validity and reliability of new rod-and-frame test. Japanese Psychological Research, 7, 120-125.
- Kazelskis, R. (1970). Field independence and the free-recall of nonsense syllables. Perceptual and Motor Skills, 31, 351-354.
- Kelly, G. A. (1955). The psychology of personal constructs (2 vols.). New York: Norton.
- Kennedy, R. (1962). The Protestant ethic and the Parsis. American Journal of Sociology, 68, 11-20.
- Kernaleguen, A. P., & Compton, N. H. (1968). Body-field perceptual differentiation related to peer perception of attitudes toward clothing. Perceptual and Motor Skills, 27, 195-198.
- Kerr, M. (1952). Personality and Conflict in Jamaica. Liverpool: University Press.
- Kirton, M. J. (1978). Wilson and Patterson's Conservatism scale: A shortened alternative form. British Journal of Social and Clinical Psychology, 17, 319-323.
- Klein, G. S. (1954). Need and regulation. In M. R. Jones (Ed.), Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press.
- Knight, G. P., Ragan, S., Nelson, W., & Gumbiner, J. (1978). Acculturation of second and third-generation Mexican-American children. Journal of Cross-Cultural Psychology, 9, 87-97.
- Koff, J. H. (1972). Field dependence and psychotherapy expectancies, presenting symptoms, defensive style, and length of stay in psychotherapy. Dissertation Abstracts International, 32, 7312-7313B.
- Kogan, N. (1976). Cognitive styles in infancy and early childhood. Hillsdale, N. J.: Lawrence Erlbaum Associates.
- Koulack, D., De Koninck, J., & Oczkowski, G. (1978). Field dependence and the effect of REM deprivation on thirst. Perceptual and Motor Skills, 46, 559-562.

- Larsen, J. P., & White, B. A. (1974). Comparison of selected perceptual and personality variables among college men, deviant and nondeviant in hair length. Perceptual and Motor Skills, 38, 1315-1318.
- La Torre, R. A., Gossman, I., & Piper, W. E. (1976). Cognitive style, hemispheric specialization, and tested abilities of transsexuals and nontranssexuals. Perceptual and Motor Skills, 43, 719-722.
- La Tortue, R. (1981). The Black woman in Haitian society and literature. In F. C. Steady (Ed.), The Black Woman Cross-Culturally. MA: Schenkman Publishing Company, Inc.
- Lau, S., Figuerres, C., and Davis, K. (1981). Re-examination of the relationship between locus of control and field independence/dependence. Perceptual and Motor Skills, 53, 555-561.
- Lawrence, L. (1983). Women in Caribbean literature: The African presence. Phylon, 44, 1-11.
- Lawrence, D. M., & Morton, V. (1980). Associating embedded figures test performance with extreme hysteria and psychasthenia MMPI scores in a psychiatric population. Perceptual and Motor Skills, 50, 432-434.
- Lee, A., Fant, H., Life, M. L., Lips, L., & Carter, J. (1978). Perceptual and Motor Skills, 46, 439-442.
- Lenski, G. (1963). The Religious Factor. Garden City, N.Y. Doubleday.
- Lesnik-Oberstein, M., & Cohen, L. (1984). Cognitive style, sensation seeking and assortive mating. Journal of Personality and Social Psychology, 46, 112-117.
- Lester, G. (1968). The rod-and-frame test: Some comments on methodology. Perceptual and Motor Skills, 26, 1307-1314.
- Levenson, M., & Neuringer, C. (1974). Suicide and field dependency. Omega: The Journal of Death and Dying, 5, 181-186.
- Levine, F. J. (1976). Influence of field-independence and study habits on academic performance of Black students in a predominantly white university. Perceptual and Motor Skills, 42, 1101-1102.

- Levy, J. M., & Rokeach, M. (1960). The formation of new perceptual systems. In M. Rokeach (Ed.), The open and closed mind. New York: Basic Books. Pp. 257-269.
- Lindquist, E. L. (1978). Correlation between an embedded figures test and tennis order rank at three levels of skill. Perceptual and Motor Skills, 47, 1143-1146.
- Lis, D. J., & Powers, J. E. (1979). Reliability and validity of the Group Embedded Figures Test for a grade school sample. Perceptual and Motor Skills, 48, 660-662.
- Loewenstine, H. V., & Paludi, M. A. Women's Type A/B behavior patterns and fear of success. Perceptual and Motor Skills, 1982, 54, 891-894.
- Long, G. M. (1973). The rod-and-frame test: Further comments on methodology. Perceptual and Motor Skills, 36, 624-626.
- Loo, R. (1978). Field dependence and Eysenck's Neuroticism scale. Perceptual and Motor Skills, 47, 522.
- Loo, R., & Cauthen, N. R. (1976). Anxiety and perceptual articulation. Perceptual and Motor Skills, 43, 403-408.
- Loo, R., & Townsend, P. J. (1977). Components underlying the relation between field dependence and extraversion. Perceptual and Motor Skills, 45, 528-530.
- Lusk, E. J., & Wright, H. (1981). Differences in sex and curricula on learning the Group Embedded Figures Test. Perceptual and Motor Skills, 53, 8-10.
- Maccoby, E. E., & Jacklin, C. N. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.
- MacDonald, A. P., Jr. (1972). More on the Protestant Ethic. Journal of Consulting and Clinical Psychology, 39, 116-122.
- Mahlis, M. C. (1981). Instructional design and cognitive styles of teachers in elementary schools. Perceptual and Motor Skills, 56, 335-338.
- Mahlis, M. C., & D'Angelo, K. (1983). Group Embedded Figures Test: Psychometric data on children. Perceptual and Motor Skills, 56, 423-426.

- Mahoney, M. J. (1977). Reflections on the cognitive-learning trend in psychotherapy. American Psychologist, 32, 5-13.
- Makosky, V. P. (1972). Fear of success, sex-role orientation of the task, and competitive conditions as variables affecting women's performance in achievement-oriented situations. Paper presented at the meeting of the Midwestern Psychological Association, Cleveland.
- Margulis, M. (1971). Perceptual and cognitive correlates of self-actualization. Unpublished doctoral dissertation, University of Maine.
- Markus, E. J. (1971). Perceptual field dependence among aged persons. Perceptual and Motor Skills, 33, 175-178.
- Marlowe, D., & Gergen, K. J. (1969). Personality and social interaction. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology (Vol. 3). Reading, MA: Addison-Wesley.
- McClelland, D. C. (1961). The Achieving Society. Princeton, NJ: Van Nostrand.
- Mebane, D., & Johnson, D. L. (1970). A comparison of the performance of Mexican boys and girls on Witkin's cognitive tasks. Interamerican Journal of Psychology, 4, 3-4.
- Mednick, M. T. S., & Puryear, G. R. (1975). Motivational and personality factors related to career goals of Black college women. Journal of Social and Behavioral Sciences, 21, 1-30.
- Mednick, M. T. S., & Puryear, G. R. (1976). Race and fear of success in college women: 1968 and 1971. Journal of Consulting and Clinical Psychology, 44, 787-789.
- Meek, F., & Skubic, V. (1971). Spatial perception of highly skilled and poorly skilled females. Perceptual and Motor Skills, 33, 1309-1310.
- Merrens, M. R., & Garrett, J. B. (1975). The Protestant Ethic as a predictor of repetitive work performance. Journal of Applied Psychology, 60, 125-127.
- Messick, S. (1967). The psychology of acquiescence: an interpretation of research evidence. In I.A. Berg (Ed.), Response set in personality assessment. Chicago: Aldine.

- Messick, S. (1976). Individuality in Learning. San Francisco: Jossey-Bass Publishers.
- Messick, S. (1982). Cognitive styles in educational practice. Princeton, NJ: Educational Testing Service.
- Messick, S. (1982). Lecture on Cognitive Styles. Classnotes, Graduate & University Center of CUNY.
- Messick, S., & Jackson, D. N. (1958). The measurement of authoritarian attitudes. Educational and Psychological Measurement, 18, 241-253.
- Midgley, N., & Abrams, N. S. (1974). Fear of success and locus of control in young women. Journal of Consulting and Clinical Psychology, 42, 737.
- Miller, J. R. (1980). Relationship of fear of success to perceived parental attitudes toward success and autonomy in men and women. Psychological Reports, 47, 79-86.
- Minard, J. G. (1967). Frame disappearance and rod-and-frame test performance. Perceptual and Motor Skills, 24, 616.
- Mirels, H. L., & Garrett, J. B. (1971). The Protestant Ethic as a personality variable. Journal of Consulting and Clinical Psychology, 36, 40-44.
- Mitchelmore, M. (1973). The influence of sex and culture on spatial ability. Unpublished manuscript, Ohio State University.
- Mitchelmore, M. (1974a). A developmental study of the spatial ability of Jamaican students. Unpublished manuscript, Micro College, Kingston, Jamaica.
- Mitchelmore, M. (1974b). The perceptual development of Jamaican students, with special reference to visualization and drawing of three-dimensional geometrical figures and the effects of spatial training. Unpublished doctoral dissertation, Ohio State University.
- Montgomery, L. E., & Finch, Jr., A. J. (1975). Reflection-impulsivity and locus of control in emotionally disturbed children. Journal of Genetic Psychology, 126, 89-91.

- Monahan, L., Kuhn, D., & Shaver, P. (1974). Intrapyschic versus cultural explanations of the "Fear of Success" motive. Journal of Personality and Social Psychology, 29, 60-64.
- Moore, N. I. (1971). Cognitive styles and the schizophrenias and character disorders. Perceptual and Motor Skills, 33, 475-482.
- Moore, S. A., Gleser, G. C., & Warr, J. S. (1970). Cognitive style in the organization and articulation of ambiguous stimuli. Psychonomic Science, 21, 243-244.
- Morf, M. E., & Howitt, R. (1970). Rod-and-frame test performance as a function of momentary arousal. Perceptual and Motor Skills, 31, 703-708.
- Morf, M. E., Ravanaugh, R. D., & McConville, M. (1971). Intratest and sex differences on a portable rod-and-frame test. Perceptual and Motor Skills, 32, 727-733.
- Morris, J. B. (1967). The rod-and-frame box: a portable version of the rod-and-frame test. Perceptual and Motor Skills, 25, 152.
- Morris, T. L., & Bergum, B. O. (1978). A note on the relationship between field-independence and creativity. Perceptual and Motor Skills, 46, 1114.
- Morris, L. A., & Shapiro, A. K. (1973). Performance of psychiatric patients on the rod-and-frame test. Journal of Clinical Psychology, 29, 180-181.
- Moses, Y. (1975). What price education: The working women in Montserrat. Council on Anthropology and Education Quarterly, 6, 13-16.
- Moses, Y. T. (1981). Female status, the family, and male dominance in a West Indian community. In F. C. Steady (Ed.), The Black Woman Cross-Culturally. MA: Schenkman Publishing Company, Inc.
- Newman, R. S., & Hirt, M. (1983). The psychoanalytic theory of Depression: Symptoms as a function of aggressive wishes and level of field articulation. Journal of Abnormal Psychology, 92, 42-48.

- Nickel, T. (1971). The reduced size rod-and-frame as a measure of psychological differentiation. Educational and Psychological Measurement, 31, 555-559.
- Nobles, W. W. (1980). African Philosophy: Foundation of Black Psychology. In R. L. Jones (ed.), Black Psychology. New York: Harper and Row (second edition).
- Ohnmacht, F. W. (1968). Note on the validity of the sixteen personality factor questionnaire measure of field independence. Perceptual and Motor Skills, 27, 564.
- Ohnmacht, F. W., & McMorris, R. F. (1971). Creativity as a function of field independence and dogmatism. Journal of Psychology, 79, 165-168.
- Okinji, M. O. (1969). The differential effects of rural and urban upbringing on the development of cognitive styles. International Journal of Psychology, 4, 293-305.
- Oleron, P. (1953). Conceptual thinking of the deaf. American Annals of the Deaf, 98, 304-310.
- Oltman, P. (1964). Field dependence and arousal. Perceptual and Motor Skills, 19, 441.
- Oltman, P. (1968). A portable rod-and-frame apparatus. Perceptual and Motor Skills, 26, 503-506.
- Oltman, P. (1969). Comment on "RFT stability or failure to arouse?" Perceptual and Motor Skills, 28, 566.
- Oltman, P. R., & Capobianco, F. (1967). Field dependence and eye dominance. Perceptual and Motor Skills, 25, 645-646.
- Page, H. W. & Marais, W. F. (1981). Perceptual skill and field dependence scores of Xhosa men. Journal of Social Psychology, 114, 133-134.
- Paludi, M. A. (1979). Horner revisited: How successful must Anne and John be before fear of success sets in? Psychological Reports, 44, 1319-1322.
- Paludi, M. A. (1981). Psychometric properties and underlying assumptions of four objective measures of fear of success. Paper presented at the 53rd annual meeting of the Midwestern Psychological Association, Detroit, Michigan.

- Paludi, M. A. (1983). A comparison of four measures of fear of success. Unpublished manuscript.
- Pande, C. G. (1970). Sex differences in field-dependence: Confirmation with Indian sample. Perceptual and Motor Skills, 31, 70.
- Panek, P. E. (1982). Relationship between field-dependence/independence and personality in older adult females. Perceptual and Motor Skills, 54, 811-814.
- Pappo, M. (1972). Fear of success: A theoretical analysis and the construction and validation of a measuring instrument. Unpublished doctoral dissertation, Columbia University.
- Pappo, M. (1983). Fear of success: The construction and validation of a measuring instrument. Journal of Personality Assessment, 47, 36-40.
- Parasnis, I., & Long, G. L. (1979). Relationships among spatial skills, communication skills, and field independence in deaf students. Perceptual and Motor Skills, 49, 879-887.
- Parente, J. A., & O'Malley, J. J. (1975). Training in musical rhythm and field dependence of children. Perceptual and Motor Skills, 40, 392-394.
- Pargman, D., Bender, P., & Deshaies, P. (1975). Correlation between visual disembedding and basketball shooting by male and female varsity college athletes. Perceptual and Motor Skills, 41, 956.
- Parker, V. J. (1972). Fear of success, sex-role orientation of the task, and competition condition as variables affecting women's performance in achievement-oriented situations. Dissertation Abstracts International, 32, 5495B.
- Parlee, M. B., & Rajagopal, J. (1974). Sex differences on the Embedded-Figures Test: A cross-cultural comparison of college students in India and in the United States. Perceptual and Motor Skills, 39, 1311-1314.
- Patty, R. A., & Ferrell, M. M. (1974). A preliminary note on the motive to avoid success and the menstrual cycle. Journal of Psychology, 86, 173-177.

- Pawelkiewicz, W. M., & McIntire, W. G. (1975). Field dependence-independence and self-esteem in preadolescent children. Perceptual and Motor Skills, 41, 41-42.
- Peabody, D. (1961). Attitude content and agreement set in scales of authoritarianism, dogmatism, anti-Semitism, and economic conservatism. Journal of Abnormal and Social Psychology, 63, 1-11.
- Pellegrino, D., & Stickle, F. (1979). Field-dependence/field-independence and labeling of facial affect. Perceptual and Motor Skills, 48, 489-490.
- Pelletier, K. R. (1974). Influence of transcendental meditation upon autokinetic perception. Perceptual and Motor Skills, 39, 1031-1034.
- Petrakis, E., (1979). Perceptual style of varsity tennis players. Perceptual and Motor Skills, 48, 266.
- Petrakis, E. (1981). Cognitive styles of physical education majors. Perceptual and Motor Skills, 53, 574.
- Petrakis, E., & Hanson, C. J. (1981). Cognitive style and choice of leisure activities by older adults. Perceptual and Motor Skills, 52, 839-842.
- Pierson, J. S. (1965). Cognitive styles and measured vocational interest of college men. Dissertation Abstract International, 26, 875-876.
- Pizzamiglio, C. L., & Pizzamiglio, L. (1974). Psychometric data of some tests of field dependence related to an Italian population of children four and a half to ten and a half years old. Archivio di Psicologia Neurologia e Psichiatria, 35, 127-143.
- Pollock, N. J. (1972). Women and the division of labor: A Jamaican example. American Anthropologist, 74, 689-692.
- Preale, I. Y., Amir, Y., & Sharan, S. (1970). Perceptual articulation and task effectiveness in several Israel subcultures. Journal of Personality and Social Psychology, 15, 190-195.
- Preston, J. C., & King, L. L. (1979). Correlations between Witkin's Group Embedded Figures Test and Nickel's Rod-and-Frame test. Perceptual and Motor Skills, 48, 670.

- Puryear, G. R. (1971). Fear of success in Black women as it relates to militancy and affective attachment. Unpublished Master's thesis, Howard University.
- Puryear, G. R., & Mednick, M. T. S. (1974). Black militancy, affective attachment, and fear of success in Black college women. Journal of Consulting and Clinical Psychology, 42, 263-266.
- Rameriz, M., & Price-Williams, D. (1974). Cognitive styles of children of three ethnic groups in the United States. Journal of Cross-Cultural Psychology, 5, 212-219.
- Rapaport, D. (1959). The structure of psychoanalytic theory: A systematizing attempt. In S. Koch (Ed.), Psychology: A Study of Science, Vol. 3, New York: McGraw-Hill.
- Ray, J. J. (1982). The Protestant Ethic in Australia. Journal of Social Psychology, 116, 127-138.
- Reardon, R., Jolly, E. J., McKinney, K. D., & Forducey, P. (1982). Field-dependence/independence and active learning of verbal and geometric material. Perceptual and Motor Skills, 55, 263-266.
- Renna, M., & Zenhausern, R. (1976). The Group Embedded-Figures Test: Normative data. Perceptual and Motor Skills, 43, 1176-1178.
- Renninger, K. A., & Snyder, S. S. (1983). Effects of cognitive style on perceived satisfaction and performance among students and teachers. Journal of Educational Psychology, 75, 668-676.
- Ritzinger, F. C. (1971). Psychological and physiological differentiation in children six to eleven years of age. Unpublished doctoral dissertation, Washington University, St. Louis, Missouri.
- Roach, D. A. (1979). Effects of some variables on field dependence. Perceptual and Motor Skills, 48, 559-562.
- Roberts, G. W., & Sinclair, S. A. (1978). Women in Jamaica: Patterns of reproduction and family. Millwood, NY: KTO Press.

- Robertson, H. M. (1959). A criticism of Max Weber and his school. In R. W. Green (Ed.), Protestantism and capitalism: The Weber thesis and its critics. Boston: D. C. Heath and Company. Pp. 65-86.
- Robinson, T. (1971). Comparison of black male college students at black and white universities on attitudes towards violence. Unpublished Master's thesis, Howard University.
- Rodman, H. (1971). Lower class families: The culture of poverty in Negro Trinidad. New York: Oxford University Press.
- Rogers, C. R. (1951). Client-centered therapy. Boston: Houghton Mifflin.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, New Jersey: Princeton University Press.
- Rotella, R. J., & Bunker, L. K. (1978). Field dependence and reaction time in senior tennis players (65 and over). Perceptual and Motor Skills, 46, 585-586.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, 1-28.
- Ruggieri, V., Cei, A., Bergerone, C., & Guerrera, A. (1981). Cognitive style and perspective reversal. Perceptual and Motor Skills, 53, 745-746.
- Rusch, R., & Lis, D. (1977). Reliability and trend for field independence as measured by the portable rod-and-frame. Perceptual and Motor Skills, 44, 51-61.
- Sabatelli, R. M., Dreyer, A. B., & Buck, R. (1979). Cognitive style and sending and receiving of facial cues. Perceptual and Motor Skills, 49, 203-212.
- Savage, J. E., Jr., Stearns, A. D., & Friedman, P. (1979). Relationship of internal-external focus of control, self-concept, and masculinity-femininity to fear of success in black freshmen and senior college women. Sex Roles, 5, 373-383.
- Scallion, R., & Herron, W. G. (1969). Field articulation of enuretic boys and their mothers. Perceptual and Motor Skills, 28, 407-413.

- Schratz, M. (1976). A developmental investigation of sex differences in perceptual differentiation and mathematic reasoning in two ethnic groups. Unpublished doctoral dissertation, Fordham University.
- Schuman, H. (1971). The religious factor in Detroit: Review, replication and reanalysis. American Sociological Review, 36, 30-48.
- Schwartz, D. W., & Karp, S. A. (1967). Field dependence in a geriatric population. Perceptual and Motor Skills, 24, 495-504.
- Segalman, R. (1968). The Protestant Ethic and social welfare. Journal of Social Issues, 23, 125-147.
- Shade, B. J. (1981). Racial variation in perceptual differentiation. Perceptual and Motor Skills, 52, 243-248.
- Shugart, B. J., Souder, M. A., & Bunker, L. K. (1972). Relationship between vertical space perception and a dynamic non-locomotor balance task. Perceptual and Motor Skills, 34, 43-46.
- Siann, G. (1972). Measuring field dependence in Zambia: A cross-cultural study. International Journal of Psychology, 7, 87-96.
- Silverman, J. (1968). Towards a more complex formulation of rod-and-frame performance in the schizophrenias. Perceptual and Motor Skills, 27, 1111-1114.
- Simon, W. E., & Wilde, V. (1971). Ordinal position of birth, field dependency and Forer's measure of gullibility. Perceptual and Motor Skills, 33, 677-678.
- Simpson, G. E. (1942). Sexual and familial institutions in Haiti. American Anthropologist, 44, 655-674.
- Smith, C. P. (1976). Fear of success: Qualms and queries. In F. L. Denmark (Ed.), Women-Volume I: A PDI research reference work. Psychological Dimensions, Inc., New York.
- Smith, M. G. (1962). West Indian Family Structure. Seattle: University of Washington Press.

- Smith, R. T. (1960). The family in the Caribbean. Caribbean Studies: A Symposium. Seattle: University of Washington Press.
- Smith, R. T. (1971). Culture and social structure in the Caribbean: Some recent work on family kinship studies. In R. Frucht (Ed.), Black Society in the New World. New York: Random House.
- Soat, D. M. (1974). Cognitive style, self-concept, and expressed willingness to help others. Dissertation Abstracts, 35, 2063-2064A.
- Solomon, L. E. (1975). Perception of a successful person of the same sex or the opposite sex. Journal of Social Psychology, 85, 133-134.
- Sousa-Poza, M. D. (1975). Effects of different communicative tasks and cognitive style on verbal and kinesic behavior. Dissertation Abstracts International, 37, 531B.
- Souza-Poza, J., Rohrberg, R., & Mercure, A. (1979). Effects of type of information (abstract-concrete) and field dependence on asymmetry of hand movements during speech. Perceptual and Motor Skills, 48, 1323-1330.
- Sousa-Poza, J. P., Rohrberg, R., & Shulman, E. (1973). Field dependence and self-disclosure. Perceptual and Motor Skills, 36, 735-738.
- Spearman, C. (1927). The abilities of man. London: Macmillan.
- Spotts, J., & Mackler, B. (1967). Relationships of field-dependent and field-independent cognitive styles to creative test performance. Perceptual and Motor Skills, 24, 239-268.
- Stake, J. E. (1983). Factors in reward distribution: Allocator motive, gender, and Protestant ethic endorsement. Journal of Personality and Social Psychology, 44, 410-418.
- Stoffle, R. W. (1972). Industrial employment and inter-spouse conflict: Barbados, West Indies. Ph.D. dissertation, University of Kentucky.
- Stuart, I. R. (1965). Field dependency, authoritarianism, and perception of the human figure. Journal of Social Psychology, 66, 209-214.

- Stuart, I. R., Breslow, A., Brechner, S., Ilyus, R. B., & Wolpoff, M. (1965). The question of constitutional influence on perceptual style. Perceptual and Motor Skills, 20, 419-420.
- Stuart, I. R., & Bronzaft, A. L. (1970). Perceptual style, test anxiety and test structure. Perceptual and Motor Skills, 30, 823-825.
- Stuart, I. R., & Murgatroyd, D. (1971). Field research model of the rod-and-frame test. Perceptual and Motor Skills, 32, 671-674.
- Stuart, I. R., Murgatroyd, D., and Denmark, F. L. (1978). Perceptual style, locus of control and personality variables among East Indians and Blacks in Trinidad. International Journal of Social Psychiatry, 24, 26-32.
- Sugerman, A. A., & Cancro, R. (1968). Field independence and outcome in schizophrenia: A U-shaped relationship. Perceptual and Motor Skills, 27, 1007-1013.
- Sutton, C., & Makiesky-Barrow, S. (1981). Social inequality and sexual status in Barbados. In P. C. Steady (Ed.), The Black Woman Cross-Culturally. Mass.: Schenkman Publishing Company, Inc.
- Svinicki, J. G., Bundgaard, C. J., Schwensohn, C. H., & Westgor, D. J. (1974). Physical activity and visual field-dependency. Perceptual and Motor Skills, 39, 1237-1238.
- Tangri, S. S. (1972). Determinants of occupational role innovation among college women. Journal of Social Issues, 28, 177-199.
- Tawney, R. H. (1959). Religion and the rise of capitalism. In R. W. Green (ed.), Protestantism and capitalism: The Weber Thesis and its critics. Boston: D. C. Heath and Company. Pp. 39-55.
- Thomas, C. R. (1983). Field independence and technical achievement. Perceptual and Motor Skills, 57, 858.
- Thomas, V. G. (1983). Perceived traditionality and non-traditionality of career aspirations of Black college women. Perceptual and Motor Skills, 57, 979-982.

- Thompson, R. C., and Michel, J. B. (1972). Measuring authoritarianism: A comparison of the F and D scales. Journal of Personality, 40, 180-190.
- Tresemmer, D. W. (1974). Fear of success: Popular but unproven. Psychology Today, 7, 82-85.
- Tresemmer, D. W. (1977). Fear of success. New York: Plenum Press.
- Thurstone, L. L. (1944). A factorial study of perception, Psychometric Monographs (No. 4). Chicago: University of Chicago Press.
- Tyler, L. E. (1974). Individual differences. Englewood Cliffs, NJ: Prentice-Hall.
- Urdike, T. R., Jr. (1974). Cognitive styles and client-therapist relationship effectiveness with heroin and non-heroin users. Dissertation Abstracts International, 35, 1443-1444B.
- Vaught, G. M. (1969). Correlations between scores for a portable RPT and a stationary RPT. Perceptual and Motor Skills, 29, 474.
- Vaught, G. M., & Bremer, B. (1969). RPT stability or failure to arouse? Perceptual and Motor Skills, 28, 378.
- Vaught, G. M., & Solomon, W. (1970). Field dependence and inner-other directedness. Perceptual and Motor Skills, 31, 801-802.
- Vernon, P. E. (1965). Environmental handicaps and intellectual development: Part Two. British Journal of Educational Psychology, 35, 117-126.
- Veroff, J., Wilcox, S., & Atkinson, J. W. (1953). The achievement motive in high school and college age women. Journal of Abnormal and Social Psychology, 48, 103-119.
- Vigeland, K. (1973). Cognitive style among rural Norwegian children. Scandinavian Journal of Psychology, 14, 305-309.
- Vojtisek, J. D., & Magaro, P. A. (1974). The two factors present in the Embedded Figures Test and a suggested short form for hospitalized psychiatric patients. Journal of Consulting and Clinical Psychology, 42, 554-558.

- Wachtel, P. L. (1971). Cognitive style, attention, and learning. Perceptual and Motor Skills, 32, 315-318.
- Walsh, M. D. (1978). Factor analytic study of the Embedded Figures and rod-and-frame tests. Perceptual and Motor Skills, 47, 531-537.
- Walsh, M. D. (1979). Critique on note on the achromatic item in the Embedded Figures Test. Perceptual and Motor Skills, 49, 262.
- Waters, L. K., Baltis, N., & Water, C. W. (1976). Protestant Ethic attitudes among college students. Educational and Psychological Measurement, 35, 447-450.
- Watkins, D., & Astilla, E. (1979). Field dependence and self-esteem in Filipino girls. Psychological Reports, 44, 574.
- Watkins, D., & Astilla, E. (1980). Relationship between field independence, intelligence, and school achievement for Filipino girls. Perceptual and Motor Skills, 51, 593-594.
- Watkins, D., & Astilla, E. (1981). Field independence as a predictor of Filipino university engineering grades. Educational and Psychological Measurement, 41, 893-895.
- Weber, M. (1958). The Protestant Ethic and the spirit of capitalism. (Translated by Talcott Parsons) New York: Scribner.
- Weissenberg, P. (1973). Concurrent validity of Hidden Figures Test (CF-1). Perceptual and Motor Skills, 36, 460-462.
- Weissenberg, P. (1978). Field independence and attitudes toward population control. Perceptual and Motor Skills, 17, 185-186.
- Weits, J. M. (1971). Cultural change and field dependence in two native Canadian linguistic families. Ph.D. dissertation, University of Ottawa.
- Wenderoth, P. (1982). Fine's frame and perceived tilt. Perceptual and Motor Skills, 54, 763-766.
- Wertheim, J., and Mednick, S. A. (1958). The achievement motive and field independence. Journal of Consulting Psychology, 22, 38.

- Weston, P. J. (1969). Race, social class, and the motive to avoid success in women. Unpublished Master's thesis, Howard University.
- Weston, P. J., & Mednick, M. T. S. (1970). Race, social class and the motive to avoid success in women. Journal of Cross-Cultural Psychology, 1, 284-291.
- White, (1984). The Psychology of Blacks: An Afro-American Perspective. New Jersey: Prentice-Hall, Inc.
- Widiger, T. A., Knudson, R. M., & Rorer, L. G. (1980). Convergent and discriminant validity of measures of cognitive styles and abilities. Journal of Personality and Social Psychology, 39, 116-129.
- Williams, J. M. (1975). Perceptual style and fencing skill. Perceptual and Motor Skills, 40, 282.
- Willoughby, R. H. (1967). Field-dependence and locus of control. Perceptual and Motor Skills, 24, 671-672.
- Wilson, P. J. (1973). Crab Antics: The social anthropology of English-speaking Negro societies of the Caribbean. New Haven: Yale University Press.
- Wilson, G. D., and Patterson, J. R. (1968). A new measure of conservatism. British Journal of Social and Clinical Psychology, 7, 264-269.
- Wilson, S., Suddick, R. P., Shay, J. S., & Hustmyer, F. E., Jr. (1981). Correlations of scores on embedded and mirror tracing with preclinical technique grades and PMAT scores of dental students. Perceptual and Motor Skills, 53, 31-35.
- Windsor, A. (1983). Sex and profession as determinants of field dependence. Perceptual and Motor Skills, 57, 617-618.
- Witkin, H. A. (1977). Cognitive styles in personal and cultural adaptation. The 1977 Heinz Werner Lectures. Worcester, MA: Clark University.
- Witkin, H. A., & Asch, S. E. (1948a). Studies in space orientations. III. Perception of the upright in the absence of a visual field. Journal of Experimental Psychology, 38, 603-614.

- Witkin, H. A., & Asch, S. E. (1948b). Studies in space orientation. IV. Further experiments on perception of the upright with displaced visual fields. Journal of Experimental Psychology, 38, 762-782.
- Witkin, H. A., & Berry, J. W. (1975). Psychological differentiation in cross-cultural perspective. Journal of Cross-Cultural Psychology, 6, 4-87.
- Witkin, H. A., Dyk, R. B., Paterson, H. P., Goodenough, D. R., & Karp, S. A. (1962). Psychological Differentiation. New York: Wiley.
- Witkin, H. A., Dyk, R. B., Paterson, H. P., Goodenough, D. R., & Karp, S. A. (1974). Psychological Differentiation. Potomac, MD: Erlbaum.
- Witkin, H. A., & Goodenough, D. R. (1977). Field Dependence Revisited. ETS RB 76-39. Princeton: Educational Testing Service.
- Witkin, H. A., Goodenough, D. R., & Oltman, P. K. (1978). Psychological Differentiation: Current Status. ETS RB 76-39. Princeton: Educational Testing Service.
- Witkin, H. A., Karp, S. A., & Goodenough, D. R. (1959). Dependence in alcoholics. Quarterly Journal of Studies on Alcohol, 20, 493-504.
- Witkin, H. A., Lewis, H. B., Hertzman, M., Machover, K., Meissner, P. B., and Wapner, S. (1954). Personality Through Perception. New York: Harper.
- Witkin, H. A., Oltman, P. K., Reskin, E., & Karp, S. A., (1971). A manual for the Embedded Figures Test. Palo Alto: Consulting Psychologists Press.
- Witkin, H. A., Price-Williams, D., Bertini, M., Christiansen, B., Oltman, P. K., Ramirez, M., & Van Neel, J. (1974). Social conformity and psychological differentiation. International Journal of Psychology, 9, 11-29.
- Wollack, S., Goodale, J. G., Wijting, J. P., & Smith, P. C. (1971). Development of the Survey of Work Values. Journal of Applied Psychology, 55, 331-338.
- Wong, K. L. (1976). Psychological differentiation as a determinant of friendship choice. Dissertation Abstracts International, 38, 3639B.

- Woodfield, R. L. (1984). Embedded Figures test performance before and after childbirth. British Journal of Psychology, 75, 81-88.
- Zaks, M. S. (1954). Perseveration of set: a determinant in problem-solving rigidity. Unpublished Master's thesis, Roosevelt College of Chicago.
- Zigler, E. (1963). A measure in search of a theory. Contemporary Psychology, 8, 133-135.
- Zukerman, M., and Allison, S. N. (1976). An objective measure of fear of success: Construction and validation. Journal of Personality Assessment, 40, 422-430.
- Zukerman, M., Kolin, A., Price, L., & Zoob, I. (1964). Development of a sensation-seeking scale. Journal of Consulting Psychology, 28, 477-482.
- Zukerman, M., & Link K. (1968). Construct validity for the sensation seeking scale. Journal of Consulting and Clinical Psychology, 32, 420-426.
- Zukerman, M., and Wheeler, L. (1975). To dispel fantasies about the fantasy-based measure of fear of success. Psychological Bulletin, 82, 932-946.

ADDENDUM

- Anastasi, A. (1976). Psychological Testing. New York: MacMillan Publishing Company, Inc. (Fourth Edition).
- Berg, I.A., & Collier, J.S. (1953). Personality and group differences in extreme response sets. Educational and Psychological Measurement, 13, 164-169.
- Cronbach, L.J. (1946). Response set and test validity. Educational and Psychological Measurement, 6, 475-494.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.
- Cronbach, L.J., & Meehl, P.E. (1955). Construct validity in psychological tests. Psychological Bulletin, 52, 281-302.
- Gonsalves, S.V. (1985). The Psychology of Afro-Caribbean Women: Succinct review and future directions. Unpublished manuscript.
- Graham, J.R., & Lilly, R.S. (1984). Psychological Testing. New Jersey: Prentice-Hall, Inc.
- Gump, J.P. (1978). Reality and myth: Employment and sex-role ideology in Black women. In J.A. Sherman and P.L. Denmark (Eds.) The Psychology of women: Future Directions in Research. New York: Psychological Dimensions, Inc.
- Lawrence, L.S. (1983). Women in Caribbean literature: The African Presence. Phylon, 44, 1-11.
- Messick, S. (1980). Test validity and the ethics of assessment. American Psychologist, 35, 1012-1027.
- Messick, S. (1981). Constructs and their vicissitudes in educational and psychological measurements. Psychological Bulletin, 89, 575-588.
- Mintz, S.W. (1981). Economic role and cultural tradition. In P.C. Steady (Ed.) The Black Woman Cross-Culturally. Mass: Schenkman Publishing Company, Inc.
- Neale, J.M., & Liebert, R.M. (1980). Science and Behavior: An Introduction to methods of research. New Jersey: Prentice Hall, Inc.

- Sherman, J. (1967). Problem of sex difference in space perception and aspects of intellectual functioning. Psychological Review, 74, 290-299.
- Soueif, M.I. (1958). Extreme response sets as a measure of intolerance of ambiguity. British Journal of Psychology, 49, 329-334.
- Sowell, T. (1981). Ethnic America: A history. New York: Basic Books, Inc.