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ABILITY, LOCUS OF CONTROL, ACHIEVEMENT MOTIVATION, AND
PERFORMANCE: A TEST OF A SEQUENTIAL HYPOTHESIS

City University of New York

Ph.D. 1983

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ABILITY, LOCUS OF CONTROL, ACHIEVEMENT MOTIVATION,
AND PERFORMANCE: A TEST OF A SEQUENTIAL HYPOTHESIS

by

L. E. Cobb

A dissertation submitted to the Graduate Faculty
in Psychology in partial fulfillment of the
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Abstract

ABILITY, LOCUS OF CONTROL, ACHIEVEMENT MOTIVATION, AND PERFORMANCE: A TEST OF A SEQUENTIAL HYPOTHESIS

by

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The main hypothesis of this investigation was that $IQ \rightarrow IE \rightarrow Ac \rightarrow DV$: some level of ability (IQ)--and the resultant self-perception of competency--is necessary for the formation of an internal locus of control (IE), and some level of this sense of control over one's life is necessary for the formation of achievement motivation (Ac)--the desire to attain goals, which, in turn, is antecedent to actual performance (DV). Ancillary hypotheses were that (a) this model would not hold for members of the lower socioeconomic class: apparently sufficient ability levels would not support adequate levels of internal locus of control, and (b) the often-cited superiority of males over females in achievement motivation and internal locus of control would not occur in a lower-class sample: both would be obliterated by the pervasive and depressive influences emanating from the lower-class environment.

White middle class and Black/Hispanic lower class samples were drawn from a college student population in the

New York metropolitan area.

The main hypothesis was disconfirmed among middle class Whites, using both measures commonly quoted in the literature as well as purified measures with increased discriminant validity, mainly because the causal path model used to test this hypothesis was constrained by the low zero-order correlations among the variables.

The main hypothesis was also disconfirmed among lower class Blacks and Hispanics using measures quoted in the literature. The ancillary hypotheses could neither be confirmed nor disconfirmed because it proved impossible to define a stable and meaningful factor structure for lower class Blacks and Hispanics. It is demonstrated that the responses of this group were virtually content-free: their responses could be most readily explained by the operation of acquiescent responding with the implication of low interpretive skills, social desirability responding, defensive responding, and careless responding.

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CHAPTER I

INTRODUCTION

There have been a large number of univariate investigations of the extent to which ability, achievement motivation, and locus of control affect and predict achievement behavior, several bivariate investigations of how some of these variables operate in tandem as predictors of actual achievement (q.v. Atkinson & Raynor, 1974; Lefcourt, 1976; Phares, 1976), and a few investigations of how all three variables interact together (q.v. Wiener, 1974). Wiener has also supplied a theoretical statement of how ability, effort (a component of achievement motivation), locus of control, task difficulty, and "luck" (a component of locus of control) may interact.

What has been almost completely lacking--Wiener has skirted the boundaries of this issue--has been a theoretical statement or an empirical investigation concerning ability, achievement motivation, locus of control, and achievement in terms of causality or priority as they might occur in either a strong (causal) or weak (prior) temporal developmental sequence.

As regards two of the variables, achievement motivation and locus of control, Lefcourt (1976, p. 77) has stated the directionality of the inference partially and implicitly:

"the engagement in achievement activity . . . is unlikely if one views himself at the mercy of capricious external forces," as has Phares (1976, p. 110): "Although people high in need for achievement usually show an internal control organization, the reverse does not follow." From these logical considerations, it would appear that the causal or at least temporal relationship of these variables is such that an internal locus of control is a necessary but insufficient precondition for the emergence of achievement motivation.

While similar analyses of the sequential relationship between ability and locus of control and ability and achievement motivation are lacking, the customarily low zero-order correlations between ability and these two constructs is puzzling at best but does not entirely preclude the possibility of higher partial correlations. Equally challenging is Stephens' (e.g., Stephens & Delys, 1973) contention that an internal locus of control is an antecedent of much that is referred to as intelligent behavior, rather than the other way around. It would seem, again on purely logical grounds, that the formation of a sense of some (internal) control of one's environment should not develop without some self-perceived evidence that one has the ability to master this environment, and that one should not expect to achieve further gains without some sense of control over one's present situation.

Statement of the Hypotheses

The main purpose of this research is to demonstrate that there is a sequential/temporal relationship among ability, achievement motivation and locus of control: there can be no achievement motivation (desire for the attainment of some personally valued goal) without an internal locus of control (a belief that success in an endeavor is contingent upon one's own actions), and that some level of ability is a necessary precondition for the occurrence of achievement motivation and internal locus of control. Thus the hypothesized sequence is as follows:

ABILITY → INTERNAL LOCUS → ACHIEVEMENT → ACHIEVEMENT
OF CONTROL MOTIVATION

The secondary hypotheses are as follows:

1. This model will be found to break down among members of the lower class with otherwise sufficient ability levels, which will not guarantee the maintenance of enough internal-
ity to generate achievement motivation.

2. Within a lower class sample, the often found (among the middle classes) superiority of males in achievement motivation and internality will not occur: the overwhelming influence of the lower class environment will obliterate such sex differences.

Rationale for Hypotheses

While the theoretical reasoning behind the major premise of this research should be self-evident from the previous section, a few supporting remarks are in order

regarding the major hypothesis and the secondary ones.

1. While locus of control has usually been conceptualized as exerting a moderating effect on the achievement motivation/achievement behavior relationship (e.g., Phares, 1976, p. 109), locus of control, per se, has been found to be a good predictor of achievement behavior--though the relationship of achievement motivation with locus of control has typically been found to be low and achievement motivation has been the classic predictor of achievement behavior--and this result holds even with ability partialled out (cf. Lefcourt, 1976, pp. 70-71; Phares, 1976, pp. 108-110).

2. As regards the secondary hypothesis concerning the breakdown of the sequential model among a lower class subsample which, though qualifying on ability, will be "stopped" by insufficient internal locus of control, Cobb (1977) has demonstrated that not only is locus of control a good predictor of academic achievement among a lower class ghetto sample, but it is the best predictor after ability (and not achievement motivation) even though achievement motivation contributes significantly to the prediction of grade point average after first entering an index of ability and a measure of locus of control (which finding also has implications regarding the major hypothesis).

Coleman, Campbell, Hobson, McPartland, Mood, Winfeld, and York (1966) found that three locus of control items were the best predictors of achievement for this type of sample: many lower class individuals misperceive grades as

something done to them rather than something achieved. These authors state "the responses . . . show that minority pupils, except for Orientals, have far less conviction than Whites that they can affect their own environments and futures"--an external frame of reference.

Lefcourt (1976, p. 110) has stated in this connection, "Access to opportunity for contingent response seems to be essential to the development of locus of control. . . . a responsive and fair milieu seems to be the necessary ingredient."

Related to these findings and conjectures is the finding that the poor and Blacks have a shorter delay of gratification period and a shorter time perspective, which is related to an external locus of control (Phares, 1976, pp. 115-118). Whereas Banfield (1970) would take a lack of future orientation as both a cause and evidence for the inferiority of the lower classes--particularly ghetto Blacks--it is far more easily arguable that this tendency to be present-oriented and to strive for the attainment of short-term goals is not evidence of any deficiency but represents a completely realistic and logical response to the exigencies of being poor.

3. Regarding the hypothesis that the usually reported higher achievement motivation and internal scores for males will not be found in a homogeneous lower class sample, the rationale is that the pervasive influence of the lower class milieu will completely obliterate any sex differences that

customarily obtain for middle class samples: lower class individuals, Black and White, male and female are placed in the same vortex of competitive economic struggle for survival.

Evidence for the Hypothesis

The evidence for the relationships among the variables to be used in this investigation are presented in this subsection.

Intelligence and achievement behavior. There is no relationship that is better validated than that between intelligence and achievement, in psychology, literature, and in folk wisdom. In the psychological literature, correlations between intelligence and achievement are among the highest and most reliable. Regarding the directionality of this relationship, it has been demonstrated by Crano, Kenny, and Campbell (1972), using Campbell's (1963) cross-lagged panel analysis on longitudinal data, that, while recursive feedback does occur, the predominant (strong) causal sequence is one of ability causing later achievement--at least for a White middle class suburban sample of children. (Interestingly, for an inner city sample of children, both sequences operate, but with achievement $\rightarrow$ ability the predominant one.)

Intelligence and achievement motivation. The correlations between intelligence and achievement motivation range from negligible to low among adults, whether the projective

TAT is used (Atkinson, 1965, pp. 255-256; Heckhausen, 1967, pp. 128-131), or questionnaire measures of achievement motivation are used, e.g. Cobb (1977) who found a correlation of only .02 between Nelson-Denny reading scores and Jackson's (1967b) Personality Research Form achievement motivation scale.

However, since the causal path that models the main hypothesis of this investigation-- $IQ \rightarrow IE \rightarrow Ac \rightarrow D.V.$ --does not require the $IQ \rightarrow Ac$ relationship, the low correlations between intelligence and achievement motivation should pose no problem for the testing of the hypothesis. They would, however, pose a problem for any alternative hypothesis that does require the $IQ \rightarrow Ac$ relationship.

Intelligence and internal-external locus of control.

Rotter (1966) concluded that the correlations between intelligence measures and I-E scale scores are low and Hersch and Scheibe (1967) reported correlations from -.07 to .17 between the I-E scale and three measures of intelligence. However, a somewhat higher correlation (.34) between internality and intelligence has been reported by Powell and Centa (1972), and Cobb (1977) found a correlation of .26 between I-E scores and Nelson-Denny reading scores among students at Bronx Community College.

The negligible to low zero-order correlations between I-E scores and measures of intellectual ability in adult samples is the most troublesome finding and one that places the most severe constraint on the proof of the main

hypothesis of this investigation. However, R. T. Brown (1980) has reported correlations of .60-.62 between Nowicki-Strickland Locus of Control Scale for Children (1973) scores and scores on the Peabody Picture Vocabulary Test, among high school students, and correlations of the same order are reported for children using Crandall's Intellectual Achievement Responsibility Questionnaire (Crandall, Katkovsky, & Crandall, 1965), q.v. Lefcourt (1976, pp. 69-71).

Locus of control and achievement motivation. Phares' (1976, pp. 110-111) review of the literature shows no evidence for any significant relationships between locus of control and achievement motivation. Powell and Vega (1972), in a study not considered by Phares, did show a low but significant correlation between locus of control and achievement motivation as measured by the Edwards (1954) Personal Preference Schedule.

This is all very odd, in that just about every psychologist, including Rotter (1966) himself, recognizes the similarity between the achievement motivation and locus of control constructs on the logical-intuitive level. Once again, the low reported relationships between these variables pose a problem that may or may not be overcome by the emergence of more sizeable partial correlations.

Achievement motivation and achievement. While the correlations between projective (TAT) measures of achievement motivation and performance range from low to moderate (Atkinson & Raynor, 1974, pp. 20-23; Heckhausen, 1967, pp.

131-133; Lefkowitz & Fraser, 1980), correlations between questionnaire measures of achievement motivation and performance are higher, attaining levels as high as .60 (Cobb, 1977; Gordon, 1977; Lefkowitz & Fraser, 1980; Morgan, 1976).

Even more encouraging, some significant correlations between achievement motivation and achievement measures have been reported, even after intelligence test scores have been partialled out (Cobb, 1977; Morgan, 1976).

Locus of control and achievement. The relationship between locus of control and achievement behavior is well documented--q.v. Bar-Tal and Bar-Zohar (1977), Lefcourt (1976, pp. 70-71, 146-147), Phares (1976, pp. 107-110)--though the data reviewed by these authors do show some inconsistencies and even a few perplexing anomalies. More recent investigations of this relationship are as follows:

1. R. T. Brown (1980) found no significant relationship between the Nowicki-Strickland Locus of Control Scale for Children (1973) and achievement, among children.

2. Chandler and Dugovics (1977) found significant but low correlations between Nowicki-Strickland Internal-External Scale scores and GPA's.

3. Yoch and Nowicki (1977) found no significant relationships between internal-external locus of control and achievement scores.

4. Otten (1977) found low to moderate correlations between locus of control and subsequent academic performance.

5. Stake (1977) found no significant relationship

between locus of control and grade point average.

6. Swanson (1981) reported correlations of .28 to .55 between various measures of locus of control and achievement tests--albeit among learning disabled children.

Thus even the results of the more recent studies are mixed. Most encouraging for the present investigation are the following studies:

1. Coleman, Campbell, Hobson, McPartland, Mood, Winfield, and York (1966) found that locus of control was a strong predictor of performance among Black students, not so important for White students; in fact locus of control explained more variance in the prediction of the achievement behavior of Black students than any other variable, after socioeconomic status.

2. Cobb (1977) showed a correlation of .60 between Rotter's (1966) Internal-External Locus of Control Scale and GPA--as high as that of the achievement motivation-GPA relationships, among a sample of inner city ghetto college students.

Most germane to the present investigation is the recent study by Stipek (1980) which showed via both cross-lagged panel analysis and causal path analysis that internal locus of control influences later academic achievement--at least among White children.

Measurement of Constructs

Ability measures. The chief measure of ability was a twenty-word multiple choice vocabulary test developed by

Thorndike (1942) from the longer vocabulary section of the Institute of Educational Research Intelligence Scale (CAVD), by selecting two words from each of the ten difficulty levels of this test. When correlated with the Otis Self Administering Intelligence examination, this short test proved only slightly easier at the lower levels and only slightly harder at the higher levels.

This short test also has the advantage of having been used extensively in personal, door-to-door, interviews of large samples of people by Thorndike and Gallup (1944) and they report the following reliability estimates for it: parallel form = .83; split half = .91 (when corrected for half-length via the Spearman-Brown formula). This test also exhibits the same relationships with education, occupation, social class, age, sex, race, geographic region, and urban/rural splits, as demonstrated by longer intelligence tests.

Also contributing to the choice of this short test as the primary measure of ability is Miner's (1957) extensive review of various short form intelligence tests which shows that short vocabulary tests (including Thorndike's) have higher relationships (median $r = .83$) with full intelligence test batteries than any other short subscales.

This twenty-item scale was supplemented by 15 non-verbal Lorge-Thorndike Intelligence Test (1964) items which are designed to measure more abstract facets of intelligence: classification, analogy, and relationship. The choice of the non-verbal form is an attempt to circumvent the

objections to purely verbal tests. The authors state in this regard that while "verbal symbols are the appropriate medium for the testing of abstract intelligence, . . . for some--the poorly educated or the poor reader [both of whom are represented in the present investigation]--a parallel set of non-verbal measures is provided." They report split-half reliabilities of .90 and test-retest reliabilities of .92 for their non-verbal tests.

Achievement measures. Cobb (1977) investigated five measures of achievement motivation:

1. TATnAch: The four TAT pictures customarily used to assess achievement motivation--#2: two men in a machine shop, #8: boy at desk, #1: older man and younger man, #7: operation scene--were projected on a screen and the resulting protocols scored via the complete Atkinson (1958) procedure.

2. TATnAch (sort): These same data were rescored by sorting each protocol for each picture separately into 5-7 categories ranked for achievement motivation on a rational-intuitive basis, and giving positive weight to protocols exhibiting learning, learning to repair something, attainment of (realistically) limited goals, successful commission of a profitable crime, as well as for the more usual kinds of achievement imagery (AI) scored by the Atkinson procedure. (This was a sample of community college students largely residing in central city ghettos.)

3. EPPS Ach scale, consisting of 20 ipsative achievement items from Edwards (1954) Personal Preference Schedule,

scored dichotomously.

4. PRF-Ac scale, consisting of 29 items from Jackson's (1967b) Personality Research Form cast in a four-category Likert format.

5. PRI: Mehrabian's (1968, 1969) Personality Research Inventory--26 items cast in a seven-category Likert format, separate forms for males and females.

The California Personality Inventory's (CPI) two achievement scales were not included in this investigation because of their already demonstrated low correlations ($r = .23$) with criterion measures (Griffin & Flaherty, 1964; Marcan, 1976).

For the TATnAch measure, it was found that:

1. Atkinson's 11-point scoring system is superfluous since only one factor could be extracted from the data, which accounted for all of the variance and on which all 11 scores loaded highly.

2. Scoring protocols for AI (achievement imagery) alone, provides as good an index of nAch by itself as does scoring protocols for all eleven elements. In fact, regressing AI on total TATnAch score accounted for 77% of the variance, multiple regression coefficient (R) = .88.

3. The four pictures (protocols) all contributed significantly to the TATnAch total score and there was correspondingly low internal consistency among them.

The resulting correlations with the criterion measures were as follows:

<u>Achievement Motivation Measure</u>	<u>Dependent Variable</u>			
	<u>Actual HSGPA</u>		<u>Class Grade</u>	
	<u>r</u>	<u>r²</u>	<u>r</u>	<u>r²</u>
TATnAch (standard scoring)	.16	.03	.21	.04
TATnAch (sort ranking)	.27	.07	.33	.11
PRF Ac scale	.49	.24	.52	.27
EPPS Ach scale	.39	.15	.47	.22
PRI	.45	.20	.47	.22

While the TATnAch sort ranking procedure produces significantly higher validity coefficients than does the Atkinson procedure, all of the questionnaire measures are significantly better predictors of both past and cumulative (actual HSGPA), and present and specific (class grade) indicators of academic achievement performance, than are the TAT measures, regardless of scoring method. This is a finding somewhat more common than is usually recognized; e.g. Krumholtz and Farquiler (1957) reported correlations of .00-.18 between TATnAch and an achievement examination (and test-retest reliability of only .26); Kagan and Moss (1959) were able to get only minimal discrimination into high school grade/low school grade groups with TATnAch measures (and test-retest reliabilities of only .16 to .32); Klinger (1966), in his review of the literature, found only half of the published TATnAch-GPA relations to be even significantly different from zero. The PRF scale appears to be a little better than the other questionnaire achievement motivation scales as a predictor of academic performance--

a result similar to that of Acker (1969).

The TATnAch measure does not warrant further consideration not only because of its low validity which is constrained by low stability and homogeneity coefficients (Klinger, 1966; Entwisle, 1972), but because of a demonstrated ethnocentric bias in this measure against Blacks and members of the lower classes (Cobb, 1977), and the logical deduction that it measures only one facet of achievement motivation--self-serving acquisitiveness--by way of McClelland's (1961) entrepreneurial capitalist definition of the construct, and from evidence provided by Jackson, Ahmed, and Heapy (1976). With the type of dependent variables proposed herein and because the present study is designed to draw inferences about a lower class population, the TATnAch would seem least appropriate as a measure of achievement motivation on purely conceptual as well as predictive/empirical grounds. Thus the PRF (or the EPPS) achievement measures would also seem most appropriate on conceptual as well as empirical grounds in that these measures do not exhibit this ethnocentric bias.

Partialling out the Nelson-Denny scores (in practice, entering the Nelson-Denny score first in stepwise multiple regression equations, and then entering the achievement motivation measures separately--with actual high school grade point average as the dependent variable) produced the following results:

Relationships of Achievement Motivation Measures
with Actual HSGPA

<u>Achievement Motivation Measure</u>	<u>Nelson- Denny r</u>	<u>Incremental r*</u>	<u>Total R</u>	<u>Total R²</u>	<u>Additional R²*</u>
PRF Ac	.48	.21	.69	.48	.04
EPPS Ach	.48	.21	.69	.48	.04
PRI	.48	.21	.69	.46	.04
TATnAch (standard scoring)	.48	.08	.56	.31	.01
TATnAch (rank scoring)	.48	.02	.50	.25	.00

* After inclusion of Nelson-Denny score.

Thus while Nelson-Denny scores predict academic achievement (HSGPA) as well or better than any of the achievement motivation measures, all of the questionnaire measures of achievement motivation contribute additional predictive variance--and the same amount, additional $R^2 = .04$. That the TATnAch measure contributes nothing to the prediction of HSGPA after partialling out ability (Nelson-Denny scores) replicates findings by Shaw (1961) and Entwisle (1972).

Combining the results of the two aforementioned analyses, it would seem that either the PRF-Ac or the EPPS-Ach scale affords the best currently available measure of achievement motivation. Since the PRF produces somewhat higher zero-order correlation coefficients with HSGPA (the

same with ability partialled out), and since the ipsative format of the EPPS-Ac scale produces statistical anomalies (as well as failing to control for response sets/styles as often claimed) it was decided to use the PRF-Ac scale for this research. Because this research was conducted with a student population, the PRF-Ac scale was augmented by some school-related items and some additional items as well.

The PRF-Ac scale is presented as measuring a unitary construct; however because of the addition of some items and because of the diverse nature of the subsamples involved--Black versus White, lower versus higher SES, male versus female--the achievement scale was analyzed to see if the scale was indeed unidimensional or contained facets of achievement motivation, and the structure of these facets was assessed across analytic subgroups.

Locus of control measures. The main measure of locus of control was Rotter's (1966) Internal-External (I-E) scale. In addition, the I-E scale was augmented with some items from Dean's (1969) Alienation Scale, James' (1957) original I-E scale, and Levenson's (1972, 1973) locus of control scale, as dictated by logical consideration of the present problem.

There appear to be two main results reported for factor analyses of the Rotter (1966) I-E scale:

1. A two-factor solution of the forced-choice format which produces a factor having to do with personal control

and a factor having to do with socio-political control (control ideology): Cherlin and Bourque (1974), Lefcourt (1976, pp. 130-134), Phares (1976, pp. 47-51). Lange and Tiggeman (1981), noting that every one of the subsequent studies purporting to duplicate the first study to obtain two factors (Mirels, 1970) either deleted from or added to Rotter's I-E scale, factor-analyzed the Rotter I-E scale, per se, and obtained two factors that closely resemble those of Mirel's original study.

2. A four-factor solution obtained by recasting the 23 forced-choice items of the Rotter I-E Scale into a Likert format: Collins (1974), Duffy, Shifflet, and Downey (1977), Little (1977), Zuckerman and Gerbasi (1977). Whereas Collins added 42 new items to the 46 I-E items (the former set designed to reflect situational aspects), the other investigators analyzed the I-E scale per se--and four quite similar factors were found by all investigators, which can be interpreted as personal internal locus of control, personal external locus of control, beliefs in luck, chance, or fate, and socio-political control (control ideology).

Complicating this issue is the reported divergence of the results of factor-analysis of the I-E scale among Black subjects: Gurin, Gurin, Lao, and Beattie (1969) factor-analyzed the I-E scale items along with some specific locus of control items having to do with race, and obtained four factors which they named Control Ideology, Personal Control, System Modifiability, and Race Ideology. The first two

factors bear a strong resemblance to Mirel's two factors, while the other two are led by the race-specific items included in their investigation.

Sex differences in levels of internal locus of control have been reported, though the wide majority of studies show no significant sex differences (Phares, 1976, p. 44). More germane to the present purpose are the findings regarding sex differences in the structure of the locus of control construct:

1. Dudley (1978) found some sex differences in the factor structure of the I-E scale.
2. Strickland and Haley (1980) found three factors for males, two for females, even when balancing these subgroups for mean level and variance.

In view of these complications, the augmented locus of control scale was analyzed to determine the number and kind of facets, and their structure across the subgroups of this study. All locus of control items were cast in a Likert format. This procedure was used because of the undesirable statistical properties of forced choice scales along with evidence that they do not indeed accomplish their main purpose, i.e., the suppression of social desirability (Bernhardson & Fisher, 1970; Edwards, 1970; Harschbarger, 1974). Also, Collins (1974) has presented good evidence that the I-E scale administered in a Likert format correlates highly ($r = .82$) with the I-E scale administered in the usual forced choice format.

Other independent variables. Because of the similarities between locus of control items and some other construct domains, a few items have been added to this study in order to increase the discriminant validity of the locus of control scale (and improve upon that of the achievement motivation scale as well). These are items reflecting cynicism, paranoia, self-deprecation, and, in particular, depression--all related to the external aspect of the locus of control dimension, and somewhat (inversely) related to achievement motivation.

Depression has been found to be correlated with locus of control, especially among males (Hanes & Wild, 1977; Lefcourt, 1976, pp. 85-86, 148-149; Phares, 1976, pp. 125-126). (Peterson, Sushinsky, and Demask's [1978] finding of no significant correlation between the MMPI Depression Scale and external locus of control must be considered in light of the fact that it has never been demonstrated that the MMPI Depression Scale measures depression more than it measures a number of other psychopathological manifests or, for that matter, social undesirability.)

This correlation between depression and external locus of control obtains because most of the external items are indeed depressing: Evans and Wanty (1979) had subjects rate I-E items on depressiveness and 15 and 18 of the external items were judged more depressing than their internal (forced choice) counterparts by males and females, respectively. In addition, Evans and Wanty found that the reported

relationship between the I-E scale and depression is accounted for by those pairs of items for which the external alternative is higher in rated depressive content than the internal alternative.

Consequently, it was decided to include items connoting depression in this study and use them to increase the discriminant validity of the internal-external locus of control items. The Jackson and Messick (1971) Differential Personality Inventory's Depression Scale seemed well suited to this purpose, as did Beck's (1967) Depression Scale. Another candidate was the Beck, Wessman, Lester, and Trexler (1974) Hopelessness Scale which seemed to be even closer to the content of external locus of control items. In this connection, Fogg, Kohaut, and Gayton (1977) have found the Beck et al. Hopelessness Scale to correlate significantly with depression for males, but not females. Since the Beck Depression Scale correlates .63 with the Beck et al. Hopelessness Scale, it was decided to include both the DPI Depression Scale and the Beck et al. Hopelessness Scale in the present inventory, in order to include as many facets of depression/hopelessness as possible, to better refine by correlational procedures the locus of control construct.

In addition, inspection of these depression/hopelessness items shows that many of them appear to be (inversely) related to some of the PRF-Ac scale items and might prove valuable in refining this construct as well.

Dependent variables. Because of the nature of the student subject population that was used for this research, the following variables were available as indicants of achievement:

1. Students' reported/estimated high school GPA
2. Students' reported/anticipated college GPA
3. Actual HSGPA
4. Grade in class in which research is conducted.

Control of response biases/sets/styles. Whereas the influence of response sets/styles/biases is not a matter of serious concern regarding the intelligence measures, and both acquiescence and desirability have been suppressed in the creation of the PRF achievement scale, acquiescence and especially desirability responding contaminate the I-E measures.

1. It is well known that the I-E scale is fraught with desirability responding, despite its forced choice format: Cone (1971) found correlations between the Edwards SD scale and the I-E scale, and Bernhardson (1968), Hjelle (1971), and Joe (1972) all found that social desirability scale values (SDSVs) of the I-E items correlated highly with the probability of endorsement of these items. (Demonstrations of low correlations of I-E items with the Marlowe-Crowne Social Desirability scale [M-C SDS] by Rotter [1966] and several other [cf. Phares, 1976, p. 43] do not diminish the seriousness of the degree of social desirability responding inherent in the I-E scale, because the M-C SDS is not a very

good marker for social desirability, being rather a measure of the content domain of need for approval, as well as the response style of impression management (Edwards & Walsh, 1964).

Because virtually the entire I-E literature has employed the I-E scale in its present form and the locus of control construct is so intertwined with the I-E measurement operation, for purposes of comparability, no attempt was made to remove the effects of social desirability from it prior to its administration; rather, post hoc methods were used to partial out the effects of social desirability in the course of the analysis. Desirability scale items from Edwards' (1957) Social Desirability Scale, Jackson's (1967b) Personality Research Form, and Jackson and Messick's (1971) Differential Personality Inventory were used for this purpose.

2. Acquiescent responding was dealt with mainly by balanced keying of items, even though Jackson (1967a) has made a rather compelling case for the influence of acquiescence beyond that controlled by balanced keying. Again, post hoc procedures were used to assess the degree of residual acquiescence.

3. Concerning extremity responding, this could be removed entirely by casting all items in a dichotomous format; however the multivariate continuous distribution statistics used in this investigation do not lend themselves very well to the analysis of dichotomous data, and

statistical methods suitable for dichotomous data analysis are more complex and only partially programmed for the computer. Thus, any extremity responding that did obtain had to be tolerated, except for the extreme case of items with severely skewed and leptokurtic response distributions which were discarded prior to analysis. Of interest are the repeated findings that extremity responding is more often found in certain groups: e.g. the less intelligent, the lower classes, and Blacks (Hamilton, 1968).

4. Obviously careless respondents were discarded at the outset, and any remaining careless, non-purposive responding was partialled out of the data, using infrequency scales from Jackson's (1967b) PRF and Jackson and Messick's (1971) DPI.

5. In addition, a few items from Jackson and Messick's DPI-Defensiveness Scale were included. In the present context these items functioned as a means of detecting defensive responding as a response style, rather than functioning as exemplars of a content dimension, for which they were designed.

CHAPTER II

METHOD

Procedure

Cooperation was obtained from social science professors in eight colleges in the New York metropolitan area and their students were given the opportunity of participating in this research on a volunteer basis for extra credit. (It was decided to give extra credit because it was felt that not doing so would weight the participants towards those higher in achievement motivation and, perhaps, internal locus of control and intelligence.) All cooperating students were given a 20-30 minute questionnaire to fill out in class and a 30-40 minute questionnaire to fill out outside of class, with the instruction to return it to their professors within one to two weeks. In order for an interview to be considered complete, both questionnaires had to be completely executed and the student had to complete the course of instruction and receive a grade. (Questionnaires are contained in the Appendix of this document.)

Ten professors (three at Bronx Community College) participated in this research, each contributing from 4% to 22% of the questionnaires used in this investigation. These data were collected during the Fall '79 semester (11%), the Spring '80 semester (60%) and the Fall '80 semester (29%) as follows.

	<u>Incomplete</u>	<u>Complete</u>	<u>Discarded</u>	<u>Retained</u>	
	<u>n</u>	<u>n</u>	<u>n</u>	<u>n</u>	<u>%</u>
Bronx Community College (N.Y.)	42	101	14	87	32
Fordham University (N.Y.)	9	14	--	14	5
Jersey City Community College (N.J.)	13	63	4	59	22
Manhattan Community College (N.Y.)	0	15	--	15	6
Montclair College (N.J.)	3	45	6	39	15
New York University (N.Y.)	8	22	--	22	8
St. Peter's College (N.J.)	0	12	2	10	4
Upsala College (N.J.)	<u>1</u>	<u>21</u>	<u>--</u>	<u>21</u>	<u>8</u>
Total	76	293	26	267	100

Thus a total of (76 + 293) 369 students participated in this research, but 76 failed to return the take-home questionnaire, leaving 293 completed interviews. The large number of incomplete interviews in the Bronx Community College sample were all due to one professor's random appearances in class. The high proportions of incomplete interviews in the Fordham and New York University samples were, in both cases, due to two (untenured) professors who, despite the facts that this research was approved by the Human Subjects Committee and involved no manipulation or deception whatsoever, discouraged their students' full participation by repeatedly informing them that they did not have to participate.

The reasons for discarding the 26 completed interviews were as follows:

1. Whole or parts of questions not answered.
2. One or more pages of ratings exhibiting "dumping"--the use of the same scale position for all or nearly all of a page of ratings.
3. Three or more infrequency items answered in the keyed direction--i.e. denoting careless responding.

Of these 26 discarded questionnaires, 22 were executed by Black or Hispanic students and four were executed by White students, and all were members of the lower or lower middle classes. (The demographic characteristics of the 76 students who executed the incomplete interviews are not available as those data were obtained in the take-home questionnaire they did not complete.)

The 267 acceptable interviews were processed as follows:

1. The open-ended questions--data, professor, college, course of instruction--at the top of the first page of the classroom questionnaire (see Appendix) were coded.

2. The intelligence battery (Questions 2, 3, 4, and 5) in the classroom questionnaire was scored and coded.

3. The nine randomized pages for Q. 9 and the six randomized pages for Q. 10 in the take-home questionnaire were put into proper sequence for keypunching. (See Materials subsection.)

4. The open-ended demographic data (Q. 12) were coded as follows:

12c: "other" ethnic identification. There were only five of these subjects (two Indian and three Iranian) and they, along with the five Oriental subjects, were eventually included with the White sample when these data were analyzed.

12f: father's occupation. This question was coded using the standard 12-point coding scheme developed by the U.S. Census Bureau.

12j and 12k: stated high school and college grade point averages and class grade. Since different students reported their grades and different professors assigned class grades in different formats, these scores were all transformed to a common three-digit index.

Finally, an 8-point socioeconomic index was assigned to each subject as follows, using father's occupation and either current household or parents' household income, as deemed most appropriate.

<u>SES Index</u>	<u>Father's Occupation</u>	<u>Personal/Parental Household Income</u>	<u>SES Classification</u>
7	Upper professional, management, ownership	\$35,000 or more	upper/upper middle
6	Lower professional, management, ownership	\$25,000-\$35,000	upper middle/middle
5	Upper sales, clerical and very skilled labor	\$20,000-\$25,000	middle
4	Lower sales, clerical, skilled labor and craftsmen	\$15,000-\$20,000	middle/lower middle

<u>SES Index</u>	<u>Father's Occupation</u>	<u>Personal/Parental Household Income</u>	<u>SES Classification</u>
3	Operators, semi-skilled labor, upper service	\$10,000-\$20,000	lower middle
2	Unskilled labor, lower service, domestics	\$10,000-\$15,000	upper lower
1	Casual labor, small farmers and fishermen	\$5,000-\$10,000	lower
0	Unemployed, unknown	Up to \$5,000	lower lower

In the present research, these SES indices were used to form the following groups . . .

Higher SES: indices 4-7

Lower SES: indices 0-3

. . . both by considerations of classification and approximate median split.

Materials

The questionnaires used in this research are contained in the Appendix. Where necessary for expositional purposes, items are numbered. No item numbers appeared in the copies that were administered to the subjects used in this investigation. The classroom and take-home questionnaires consisted of the following scales or parts of scales. (It should be noted that the frequent administrations of anxiety scales were for the purposes of another investigation and are of no concern here.)

Classroom Questionnaire

These scales were administered to all subjects in the following order, the anxiety scales first and last by reason of maintaining maximum separation, the intelligence scales in approximate order of task difficulty for the average subject.

1. Twenty Spielberger, Gorsuch, and Lushene (1970) state/trait anxiety items, in which were interspersed four desirability scale items and three infrequency items.

2. Thorndike's (Thorndike, 1942; Thorndike & Gallup, 1944) 20-item multiple choice vocabulary (verbal selection) test.

3. Five verbal analogy items.

4. Five figural selection items.

5. Five figural analogy items.

All of the items in Qs. 3, 4, and 5 were selected from the Lorge-Thorndike Intelligence Test (1964).

6. Twenty Spielberger et al. (1970) state/trait anxiety items, in which were interspersed four desirability items and three infrequency items.

7. The 16-item Mandler and Sarason (1952) Test Anxiety Scale, couched in a five-point Likert format.

Take-Home Questionnaire

These scales were administered to all subjects in the following order, again the anxiety scales first and last for maximum separation. Where a scale required more than one page, these pages were administered in several different orders and these are indicated below.

8. Twenty Spielberger et al. (1970) state/trait anxiety items in which were interspersed four desirability items and three infrequency items.

9. One hundred and ninety (190) items were couched in a five-point Likert format. The order of listing the items was determined by drawing 190 numbers from a cup, except that the response style items--infrequency and defensiveness--were distributed in predetermined sequences. This section of the take-home questionnaire required nine pages and the sequence of their appearance in each questionnaire was determined by a table of random permutations of nine (Cochran & Cox, 1957, pp. 577-582). Upon their return from the several cooperating professors, they were put into the page sequence of the Appendix questionnaires, for purpose of keypunching the pre-coded columns.

These items consisted of the following scales and subscales, with numbers referring to the numbers on the Appendix questionnaires.

a-1. Jackson's (1967b) 29-item Personality Research Form (PRF) Achievement (Ac) Scale: items 4, 16, 21, 25, 30, 35, 40, 56, 64, 66, 71, 75, 79, 84, 90, 99, 105, 111, 114, 119, 125, 128, 150, 160, 168, 172, 178, 182, 187.

a-2. Fourteen (14) additional achievement motivation items, some of them PRF items rewritten to provide reference to scholastic achievements (the context in which the current research was conducted) and some of them new ones: items 8,

14, 24, 33, 61, 78, 83, 91, 103, 122, 133, 142, 173, 186.

b-1. The 46-item (23 pairs--six pairs of filler items were discarded) Rotter (1966) Internal-External Locus of Control Scale: items 6, 7, 10, 12, 15, 22, 26, 27, 28, 41, 42, 45, 46, 53, 54, 55, 60, 69, 70, 76, 80, 85, 88, 94, 101, 106, 120, 124, 129, 132, 134, 139, 141, 144, 148, 151, 152, 153, 157, 159, 161, 166, 170, 175, 179, 184.

b-2. Three items from Collin's (1974) attempt to write situationally referenced locus of control items: 5, 145, 162.

b-3. Five items from Dean's (1969) Alienation Scale: items 17, 43, 89, 104, 113.

b-4. Fifteen items from James' (1957) original I-E Scale: items 9, 23, 32, 34, 50, 59, 63, 87, 98, 109, 118, 123, 137, 156, 188.

b-5. Six items from Levenson's (1972, 1973) I-E Scale: 72, 81, 93, 102, 115, 130.

c-1. The 16-item Depression Scale from Jackson and Messick's (1971) Differential Personality Inventory (DPI): items 3, 19, 36, 65, 92, 97, 100, 108, 110, 117, 121, 127, 138, 167, 169, 171.

c-2. The 20-item Beck, Wessman, Lester, and Trexler (1974) Hopelessness Scale: items 2, 18, 31, 37, 38, 49, 52, 57, 67, 74, 82, 95, 131, 135, 143, 147, 164, 181, 185, 189.

d-1. Six items from Jackson and Messick's DPI Infrequency Scale: items 1, 20, 39, 58, 77, 96.

d-2. Five items from Jackson's (1967b) PRF Infrequency Scale: items 116, 136, 155, 174, 190.

e. Additional items from Jackson and Messick's DPI:

Cynicism Scale: Items 47, 149, 154, 158, 163, 171, 176.

Defensiveness Scale: items 11, 29, 48, 68, 86, 107,

126, 146, 165, 183.

Paranoia Scale: 51, 62, 73, 112, 140, 180.

Self-Deprecation Scale: 13, 44.

10. The Endler, Hunt, and Rosenstein (1962) S-R Inventory of Anxiousness. Since the administration of all 11 of these 14-item scales required six pages, the sequence of their appearance in each questionnaire was determined by a table of random permutations following the same procedure as for the previous question.

11. Twenty Spielberger et al. state/trait anxiety items in which were interspersed four desirability items and three infrequency items.

12. Demographic data, high school and college grade point averages.

The Spielberger et al. state/trait anxiety scales were administered in the following manner, with the following instructions, scales, and items, where "state" and "trait" refer to the instructions, scales, and items customarily used for the Spielberger et al. state and trait anxiety scales, per se.

Q. 1	State Instructions	State Instructions
	State Scale	State Scale
	State Items (<u>n</u> = 140)	Trait Items (<u>n</u> = 127)

Q. 6	State Instructions State Scale Trait Items ($\underline{n} = 140$)	State Instructions State Scale State Items ($\underline{n} = 127$)
Q. 8	Trait Instructions (T_1) Trait Scale (T_2) Trait Items (T_3) ($\underline{n} = 142$)	$T_1S_2T_3$ $T_1T_2S_3$ $T_1S_2S_3$ ($\underline{n} = 42$) ($\underline{n} = 38$) ($\underline{n} = 45$)
Q. 11	$T_1S_2T_3$ $T_1T_2S_3$ $T_1S_2S_3$ ($\underline{n} = 44$) ($\underline{n} = 52$) ($\underline{n} = 46$)	Trait Instructions (T_1) Trait Scale (T_2) Trait Items (T_3) ($\underline{n} = 125$)

The following items were interspersed among the state anxiety scale items:

"I am able to breathe" (1) and "I have the sense of touch in my fingers" (27): PRF Infrequency Scale items.

"I find it difficult to concentrate" (5): PRF Desirability Scale item.

"I feel self-conscious" (10) and "I feel embarrassed" (18): Edwards (1957) Social Desirability Scale items.

"I can see out of my right eye" (14): DPI Infrequency Scale item.

The following items were interspersed among the trait anxiety scale items:

"Sometimes I feel thirsty or hungry" (1) and "I try to get at least some sleep every night" (27): PRF Infrequency Scale items.

"My sleep is fitfull and disturbed" (5), "I blush very often" (18) and "I sweat very easily even on cold days" (22): Edwards (1957) Social Desirability Scale items.

"I have a number of health problems" (10): PRF Desirability Scale item.

"I can see the difference between red and blue" (14):
DPI Infrequency Scale item.

These state and trait anxiety scales were the subject of another investigation, as were the Text Anxiety Questionnaire (Q. 7) and the S-R Inventory of Anxiousness (Q. 10). They will not be mentioned again in this dissertation. However, the average of each subject's scores (for purposes of stability) across all administrations of the (social) desirability items, per se, will provide one of the indices of desirability responding used in this thesis. (The infrequency items that were imbedded in the state and trait anxiety items were not used to provide indices of infrequency responding because the 11 infrequency items imbedded in Q. 9, above, were used for this purpose.)

Sample Composition

The resulting sample of respondents who qualified for further analysis fell into the following subgroups:

	<u>Total</u>	<u>White</u>	<u>Black/Hispanic</u>
Total	267	156	111
Male	83	54	29
Female	184	102	83
Higher socioeconomic status	152	132	20
Lower socioeconomic status	115	24	91

Despite a special effort to obtain more males, they are in rather short supply--particularly Black or Hispanic males.

Also severely underrepresented are Whites of lower socioeconomic status and Blacks/Hispanics of higher socioeconomic status--a common problem in college sample studies.

Rather than further delay the analysis it was decided to proceed using the above subsamples, and also create the following contrasting analytic groups . . .

Higher SES Whites = 132

Males = 53

Females = 79

Lower SES Blacks/Hispanics = 91

Males = 26

Females = 65

. . . simply discarding the one (54 - 53) White lower SES male, the 23 (102 - 79) White lower SES females, the three (29 - 26) Black/Hispanic higher SES males, and the 17 (82 - 65) Black/Hispanic higher SES females, thus lowering the total sample size to 223, and taking note of the very small size (26) of the Black/Hispanic male subsample.

Analysis

There are analytic methods that, in effect extract latent variables (factors) from manifest variables (items) and, using these latent variables, test hypotheses via structural equation models--all in one pass (e.g. Jöreskog & Sörbom, 1979). However, these methods work off maximum likelihood formulations which require calculation of first and second derivatives and, despite some rather ingenious

computational shortcuts, they require substantial amounts of computer time. With the large (190 x 267) data matrix with which the subsequently reported analyses begin, and with the multiple passes on the data made necessary by the quest for factorial invariance across subgroups, these analytic methods are just too costly. Consequently, the analyses of the present data sets all proceed in two main stages: analysis of the structure of the data via factor- and item-analytic methods, and hypothesis testing via causal path analysis. This procedure is conceptually equivalent to that of structural equation methods except that the data are analyzed in stages rather than concomitantly, and does not require the acceptance of some of the assumptions inherent in structural equation models, per se. (Nor does it require multivariate normal response distribution assumptions as required by all maximum likelihood formulations.)

CHAPTER III

RESULTS

For purposes of clarity, this section is divided into three main subsections: Total Sample, White Sample, and Black/Hispanic Sample. Within each of these samples, the data will first be subjected to procedures that will increase the discriminant validity of the scales representing the constructs, an attempt will be made to delineate factors the structures of which are invariant across analytic subgroups, the hypothesis will be tested, and the influence of stylistic responding will be assessed.

Total SampleFactor Analysis of All Items

As an initial pass on the data, it was decided to obtain a grand R-matrix of all 190 attitudinal variables across all 267 subjects. Since it requires only a little more additional machine time, a principal component solution was also obtained, with 1's in the principal diagonal. Because substantive considerations dictated that, on the outside, 21 factors might be extracted, 21 principal components were rotated to equimax criterion, which rotation was chosen because there was no substantive reason to retain a large first principal component, which some other rotational

methods might have done.

The resulting solution was totally unexpected for two reasons:

1. The factors, with the exception of one which was a hybrid of some of the achievement motivation and locus of control measures, made little or no sense.

2. Sixty principal components had eigenvalues over 1.0, accounting for 75% of the total variance. These data are virtually meaningless because of low factor loadings with many items split between two or more factors, and the large number of apparent factors which were trivial; hence they are not reported.

Based on a careful inspection of the factor loadings, the intercorrelation matrix, and a scree plot of the eigenvalues (see Figure 1), a 13-factor equimax rotation was performed. While this solution made just a little more sense, only 36% of the total variance was explained. Again, this solution is not reported.

In an effort to reduce the number of significant eigenvalues, a principal factor analysis was performed, with squared multiple correlations (average size = .83) in the principal diagonal, and no iteration of these initial communality estimates.* Still, 52 principal factors had

*Ledyard Tucker, employing Monte Carlo simulation models, has demonstrated that for sample sizes commonly used in psychological research, iteration of communalities capitalizes upon error of measurement and, in particular, sampling fluctuations; hence the best factor analytic solution--in the sense of invariance of factor structure--is provided by retaining the initial communality estimates and not iterating them (Messick, 1981).

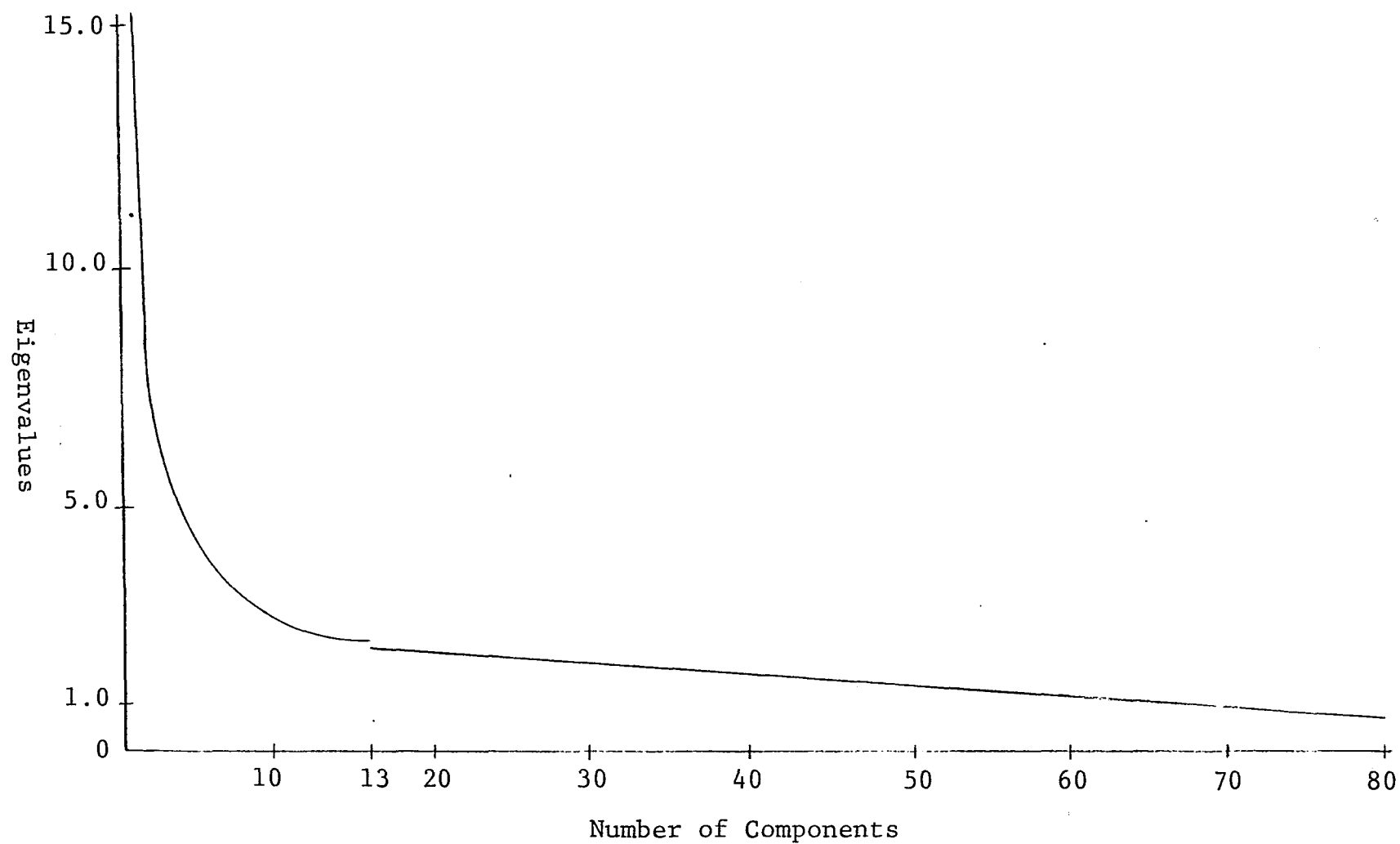


Figure 1. Scree Plot of Principal Component Analysis of All 190 Items: Total Sample.

eigenvalues above 1.0, accounting for 80% of the total variance (and 90% of the common variance). Based on another scree plot (see Figure 2), seven factors were rotated to equimax criterion, and this procedure resulted in the explanation of only 32% of the total variance (and 52% of the common variance).

Moreover, communalities were reduced from a range of .28 to .62 in the 21-factor principal component analysis, to a range of .18 to .46 in the 13-factor principal component analysis, to a range of .13 to .38 in the 7-factor principal factor analysis. Once again, this solution is not reported.

Further attempts at factor analysis of the entire set of 190 items on the total sample were abandoned, and it was decided to go directly into multiple item analysis procedures, since it was apparent that something was wrong with these data. A likely possibility is that the factor structure of the total sample is confounded by radically different sub-group structures. More will be said of this later.

Analysis of the Extent of Extremity Responding

In order to assess the extent to which subjects responded in terms of extremity response style rather than content--a possible cause of the lack of a reasonable factor structure--the 190 items were first recoded as follows:

Agree completely/disagree completely = 3.

Agree somewhat/disagree somewhat = 2.

Neither agree nor disagree = 1.

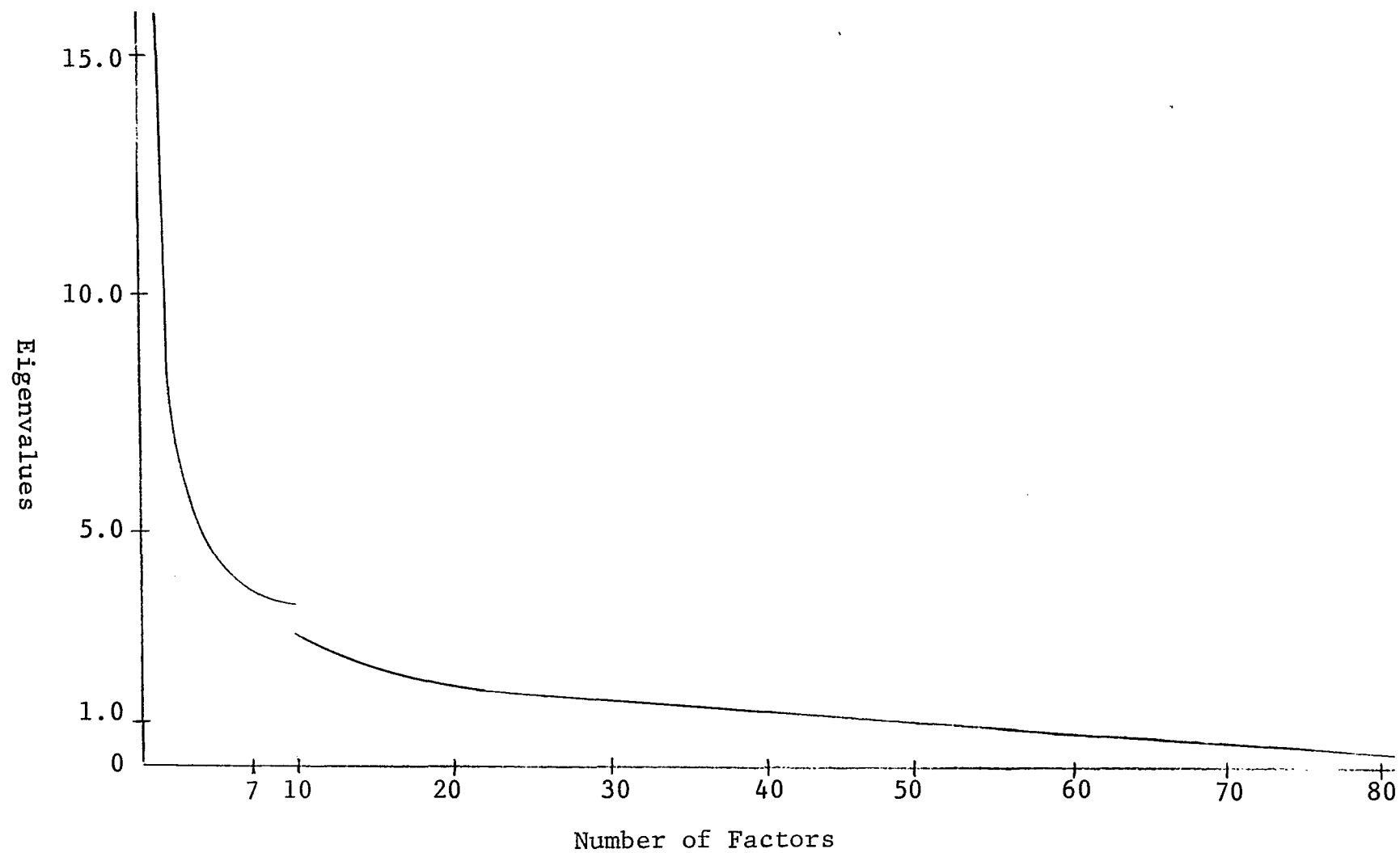


Figure 2. Scree Plot of Principal Factor Solution of All 190 Items: Total Sample.

By this procedure responses are scored by the extent of extremity responding rather than response direction or content. These rescored data were analyzed for internal consistency via split-half reliability analysis and the results were truly remarkable (see Table 1).

Table 1
Internal Consistency of All 190 Items
Coded for Extremity Responding
Total Sample

Coefficient alpha (all items)	.97
Alpha, part 1 (odd-numbered items)	.93
Alpha, part 2 (even-numbered items)	.95
Correlation between parts	.88
Spearman-Brown coefficient	.93
Guttman split-half coefficient	.93

From this analysis it can be concluded that the subjects used in this investigation had a pervasive and reliable tendency to use the same scale positions regardless of whether they were positive or negative, and apparently uninfluenced by content considerations.

In an attempt to reduce the effects of this response style, the items that correlated .50 or more, .45 or more, and .40 or more with the total scale of 190 items (which total scale reflects the tendency to utilize extreme judgment categories regardless of item content and direction of

keying) were counted to determine the feasibility of omitting these items from further analysis. Such exclusion proved to be impossible, because of the large number of items involved:

2 items with item-scale correlations of .500 or more;

23 items with item-scale correlations of .450 to .499;

48 items with item-scale correlations of .400 to .449.

Thus 73 of 190 items would have to be omitted even by these very lax criteria. (See Appendix Table A-1.)

Because this type of analysis usually results in internal consistency coefficients in excess of .75, this in itself is sufficient reason for following Jackson's (1967b, 1970, 1971) procedure and casting items in dichotomous formats for actual practical testing applications: since this response style is so pervasive that post hoc item deletion would delete a large part or even most of the items in any given Likert format battery, it is better to remove any possible extremity responding by simply removing extreme response categories through utilization of dichotomous response formats.

However, dichotomous response formats in the present case imply the use of tetrachoric correlation coefficients, and the only public program that computes such coefficients is LISREL V (Jöreskog & Sörbom, 1982) which was not yet available when this analysis was conducted. Moreover, with the quite small subsamples in the present investigation, estimation errors in calculating tetrachoric correlations tend to be too large and, in addition, such calculations

are costly for large numbers of variables: "The computation of polychoric and polyserial correlations from raw data is a rather time-consuming process especially when the number of variables . . . is large" (Jöreskog & Sörbom, 1981).

Thus it was decided to continue the analysis with all of the items, on the rationale that final scales could be purged of extremity responding by casting all items in dichotomous formats.

These results are to be compared with a similar analysis of the unrecoded data.

Table 2

Internal Consistency of All 190
Unrecoded Items
Total Sample

Total coefficient alpha (all items)	.86
Alpha, part 1 (odd-numbered items)	.76
Alpha, part 2 (even-numbered items)	.78
Correlation between parts	.61
Spearman-Brown coefficient	.76
Guttman split-half coefficient	.76

Thus, all reliability coefficients range between moderate to respectable, even though this particular "inventory" consisted of 190 items purported to measure six different substantive constructs--twelve if facets of the expected factors are considered--plus a response style (infrequency

responding). If item content was unknown and all we had to go on were the above reliability coefficients, then we would be justified in concluding that we had a unidimensional inventory of 190 items with a very decent coefficient alpha of .86--or that we had an inventory containing many construct facets, all of which are related to one another. Clearly, something is wrong here and there are only two possible explanations for these findings:

1. The constructs which these items represent are not nearly independent of one another and hence exhibit insufficient discriminant validity.

2. The responses to these items by this particular subject pool consist largely of error, deriving from the operation of various response sets and styles in addition to extremity responding, and it is this constant error that causes the apparently high internal consistency estimates. More will be said of this later.

Because of these severe difficulties, it was decided to enter multiple item analysis with the total complement of items, and attempt to obtain as much discriminant validity as possible, with the thought that the items that would be retained would be the ones that have the highest content saturation and hence are the least prone to response bias. Evidence for this supposition may be found in Trott and Jackson (1967), Jackson and Lay (1968), and Lay and Jackson (1969).

Item Analysis of Individual Scales

To maximize content saturation of the scales or parts of scales used in this investigation prior to multiple item analysis, sequential individual item analyses were performed, deleting items as suggested by the data, after first reflecting negatively keyed items. One to five passes were made on each scale, as required, and the final coefficients may be seen in Table 3.

The eleven infrequency scale items were not analyzed for reliability as this scale does not measure a reliable, stable personality trait or attitudinal characteristic, but it is rather a device to detect the occurrence of careless responding which may be pervasive across all segments of a battery or, more likely, occur differentially across battery parts, in which case low internal consistency can be expected. This position is contrary to that of Jackson (1967b) who does report respectable reliability coefficients for the PRF Infrequency scale; however, as has been shown, some reliability among even diverse verbal measures is almost inescapable--given a sufficient number of items. Also, those subjects who would have exhibited a reliable tendency to respond carelessly (three or more endorsements of extremely infrequent items) were discarded prior to analyzing the results of this investigation.

Table 3
Internal Consistency of Individual Scales
Coefficient Alphas
Total Sample

	Original		Revised	
	Alpha	N (items)	Alpha	N (items)
Augmented PRF Achievement Scale	.82	43	.86	36
Augmented Rotter I-E Scale	.84	75	.88	70
Collins (1974) Factor I ^a	.74	25	.82	23
Collins Factor II ^a	.76	22	.76	22
Collins Factor III ^a	.76	17	.79	15
Collins Factor IV ^a	.71	11	.77	10
DPI Depression/Beck Hopelessness Scales	.90	36	.92	34
Reduced DPI Cynicism Scale	.70	7	.70	7
Reduced DPI Defensiveness Scale	.64	10	.70	7
Reduced DPI Paranoia Scale	.67	6	.67	6
Social Desirability Scale ^b	.76	(16)	.76	(16)
Total		177 ^c		

^aItems (29) used to augment the I-E scale were assigned to Collins' factors by logical considerations.

^bThe social desirability items were not interspersed among the 190 items that are the concern of this investigation, but were contained elsewhere in the questionnaires. (See Method section.)

^cThe items total to 177; if the infrequency items--which are part of this battery--are added in, this brings the total to 188. The two missing items are the two self-deprecation items for which a compound variable was not constructed, there being only two of them.

The internal consistency coefficients for the revised scales, which range from respectable to high, resulted from deletion of the following items from the following scales:

Augmented PRF Achievement Scale: items 14, 24, 33, 35, 83, 178, 187.

Augmented Internal-External Locus of Control Scale: items 22, 34, 72, 76, 152.

DPI Depression Scale/Beck et al. Hopelessness Scale: items 49, 52.

Reduced DPI Cynicism Scale: no deletions.

Reduced DPI Defensiveness Scale: items 48, 146, 183.

Reduced DPI Paranoia Scale: no deletions.

Social Desirability Scale: no deletions.

It should be noted that these items were deleted to maximize content saturation of individual scales for the present sample of subjects; it is possible and even likely that different items would have been discarded for different samples of subjects.

Multiple Item Analysis

Compound variables were computed for each of the above constructs by summing the scores for the remaining variables and dividing by the number of items assigned to each construct, as follows:

TOTAC: 36 achievement motivation items.

TOTIE: 70 locus of control items.

TOTDEP: 34 depression/hopelessness items.

TOTCYN: 7 cynicism items.

TOTPAR: 6 paranoia items.

TOTDEF: 7 defensiveness items.

TOTSD: 16 social desirability items.

TOTINF: 11 infrequency items.

Each of the 190 items was correlated with each of the compound variables. Any item that failed to correlate significantly with the compound variable with which it was supposed to correlate, or failed to correlate with its purported construct scale higher than it did with an unintended construct, was excluded from further analysis

Using these criteria, the following items were eliminated:

Achievement Motivation: 8, 56, 79, 90, 105.

Internal-External Locus of Control: 59, 88, 102, 113, 115, 156, 158, 161.

Depression/Hopelessness: 19, 31, 37, 164.

Cynicism: 47, 120, 148, 158.

Paranoia: none.

Defensiveness: none.

Desirability: none.

Infrequency: none.

(See Appendix Table A-2 for item-total correlations.)

Factor Analysis of Augmented Achievement Motivation and Locus of Control Scales

In order to gain some insights into how many achievement motivation and locus of control facets to expect, prior to

the purification of these constructs, preliminary factor analyses of these scales were conducted separately, using principal factor analysis with equimax rotation. These analyses were performed using the items selected on the basis of the multiple item analysis and, to make sure this selection procedure did not cause a reduction in the number of facets present in the full scales, this procedure was repeated for the entire sets of augmented scales as well.

Achievement motivation. Factor analysis of the reduced sets of 31 achievement motivation items plus the four intelligence facet scores resulted in three factors, as may be seen from a scree plot (Figure 3).

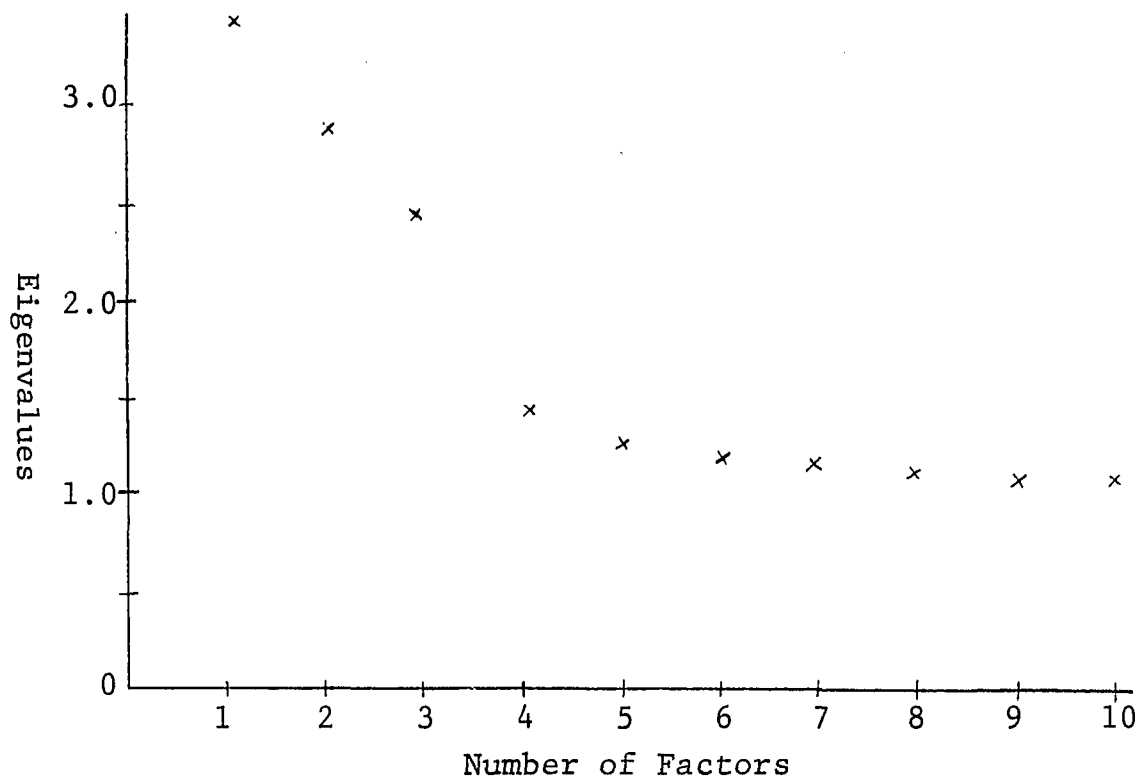


Figure 3. Scree Plot of Principal Factor Analysis of Ac Items and IQ Facets: Total Sample.

Correlations of intelligence facets with achievement facets were very low, the former comprising their own factor, as may be seen in Table 4. Since almost identical results

Table 4
Equimax Loadings of Intelligence and
Achievement Facets
Total Sample

Intelligence Facet	Achievement Factor I	Achievement Factor II	Intelligence Factor
Verbal Selection	.29	.18	.60
Verbal Analogy	.23	.14	.66
Figural Selection	.18	.26	.64
Figural Analogy	.22	.28	.66

were obtained from factor analysis of the full set of augmented achievement motivation items, these are not reported.

The factor loadings of the two reduced-item achievement motivation factors are presented in Table 5. These factors may be interpreted in at least three ways:

1. Factor I reflects the effort component of achievement motivation and Factor II reflects attitudes towards the end result.

2. These are both acquiescence factors. This would

Table 5
Factor Structure of Reduced Set of
Achievement Motivation Items
Total Sample

Item Number	Equimax Loading	
	Factor I	Factor II
4. I don't mind working while people are having fun.	<u>-.45</u>	-.01
8. If I am not good at something, I give it up rather quickly.	<u>.30</u>	-.09
16. When people are not going to see what I do, I often do less than my very best.	<u>.43</u>	-.09
21. I like to accomplish tasks that other people recognize as requiring skill and effort.	-.06	<u>.47</u>
25. I am sure people don't think I have a great deal of drive.	<u>.41</u>	-.19
30. I like to be able to say that I've done a difficult job well.	-.09	<u>.38</u>
40. I enjoy work more than play.	<u>-.24</u>	.04
61. I enjoy easy courses more than hard ones.	<u>.55</u>	-.05
64. I really don't enjoy hard work.	<u>.44</u>	-.02
66. I would like to be a recognized authority in some job, profession, or field.	.15	<u>.57</u>
71. I will keep working on a problem after others have given up.	<u>-.42</u>	.28
75. I would like to accomplish something of great significance.	-.02	<u>.57</u>
84. People have always said I am a hard worker.	<u>-.35</u>	<u>.28</u>

Table 5 (continued)

Item Number	Equimax Loading	
	Factor I	Factor II
91. I worry more about getting a good grade than learning anything.	<u>.42</u>	.00
99. It is unrealistic for me to insist on becoming the best in my field.	.16	<u>-.30</u>
103. I go to school only to improve my earning power.	<u>.53</u>	.06
111. I try to work just hard enough to get by.	<u>.61</u>	-.13
114. I like to try to solve puzzles and problems that other people find difficult.	-.22	<u>.40</u>
119. I would rather do an easy job than one involving obstacles that must be overcome.	<u>.59</u>	-.11
122. I like to get better grades than other people.	.12	<u>.45</u>
125. I work because I have to, and for that reason only.	<u>.46</u>	.12
128. I like to do my very best in whatever I undertake.	<u>-.31</u>	<u>.35</u>
133. I like to do my very best in my courses.	<u>-.39</u>	<u>.34</u>
142. I usually study just hard enough to pass and no more.	<u>.63</u>	.01
150. I like to be able to do things better than other people can.	.05	<u>.57</u>
160. It doesn't really matter to me whether I become one of the best in my field.	.10	<u>-.35</u>

Table 5 (continued)

Item Number	Equimax Loading	
	Factor I	Factor II
168. I rarely do extra studying to improve myself at work.	<u>.45</u>	-.09
172. Self-improvement means nothing to me unless it leads to immediate success.	<u>.41</u>	.02
173. I enjoy easy courses more than hard ones.	<u>.66</u>	-.01
182. I enjoy things which challenge me.	<u>-.47</u>	<u>.38</u>
186. I prefer taking courses that are challenging and difficult.	<u>-.44</u>	<u>.35</u>

be surprising in that Jackson (1967b) took particular care to suppress this response style in the development of the PRF. That this result may be due to the nature of the sample in the present investigation cannot be ignored.

3. The third and most likely explanation is a hybrid of the first two: Factor I reflects negative attitudes towards the hard work aspect and Factor II reflects positive attitudes towards the attainment of the goal of achievement motivation. Taken together, these two facets of achievement motivation reflect a rather unpleasant admixture of wishful thinking for a good outcome without any expenditure of effort.

More will be said of this in the Black/Hispanic Sample subsection.

Locus of control. Factor analysis of the reduced set of locus of control items along with the four intelligence facet scores resulted in five factors as may be seen in Figure 4.

Correlations of intelligence facets with the locus of control facets were inconsequential, as may be seen in Table 6.

Factor analysis of the full augmented set of 70 locus of control items also resulted in four locus of control factors and virtually the same loadings; hence these are not presented.

The results of the factor analysis of the reduced set of locus of control items are presented in Table 7.

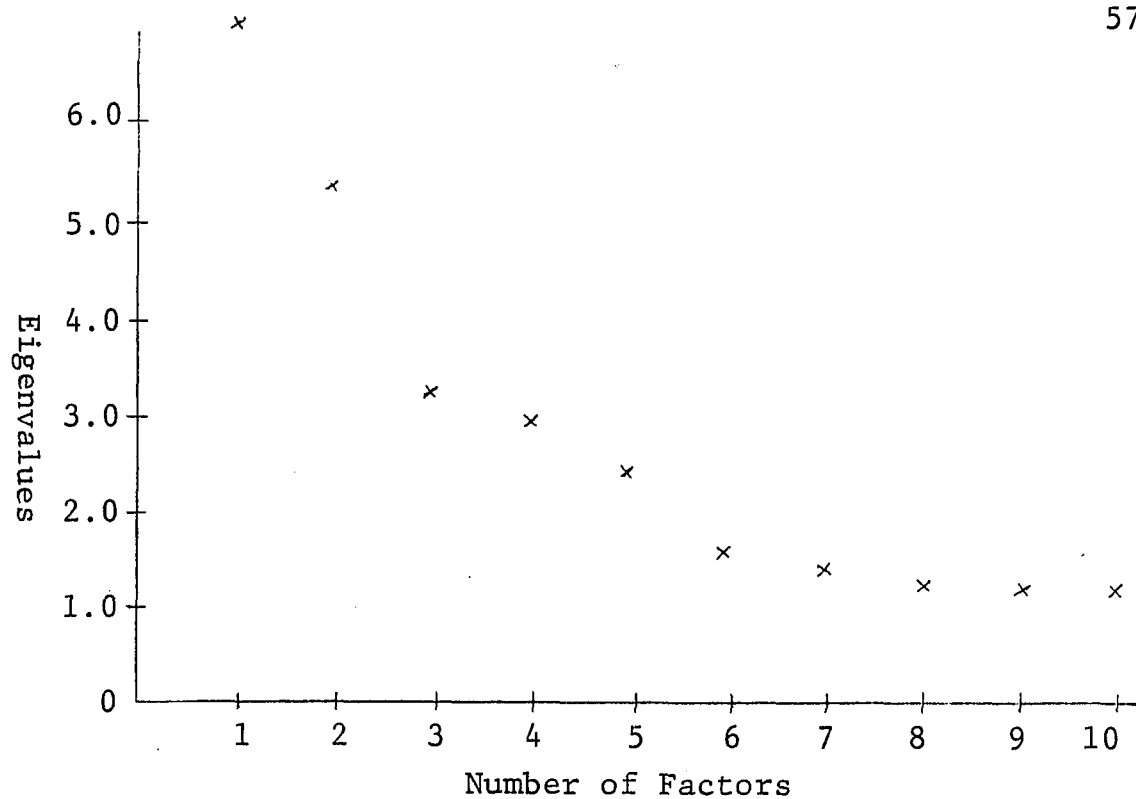


Figure 4. Scree Plot of Principal Factor Analysis of IE Items and IQ Facets: Total Sample.

Table 6

Equimax Loadings of Intelligence and Locus of Control Factors
Total Sample

Intelligence Facet	I-E Factor I	I-E Factor II	I-E Factor III	I-E Factor IV	Intel- ligence Factor
Verbal Selection	-.11	-.04	.03	-.05	.61
Verbal Analogy	.02	.05	.02	-.03	.65
Figural Selection	-.02	-.09	-.05	-.06	.66
Figural Analogy	.06	.04	.06	.01	.62

Table 7

Factor Structure of Reduced Set of
Locus of Control Items
(Rotter I-E Items Asterisked)
Total Sample

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
2. There is not much use in really trying to get something I want because I probably won't get it.	<u>.38</u>	-.12	-.02	.08
5. People who seem lucky are really those who are good at figuring out and taking advantage of situations.	-.08	<u>.33</u>	.02	.08
*6. It's not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.	<u>.50</u>	.01	-.11	.07
*7. In the long run, the people are responsible for bad government on a national as well as a local level.	.11	<u>.38</u>	.00	-.07
9. I am a little more superstitious than most people.	.15	.11	<u>-.38</u>	.05
*10. The idea that teachers are unfair to students is nonsense.	-.05	.10	.28	-.01
*12. With enough effort, we can wipe out political corruption.	.11	.23	.20	<u>-.33</u>
*15. In the long run, the bad things that happen to us are balanced by the good ones.	-.09	<u>.31</u>	-.09	.02
17. You don't know who or what to believe anymore.	<u>.43</u>	.11	-.06	.21
*22. Capable people who fail to become leaders have not taken advantage of their opportunities.	.14	<u>.42</u>	-.08	.08

Table 7 (continued)

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
23. Most of the things fortune tellers and readers/advisors tell you are true.	.13	.10	<u>-.34</u>	.10
*26. Many times exam questions tend to be so unrelated to course work that studying is really useless.	<u>.39</u>	.03	-.21	.09
*27. In the long run, people get the respect they deserve.	-.01	<u>.45</u>	.06	-.15
*28. People who can't get others to like them don't understand how to get along with others.	-.03	<u>.39</u>	.01	.05
32. You can change what happens tomorrow by what you do today.	-.23	<u>.30</u>	.05	.01
*41. People are lonely because they don't try to be friendly.	.08	<u>.47</u>	.08	-.19
*42. It is impossible for me to believe that chance or luck plays an important role in my life.	-.16	.00	<u>.38</u>	.07
43. Sometimes I feel other people are just using me.	<u>.31</u>	.03	-.21	.16
*45. Most students don't realize the extent to which their grades are influenced by accidental happenings.	<u>.35</u>	.02	-.15	-.01
*46. How many friends you have depends on how nice a person you are.	.03	<u>.48</u>	.00	-.11
50. A belief in fate or luck is just a way of avoiding responsibility for your actions.	-.19	.19	<u>.50</u>	.09

Table 7 (continued)

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
*53. There will always be wars, no matter how hard people try to prevent them.	.06	-.11	.00	<u>.31</u>
*54. In the case of a well prepared student, there is rarely, if ever, such a thing as an unfair test.	.03	.24	<u>.42</u>	-.07
*55. Most people don't realize the extent to which their lives are controlled by accidental happenings.	<u>.40</u>	.09	-.30	.14
*60. Getting people to do the right thing depends on ability; luck has little or nothing to do with it.	-.05	.25	<u>.52</u>	-.02
63. A belief in luck or fate is a primitive way of thinking.	-.03	.06	<u>.46</u>	.04
*69. Once a politician gets elected, the people have little or no control over him.	.11	.14	.14	<u>.53</u>
*70. In my case, getting what I want has little or nothing to do with luck.	.03	.16	<u>.57</u>	.00
*76. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.	.24	<u>.48</u>	.15	.10
*80. Whether someone likes you or not has very little to do with you.	<u>.37</u>	.05	.14	.05
81. My life is determined by my own actions.	-.17	<u>.37</u>	.29	.03
*85. Many of the unhappy things in people's lives are partly due to bad luck.	.05	-.10	<u>-.53</u>	.09

Table 7 (continued)

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
87. There is usually no point in trying because you can't win anyway.	<u>.30</u>	.01	-.07	.11
89. The end often justifies the means.	.09	<u>.30</u>	.10	.15
93. Almost any child can grow up to be anything he/she wants to be.	.17	<u>.44</u>	.22	-.25
*94. Becoming a success is a matter of hard work; luck has little or nothing to do with it.	.11	<u>.33</u>	<u>.52</u>	.13
98. I consider myself a religious person.	.05	-.03	-.11	-.09
*101. There really is no such thing as "luck."	-.07	-.07	<u>.48</u>	-.07
104. The only thing you can be sure of is that you can be sure of nothing.	.01	.14	-.10	<u>.40</u>
*106. Sometimes I can't understand how teachers arrive at the grades they give.	.26	.05	-.21	.13
109. What happens to people is mainly a result of fate.	<u>.40</u>	-.02	-.23	.17
118. What you get out of life is strictly a matter of what you put into it.	-.22	<u>.45</u>	.16	.14
*120. The average citizen can have an influence on government decisions.	-.16	.21	-.07	<u>-.49</u>
123. It's not what you know but who you know that counts.	.15	.12	<u>-.33</u>	<u>.44</u>

Table 7 (continued)

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
*124. Many times I feel that I have little influence over the things that happen to me.	<u>.40</u>	-.19	-.23	.23
*129. As far as world affairs are concerned, most of us are the victims of forces we can neither control nor understand.	.27	-.01	-.01	<u>.52</u>
130. When I get what I want, it's because I worked hard for it.	.04	<u>.37</u>	.19	.02
*132. You have very little control over whether people like you or not.	<u>.50</u>	-.01	.04	.17
*134. People's misfortunes result from the mistakes they make.	-.07	<u>.44</u>	.11	.24
137. Some people are just born lucky.	<u>.39</u>	.08	<u>-.35</u>	.21
*139. There is not much use in trying too hard to please people; if they don't like you, they don't like you.	<u>.40</u>	.02	.00	<u>.35</u>
*141. Without the right breaks, one cannot become an effective leader.	<u>.28</u>	.12	.25	<u>.31</u>
*144. It is difficult for people to have much control over the things politicians do in office.	.26	-.08	.13	<u>.52</u>
145. Sometimes planning works out, sometimes it doesn't; it all depends on the particular situation.	.03	.16	-.09	<u>.31</u>
*148. By taking an active part in political and social affairs, the people can control world events.	-.04	<u>.41</u>	-.08	<u>-.34</u>

Table 7 (continued)

Item Number	Equimax Loading			
	<u>F I</u>	<u>F II</u>	<u>F III</u>	<u>F IV</u>
*151. What happens to me is my own doing.	<u>-.36</u>	<u>.45</u>	.13	-.08
*153. I have often found that what is going to happen will happen no matter what you do.	<u>.63</u>	.03	-.08	.25
*157. There is a direct connection between how hard I study and the grades I get.	-.19	<u>.25</u>	.17	.14
*159. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	<u>-.32</u>	.17	.17	.07
*166. Getting a good job depends mainly on being in the right place at the right time.	.11	.20	<u>-.37</u>	<u>.38</u>
*170. When I make plans ahead of time, I am almost certain that I can make them turn out right.	-.23	<u>.39</u>	.14	.06
*179. Who gets to be boss often depends on who was lucky enough to be in the right place first.	.15	.10	<u>-.43</u>	.25
*184. This world is run by the few people in power and there is not much the little guy can do about it.	<u>.43</u>	.12	.10	<u>.40</u>
188. Most people are victims of circumstances beyond their control.	.60	.04	-.11	.14

These results may be interpreted as follows:

Factor I, reflecting mainly a lack of confidence in the efficacy of one's actions and what the future holds, along with a concomitant belief in the accidental nature of events and the inevitability of outcomes, is clearly an external locus of control factor and will be called "External Locus of Control."*

Factor II, reflecting a belief in the efficacy of one's actions and personal responsibility for outcomes, along with a hopeful attitude, is clearly an internal locus of control factor, and will be called "Internal Locus of Control."*

Factor III clearly reflects attitudes towards luck, fate, and chance, and will be called "Luck, Fate and Chance."

Factor IV is mainly concerned with the degree of control the individual has over large outside forces, particularly in the realm of politics and government, and will be called "System Modifiability."

These factors bear a striking resemblance to those obtained by Collins (1974), who even more strenuously augmented the Rotter I-E scale with 42 other items written in an attempt to take account of situational influences by using "it all depends on the situation" type wordings. The only

*It should be noted that Factors I and II could just as easily be interpreted as acquiescence factors, the first reflecting negative, the second reflecting positive responding. Collins (1974) deals with this question regarding the first principal component, but fails to recognize the possibility that acquiescence may be involved in the first two rotated factors. More will be said of this in the Black/Hispanic Sample subsection.

exceptions to this correspondence are listed in Table 8, using the same numerical factor designations (I, II, III, IV) as Collins. (Collins' names for his factors are not used because he named them to fit a particular situationist position, which is not at issue here.) Thus there are some

Table 8
Items Which Load Different Factors:
Collins' Solution Versus Present Solution
Total Sample

Item No.	Present Factors					Collins Factors				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>None</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>None</u>
6	X					X		X		
7		X							X	
10					X		X			
53				X			X		X	
106					X	X				
139	X			X						X
141	X			X		X				
148		X		X					X	
151	X	X					X			
159	X							X		
161					X	X				
166			X	X		X				
170		X								X
179			X			X				
184	X			X					X	

differences--but only partial differences for 11 of the 15 items--between the factor structure obtained here and Collins' factor structure; however, there is complete correspondence between the two structures on the remaining 31 items. All of these differences are most likely due to sample differences.

Purification of Achievement Motivation, Locus of Control, and Intelligence Scales

Despite the exhibition of very low correlations between achievement motivation and intelligence, and locus of control and intelligence, this did not remove the possibility that there remained some correlation between achievement motivation and locus of control, per se, or that complex moderating effects between the achievement motivation and locus of control measures might cause substantial correlations between these measures and the intelligence measures. In particular, it was conceivable that some of the locus of control items might serve as suppressors for possible achievement motivation-intelligence relationships. Also, it was deemed desirable to render all measures as independent of one another as possible, prior to hypothesis testing.

These analyses employed only the 31 achievement motivation and the 66 locus of control items that survived the multiple item analysis procedure. Principal factor analysis with squared multiples as the initial communality estimates and equimax rotations were used throughout this phase of the analysis, and, based on the previous findings, seven-factor

solutions (two achievement, four locus of control, and one intelligence factor) were employed, with an occasional five-, six- and eight-factor solution, to confirm the correctness of the seven-factor solution. In all, nine factor analyses were performed, sequentially deleting items as indicated at each step, by their failing to load any factor, loading the intelligence factor more highly than a construct scale, or exhibiting split loadings between one or more achievement motivation and one or more locus of control factors. Items exhibiting significant loadings on two or more locus of control factors (facets) were retained if that was their only deficiency. The final seven-factor solution provided two orthogonal achievement motivation, four locus of control, and one intelligence factor(s).

As an additional check that these results did not capitalize on chance relationships based on fortuitous item deletions, the same procedure was performed but this time not including the intelligence facets until the last analysis and, of course, rotating six factors throughout. Four passes were made on these data and, on the fifth pass, the intelligence facets were included. The results were identical, in terms of the items retained, to the procedure in which the intelligence scores were included from the outset. The results of the final factor analysis may be seen in the "Total" column of Appendix Table A-3. To sum up the results of the analysis, the items exhibit relatively exclusive factor loadings as follows:

7 load AC-1--the achievement-result factor.

12 load AC-2--the achievement-effort factor.

9 load IE-1--the external locus of control factor.

10 load IE-2--the internal locus of control factor.

10 load IE-3--the luck/fate/chance factor.

8 load IE-4--the system modifiability factor.

All four intelligence facets load the intelligence factor.

It will be demonstrated in a later section that this reductive procedure did not result in any erosion of the substantive implications of these factors.

Factorial Invariance Among Subgroups

To determine whether the same factor structure that was obtained for the total sample also held among the subgroups that were the concern of this investigation--i.e. to assess the degree to which both item and factor interrelationships perceived by the sample as a whole were also perceived by subgroups--separate factor analyses were conducted among subgroups, using the same final item pool retained for the total sample and again using principal factoring with equimax rotation of seven factors. The results of this analysis for males, females, Whites, lower SES subjects, and higher SES subjects are presented in Appendix Table A-3, under the appropriate column headings.

The departures of the subgroup factor structures from that of the total sample are summarized in Table 9. For convenience of interpretation, the kind of violation is

Table 9
 Number and Kind of Violations of
 Factorial Invariance Among Subgroups
 (7-Factor Equimax Solutions)
 Total Sample

Violation (Weight in Parentheses)	Males	Females	Whites	High SES	Low SES
Higher loading on another facet of a different construct (4)	1	--	--	--	8
Equal loading on another facet of a different construct (3)	2	3	1	1	2
Higher loading on another facet of the same construct (2)	2	--	--	1	3
Equal loading on another facet of the same construct (1)	7	5	3	2	5
Weighted score	21	14	6	7	49

weighted by its seriousness. It is apparent that the most serious, as well as the most numerous departures from factorial invariance are concentrated in the lower SES subsample.

Conspicuously absent from the preceding analysis was any mention of the Black/Hispanic sample. It was not possible to present any factor structure for this subsample because there was none. The 7-factor equimax solution produced the following hybrid factors for this group of subjects:

Factor I: Ac-1, Ac-2, IE-1, IE-4

Factor II: Ac-1, IE-3, IE-4, IQ

Factor III: IE-3, IQ

Factor IV: IE-2, IQ

Factor V: Ac-1, Ac-2

Factor VI: IE-1, IE-3

Factor VII: IE-1, IE-4

Moreover, this solution contained many items whose loadings split among two or more factors. Since any interpretation of this solution would border on the fanciful, it will not be attempted. Because a scree plot seemed to infer only four factors for this sub-group, a four-factor solution was attempted but, since this was completely uninterpretable, it is also not presented.

Several findings all converge upon the inescapable conclusion that it is the Black/Hispanic sample causing the difficulties:

1. Most of and the most serious departures from factorial invariance are in the lower SES subsample.
2. Most (78%) of this subsample is Black and Hispanic.
3. The Black/Hispanic subsample, per se, exhibited no meaningful factor structure.

A direct proof of this conclusion would have been provided by the exhibition of factorial invariance among lower SES Whites. Unfortunately there were only 24 subjects in this subgroup, rendering any such analysis impossible. However the evidence marshalled thus far at the very least suggests separate analysis of the White and Black/Hispanic

subgroups, which was done and which will be presented in the following two subsections of results. To remove any possible doubts regarding the possible confounding influence of lower SES Whites ($\underline{n} = 24$) on these analyses, they were removed from these analyses. However, to maximize the potential of finding a meaningful factor structure for Blacks and Hispanics, and because of the comparative smallness of this subsample, upper SES Blacks and Hispanics ($\underline{n} = 20$) were retained in the Black/Hispanic analyses. Thus, if anything, the dice were loaded a little in favor of this latter subgroup.

White Subsample

Analysis of the Extent of Extremity Responding

As was done for the total sample of respondents, responses were rescored for the White subsample such that extreme responses (1, 5) were set equal to "3," intermediate responses (2, 4) were set equal to "2," and neutral responses (3) was set equal to "1."

The internal consistency analysis for these revised scores produced coefficients that were virtually identical to those obtained for the total sample of respondents and as high as those usually found (Hamilton, 1968); see Table 10.

Once again, these coefficients provide strong evidence that the White subjects used in this investigation had a strong and reliable tendency to use the same scale positions

Table 10

Internal Consistency of All 190 Items
 Coded for Extremity Responding (ERS)
 White Middle Class Sample

Total Coefficient alpha	.97
Alpha, part 1 (odd-numbered items)	.93
Alpha, part 2 (even-numbered items)	.93
Correlation between parts	.87
Spearman-Brown coefficient	.93
Guttman split half coefficient	.93

regardless of keying and content considerations. This finding is particularly troublesome in that, as will be seen, a strong argument can be made that the extremity responding by the total sample was augmented and confounded by acquiescence and desirability responding by the Black/Hispanic subsample, but not the White subsample; hence the absence of Blacks and Hispanics in the present subsample dictates a purely extremity responding interpretation of these unacceptably high reliability coefficients.

In terms of individual item-total correlations there were:

- 12 items with item-scale correlations of .50 or more;
- 22 items with item-scale correlations of .450 to .499;
- 36 items with item-scale correlations of .400 to .449.

Thus 70 of 190 items are correlated with an "ERS factor" at least .40, as compared with 73 for the total sample; however

the number of items with item-scale correlations above .50 is much higher for the White subsample ($\underline{n} = 12$) than for the total sample ($\underline{n} = 2$).

Once again, it is simply not practical to omit 70 of the 190 items prior to item analysis; the defense for continuing the analysis must be that, once the final set of items are decided upon, casting them in a dichotomous format for re-administration will remove extremity responding, by definition. Collapsing into dichotomous format prior to analysis was rejected for the same reasons given for the Total Sample analysis: lack of viable computer programs for computing the implied tetrachoric correlations, and the large estimation errors inherent in the calculation of tetrachorics with samples of the present size. Another defense is provided by looking ahead for a moment to the final selection of items for the White subsample, where we can see that, had we decided to delete items on the basis of high extremity responding correlations, it would not have affected the results very much, since most of these items were deleted at later stages of the analysis anyway. (See Table 11; Appendix Table A-4.)

Thus all of the twelve items that correlate with ERS .50 or more were subsequently rejected for other reasons. Of those 20 items correlating .450-.499 with ERS, all but five were rejected later, and of those 36 correlating .400-.449 with ERS, about half (19) were later rejected. Interesting but not interpretable is the finding that all of the

Table 11

Items with High ERS Correlations
Not Deleted from Final Lists
White Middle Class Subsample

<u>Item-scale Correlation</u>	<u>Items with High ERS Correlations</u>	<u>Items <u>Not</u> Deleted from <u>Final List</u></u>
.50 or more	47, 73, 92, 108, 109, 121, 143, 147, 172, 175, 180, 186	None
.450-.499	13, 36, 38, 65, 71, 76, 84, 91, 94, 111, 112, 124, 130, 140, 141, 151, 159, 171, 173, 182	76, 94, 111, 173, 182
.400-.449	16, 17, 19, 26, 37, 42, 48, 50, 51, 55, 60, 63, 64, 67, 70, 81, 83, 87, 95, 100, 101, 110, 118, 119, 123, 125, 129, 133, 135, 142, 153, 162, 168, 177, 185, 189	16, 17, 26, 42, 50, 60, 63, 70, 101, 114, 119, 125, 129, 142, 153, 162, 168

items that would have been rejected on the basis of the ERS analysis but were not later rejected for other reasons load either Factor III--Belief in Luck, Fate, and Chance--or one of the two achievement motivation factors, except items 129 (IE-4), 26 and 153 (IE-1), and 76 and 162 (IE-2). (It should be mentioned that throughout the analyses to be presented in this section, the strongest factors were formed by the achievement motivation items and those I-E items which formed the "Luck, Fate, Chance" factor.)

At any rate, the finding that the higher the relationship of an item with a scale reflecting stylistic (ERS) responding, the more likely it will be rejected later for

other reasons, is entirely consistent with Jackson's (Trott & Jackson, 1967; Jackson & Lay, 1968; Lay & Jackson, 1969) contention that the higher an item loads a stylistic responding factor, the lower it will load a content factor and vice-versa. These findings are yet another vindication of construct strategy test construction procedures--and of Cronbach's (1946) original suggestion that Likert scales be reduced to dichotomous formats. These results may be compared with a similar analysis of unrecoded data presented in Table 12.

Table 12

Internal Consistency of All 190 Unrecoded Items
White Middle Class Subsample

Total Coefficient Alpha (all items)	.83
Alpha, part 1 (odd-numbered items)	.70
Alpha, part 2 (even-numbered items)	.74
Correlation between parts	.65
Spearman-Brown coefficient	.78
Guttman split-half coefficient	.78

As was the case for the total sample of respondents, apparent internal consistency of a multifactor and multifaceted set of 190 items is moderate to respectable.

It would seem that there is still a great deal of constant (non-construct) error in these data, even with

Blacks/Hispanics removed, and this stylistic variance is causing unrealistically high apparent internal consistency coefficients. This problem will be dealt with in a subsequent section, in which we shall see that the item deletion procedures reduce the influence of stylistic responding to acceptable levels.

Factor Analysis of All Items

As was done for the total sample, all 190 attitudinal variables were subjected to principal components analysis with equimax rotation, among the 132 subjects (53 males and 79 females) that comprised the higher SES White subsample. A scree plot (Figure 5) that showed no "break" in the eigenvalues seemed to show a minimum at about the 12th eigenvalue. Consequently, 12 components were rotated to equimax criterion--even though components analysis produced a large number (58) of eigenvalues above 1.0, accounting for 83% of the variance, and rotating 12 components accounted for only 40% of the total variance. These figures are similar to those resulting from the principal components analysis of the total sample; however the results of this analysis are very different: a stable, reasonable, and predictable factor structure now obtains, as may be seen in the following presentation.

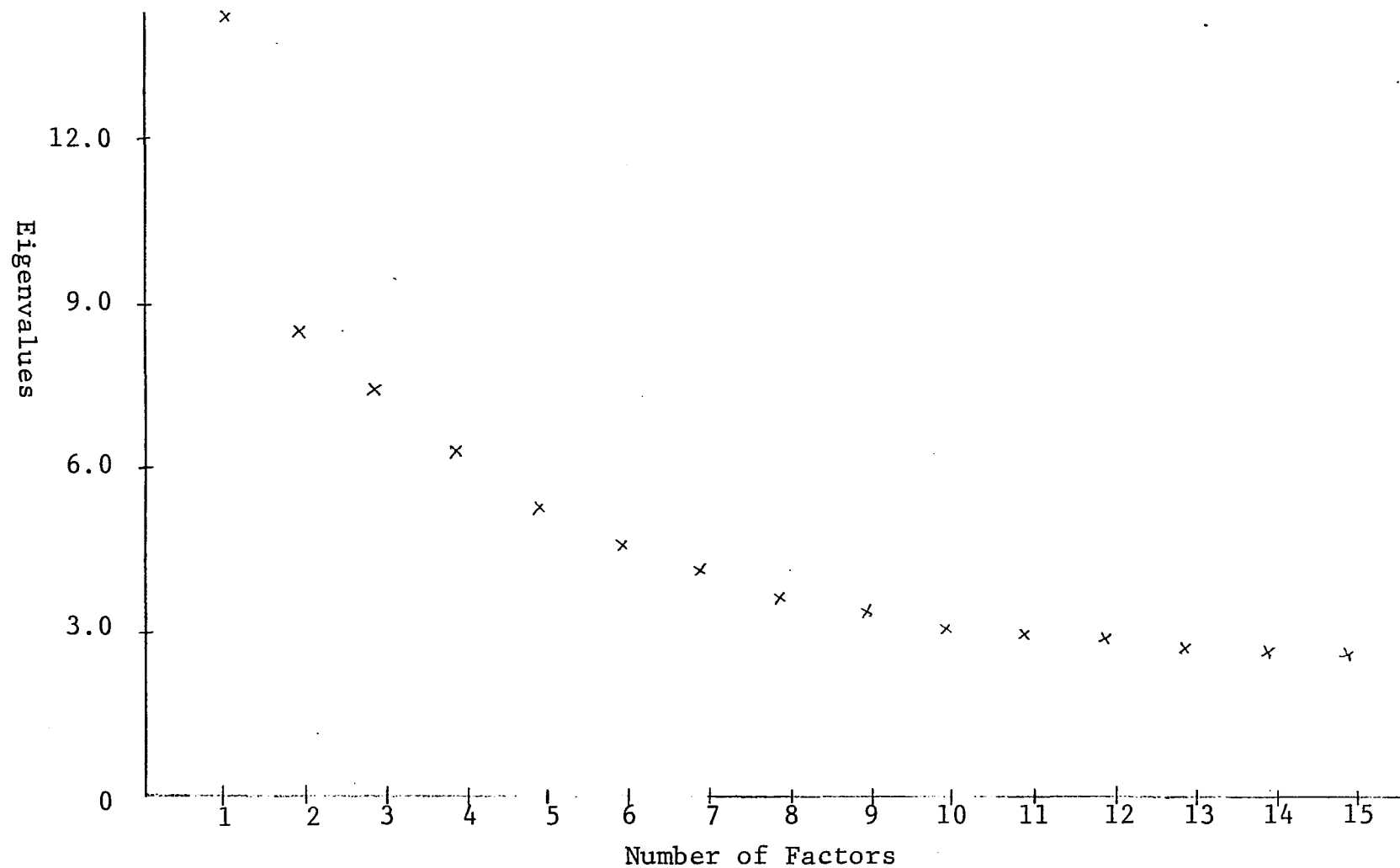


Figure 5. Scree Plot of Principal Component Analysis of All 190 Items: White Middle Class Sample.

Factor I is composed of the luck/fate/chance items from the Rotter I-E scale (IE-3) plus similar items from James' I-E scale (J-3).

Factor I (IE-3): Belief in Luck/Fate/Chance

<u>Item #</u>		<u>Equimax Loading</u>
42 (IE-3)	It is impossible for me to believe that chance or luck plays an important role in my life.	.65
70 (IE-3)	In my case, getting what I want has little or nothing to do with luck.	.65
50 (J-3)	A belief in luck or fate is just a way of avoiding responsibility for your actions.	.62
94 (IE-3)	Becoming a success is a matter of hard work; luck has little or nothing to do with it.	.59
101 (IE-3)	There really is no such thing as "luck."	.57
63 (J-3)	A belief in luck or fate is a primitive way of thinking.	.56
60 (IE-3)	Getting people to do the right thing depends on ability; luck has little or nothing to do with it.	.56
9 (J-3)	I am a little more superstitious than many people.	-.54
85 (IE-3)	Many of the unhappy things in people's lives are partly due to bad luck.	-.39
137 (J-3)	Some people are just born lucky.	-.39
159 (IE-3)	Trusting to fate never turned out as well for me as making a decision to take a definite course of action.	.35

Factor II is composed of those PRF items having to do with the result or outcome of achievement motivation (PRF-Ac) plus one added achievement motivation item (Ac) along with

two related locus of control items (IE-2, Lev = Levenson) and one Hopelessness Scale item (Beck et al.) all having to do with personal control over outcomes.

Factor II (AC-2): Achievement Motivation: Result

<u>Item #</u>		<u>Equimax Loading</u>
150 (Ac-PRF)	I like to be able to do things better than other people can.	.62
105 (Ac-PRF)	My goal is to do at least a little better than anyone has done before.	.55
49 (Beck)	I expect to get more of the good things in life than the average person.	.48
128 (Ac-PRF)	I like to do my very best in whatever I undertake.	.43
160 (Ac-PRF)	It doesn't really matter to me whether I become one of the best in my field.	-.42
99 (Ac-PRF)	It is unrealistic for me to insist upon becoming the best in my field.	-.42
130 (IE-Lev)	When I get what I want, it's because I worked hard for it.	.42
151 (IE-2)	What happens to me is my own doing.	.41
114 (Ac-PRF)	I like to solve puzzles and problems that other people find difficult.	.41
122 (AC)	I like to get better grades than other people.	.38
75 (Ac-PRF)*	I would like to accomplish something of great significance.	.38
21 (Ac-PRF)	I like to accomplish tasks that other people recognize as requiring skill and effort.	.36
66 (Ac-PRF)**	I would like to be a recognized authority in some job profession, or field.	.35

*Also loads Factor VII.

**Also loads Factor IX.

Factor III is composed mostly of Rotter I-E items dealing with system modifiability (IE-4) and internal locus of control (IE-2) along with an item from Levenson's scale (IE-Lev). Taken together these items reflect an optimistic sense of both personal and social control.

Factor III: Internal Locus of Personal and Social Control

<u>Item #</u>		<u>Equimax Loading</u>
148 (IE-4)	By taking an active part in political and social affairs, the people can control world events.	.65
12 (IE-4)	With enough effort, we can wipe out political corruption.	.53
152 (IE-4)	One of the major reasons we have wars is because people don't take enough interest in politics.	.52
46 (IE-2)	How many friends you have depends on how nice a person you are.	.49
41 (IE-2)	People are lonely because they don't try to be friendly.	.46
53 (IE-4)	There will always be wars, no matter how hard people try to prevent them.	-.43
129 (IE-4)	As far as world affairs are concerned, most of us are victims of forces we can neither control nor understand.	-.43
27 (IE-2)	In the long run, people get the respect they deserve.	.41
7 (IE-4)	In the long run, the people are responsible for bad government on a national as well as a local level.	.39
93 (IE-Lev)*	Almost any child in the country can grow up to be anything he/she wants to be.	.38
22 (IE-2)*	Capable people who fail to become leaders have not taken advantage of their opportunities.	.37

*Also loads Factor VIII.

Factor IV is comprised of 15 of the 16 Differential Personality Inventory (DPI-D) and 9 of the 20 Beck Hopelessness scale (Beck) items. Also implicated are two external locus of control items (IE-1), a Differential Personality Inventory Self-Deprecation Scale item (DPI-Sd), a Personality Research Form Achievement Scale item (Ac-PRF), and a Differential Personality Inventory Defensiveness Scale item (DPI-De), all connoting enthusiasm and all loading this factor negatively.

Factor IV: Depression/Hopelessness

<u>Item #</u>		<u>Equimax Loading</u>
189 (Beck)	My future often seems dark to me.	.69
100 (DPI-D)	I am depressed most of the time.	.65
135 (Beck)	I don't expect to get what I really want.	.62
117 (DPI-D)	I do not feel very sad at the present time.	-.59
95 (Beck)	The future looks vague and uncertain to me.	.59
92 (DPI-D)	I never seem to be really happy.	.57
121 (DPI-D)	Others always seem to enjoy life more than I do.	.57
108 (DPI-D)	I often think I have very little to look forward to.	.57
127 (DPI-D)	I have a dull life.	.56
131 (Beck)	I see mostly unpleasantness ahead of me, not pleasantness.	.54
36 (DPI-D)	My days seem gloomy and dull.	.53
65 (DPI-D)	Each day has some event that holds my interest.	-.52

<u>Item #</u>		<u>Equimax Loading</u>
177 (DPI-D)	My present situation seems quite hopeless.	.51
110 (DPI-D)	I am as happy as my friends.	-.48
124 (IE-1)	Many times I feel that I have little influence over the things that happen to me.	.48
13 (DPI-Sd)	When I do things, I usually do things quite well.	-.48
3 (DPI-D)	Life is very interesting to me.	-.47
38 (Beck)	I may as well give up because I can't seem to make things better for myself.	.47
97 (DPI-D)	I enjoy almost everything I do.	-.46
167 (DPI-D)	My future is bright.	-.46
185 (Beck)	I look forward to the future with hope and enthusiasm.	-.45
74 (Beck)	I can't imagine what my life will be like in ten years.	.45
138 (DPI-D)	I sometimes become saddened and think of killing myself.	.44
181 (Beck)	I look forward to more good times than bad times.	-.44
71 (Ac-PRF)	I will keep on working on a problem after others have given up.	-.43
161 (IE-1)	Sometimes I feel I don't have enough control over the direction my life is taking.	.42
86 (DPI-De)*	I always admit my errors without trying to hide anything.	-.42
18 (Beck)**	Things just don't work out the way I want them to.	.41
19 (DPI-D)	I usually enjoy starting a new activity.	-.39

*Also loads Factors VII and IX.

**Also loads Factor VI.

Factor V is composed of those PRF achievement motivation items (Ac-PRF) and additional achievement motivation items (Ac) having to do with expenditure of effort.

Factor V: Achievement Motivation: Effort

<u>Item #</u>		<u>Equimax Loading</u>
173 (Ac)	I enjoy easy courses more than hard ones.	.64
119 (Ac-PRF)	I would rather do an easy job than one involving obstacles that must be overcome.	.60
186 (Ac)	I prefer taking courses that are challenging and difficult.	-.58
61 (Ac)	I enjoy easy courses more than hard ones.	.57
78 (Ac)	I study because I have to, and for no other reason.	.56
111 (Ac-PRF)	I try to work just hard enough to get by.	.54
168 (Ac)	I rarely do extra studying to improve myself at work.	.53
142 (Ac)	I usually study just hard enough to pass and no more.	.52
40 (Ac-PRF)	I enjoy work more than play.	-.51
103 (Ac)	I go to school only to improve my earning power.	.51
125 (Ac-PRF)	I work because I have to and for that reason only.	.48
182 (Ac-PRF)	I enjoy things which challenge me.	-.45
64 (Ac-PRF)	I really don't enjoy hard work.	.44
84 (Ac-PRF)*	People have always said that I am a hard worker.	-.42

*Also loads Factor VII.

<u>Item #</u>		<u>Equimax Loading</u>
16 (Ac-PRF)	When people are not going to see what I do, I often do less than my very best.	.39
4 (Ac-PRF)*	I don't mind working while other people are having fun.	-.38
90 (Ac-PRF)	I often set goals for myself which are very difficult to reach.	-.37
24 (Ac)*	I don't mind studying while other people are having fun.	-.35

Factor VI is comprised mainly of personally external Rotter I-E items (IE-1), along with externally worded system modifiability items (IE-4) and external James scale (J-1) and Dean Alienation Scale (D-1) items. Also implicated is one item (109) that could be interpreted as belonging to IE-1, the external factor, or IE-3, the luck/chance/fate factor. At lower levels of loading are two depression items (DPI-D/Beck), three negatively loading internal locus of control items (IE-2) and two Differential Personality Inventory Cynicism items (DPI-Cyn).

Factor VI: External Locus of Personal and Social Control

<u>Item #</u>		<u>Equimax Loading</u>
69 (IE-4)	Once a politician gets elected, the people have little or no control over him.	.60
184 (IE-4)	The world is run by the few people in power and there is not much the little guy can do about it.	.59

*Also loads Factor X.

<u>Item #</u>		<u>Equimax Loading</u>
26 (IE-1)	Many times exam questions are so unrelated to course work that studying is really useless.	.57
153 (IE-1)	I have often found that what is going to happen will happen no matter what you do.	.55
144 (IE-4)	It is difficult for people to have much control over the things politicians do in office.	.55
188 (J-1)	Most people are victims of circumstances beyond their control.	.55
106 (IE-1)	Sometimes I can't understand how teachers arrive at the grades they give.	.54
141 (IE-1)	Without the right breaks, one cannot be an effective leader.	.50
109 (J-3)	What happens to people is mainly a result of fate.	.48
43 (D-1)*	Sometimes I feel people are just using me.	.44
45 (IE-1)	Most students don't realize the extent to which their grades are influenced by accidental happenings.	.44
120 (IE-4)	The average citizen can have an influence on government decisions.	-.44
76 (IE-2)	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.	-.42
132 (IE-1)	You have little control over whether people like you or not.	.42
147 (Beck)	I just don't get the breaks and there is no reason to believe I will in the future.	.42

*Also loads Factor XI.

<u>Item #</u>		<u>Equimax Loading</u>
171 (DPI-Cyn)*	I am willing to trust most people.	-.41
18 (DPI-D)**	Things just don't work out the way I want them to.	.40
87 (J-1)	There is really no point in trying because you can't win anyway.	.39
6 (IE-1)	It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyway.	.37
123 (J-1)***	It's not what you know, but who you know that counts.	.37
10 (IE-2)	The idea that teachers are unfair to students is nonsense.	-.37
176 (DPI-Cyn)*	Politicians are and always will be rotten.	.36
166 (IE-1)	Getting a good job depends mainly on being in the right place at the right time.	.35
139 (IE-1)	There's not much use in trying to please people; if they don't like you, they don't like you.	.35
175 (IE-1)	It's so hard to predict how things will turn out; you might as well flip a coin.	.35
157 (IE-2)	There is a direct connection between how hard I study and the grades I get.	-.35

While it would be easy enough to make a content interpretation of Factor VII--e.g. "All-American"--the presence of the three defensiveness items (DPI-De) which are related

*Also loads Factor XII.

**Also loads Factor IV.

***Also loads Factor X.

to desirability responding, along with the wordings of the other items that comprise this factor, lead to a stylistic responding interpretation, in this case, desirability responding.

Factor VII: Stylistic Responding: Desirability

<u>Item #</u>		<u>Equimax Loading</u>
157 (IE-2)	There is a direct connection between how hard I study and the grades I get.	.61
133 (Ac)	I like to do my very best in courses.	.58
170 (IE-2)	When I make plans ahead of time, I am almost certain I can make them turn out right.	.47
86 (DPI-De)*	I always admit my errors without trying to hide anything.	.44
75 (Ac-PRF)**	I would like to accomplish something of great significance.	.44
84 (Ac-PRF)***	People have always said that I am a hard worker.	.44
89 (Dean)	The end often justifies the means.	.43
48 (DPI-De)	I have always lived up to my responsibilities.	.38
29 (DPI-De)	I have never cheated in any manner.	.36

Factor VIII reflects careless responding as may be inferred from the presence of the PRF Infrequency items (PRF-Inf). Since this is not a sample from a clinical population, the paranoia item (DPI-P) also apparently functioned

*Also loads Factors IV and IX.

**Also loads Factor II.

***Also loads Factor V.

as an indicant of careless responding, as did the Levenson (IE-Lev) item.

Factor VIII: Careless Responding

<u>Item #</u>		<u>Equimax Loading</u>
174 (PRF-Inf)	I usually wear clothes when I am around other people.	-.50
56 (Ac-PRF)	Sometimes people say I neglect other important aspects of my life because I work so hard.	.43
73 (DPI-P)*	I would be much more successful if other people were not against me.	.38
93 (IE-Lev)**	Almost any child in the country can grow up to be anything he/she wants to be.	.35
190 (PRF-Inf)	I have never ridden in an automobile.	.34
20 (PRF-Inf)	I could talk before I went to school.	-.34

Factor IX is marked by DPI Defensiveness Scale items (DPI-Def) and DPI Infrequency Scale items (DPI-Inf) are also implicated at lower levels of loading. The defensiveness items function as response style indicators in the present investigation. While it is clear why item 145 should load this factor--it is one of the artificially worded items from Collins' augmented items (IE-Col)--it is not clear why the PRF achievement motivation item should load this factor.

*Also loads Factor XI.

**Also loads Factor III.

Factor IX: Stylistic Responding: Defensiveness

<u>Item #</u>		<u>Equimax Loading</u>
107 (DPI-De)	Sometimes I get mad at my friends. [†]	.55
126 (DPI-De)	Sometimes I say bad things about my friends.	.55
68 (DPI-De)	Sometimes I get mad at my friends. [†]	.53
165 (DPI-De)	I sometimes get angry when people tease me.	.48
66 (Ac-PRF)*	I would like to be a recognized authority in some job, profession, or field.	.46
145 (IE-Col)	Sometimes planning works out, sometimes it doesn't; it all depends on the particular situation.	.46
86 (DPI-De)**	I always admit my errors without trying to hide anything.	.42
77 (DPI-Inf)	I talk to someone almost every day.	.38
96 (DPI-Inf)	I have no trouble counting from one to twenty.	.35

Factor X is composed of four external locus of control items (IE-Lev, Dean-1, and James-1) and two internal locus of control items (IE-2, IE-Col), as well as two PRF Achievement Scale items. While a content interpretation of this factor is at least remotely possible, the aphoristic quality of these items--some of these are even homilies--lends itself

*Also loads Factor II.

**Also loads Factors IV and VII.

[†]Purposely included twice as a further check on response consistency; the correlation between the first response to this item (#68) and the second response (#107) was .97 in the White subsample.

more to a stylistic interpretation, in this case acquiescent responding.

Factor X: Stylistic Responding: Acquiescence

<u>Item #</u>		<u>Equimax Loading</u>
102 (IE-Lev)	It is necessary to please people in power to get what you want.	.61
28 (IE-2)	People who can't get others to like them don't understand how to get along with others.	.46
162 (IE-Col)	Most of the bad things that happen to us take place because we didn't figure out the situation correctly.	.44
104 (Dean-1)	The only thing you can be sure of is that you can be sure of nothing.	.41
24 (Ac)*	I don't mind studying while other people are having fun.	-.40
113 (Dean-1)	We are just so many cogs in the machinery of life.	.38
123 (James-1)**	It's not what you know but who you know that counts.	.36
4 (Ac-PRF)*	I don't mind working while people are having fun.	.35

Factor XI is solely comprised of the six Differential Personality Inventory Paranoia Scale items (DPI-P) included in this investigation, along with an external locus of control item (Dean-1) which is clearly answerable in the paranoid context.

*Also loads Factor V.

**Also loads Factor VI.

Factor XI: Paranoia

<u>Item #</u>		<u>Equimax Loading</u>
62 (DPI-P)	I often feel I am in great danger from people who wish to harm me.	.55
112 (DPI-P)	I am sure that no one has it in for me.	-.48
140 (DPI-P)	I never feel like a robot that someone else is directing.	-.47
43 (Dean-1)*	Sometimes I feel that other people are just using me.	.40
73 (DPI-P)**	I would be much more successful if other people were not against me.	.40
180 (DPI-P)	No one is making things go wrong for me.	-.38

Factor XII is comprised of the Differential Personality Inventory Cynicism Scale items (DPI-Cyn).

Factor XII: Cynicism

<u>Item #</u>		<u>Equimax Loading</u>
149 (DPI-Cyn)	Most people are decent and trustworthy.	.42
154 (DPI-Cyn)	People are basically good.	.42
171 (DPI-Cyn)*	I am willing to trust most people.	.41
47 (DPI-Cyn)	People are not always out to trick you.	.37
176 (DIP-Cyn)*	Politicians are and always will be rotten.	.37
158 (DPI-Cyn)	There is good reason to believe there's a sucker born every minute.	.35

*Also loads Factor VI.

**Also loads Factor VIII.

Thus, the expected content factor structure is obtained among the White subsample of respondents. Moreover, every expected stylistic dimension forms its own factor. There is little content overlaps in this factor structure; most of the split loadings occur when an item loads both a content and a stylistic factor. Furthermore, if only the highest loading items are selected as markers for the content dimensions--i.e. those items loading content factors in excess of .48--there is no content or stylistic dimension overlap whatsoever.

These results are in sharp contrast to those obtained for the total sample--which of course included the Black/Hispanic subsample.

Multiple Item Analysis

Since a good factor solution was obtained for the White subsample of respondents, compound variables were computed for the following constructs by summing the appropriate items--those loading their intended constructs and being unasterisked (not having split loadings)--in the previous section and dividing by the number of items in each construct. No preliminary item analysis of individual scales was conducted, as was necessary for the total sample analysis, for which no factor structure was obtained.

- TOTAC: 24 achievement motivation items
- TOTIE: 41 locus of control items
- TOTDEP: 23 depression/hopelessness items

TOTCYN: 4 cynicism items

TOTPAR: 4 paranoia items

TOTDEF: 4 defensiveness items

TOTINF: all 11 infrequency items were included, though 3 formed a factor, for reasons of stability

TOTSD: all 16 social desirability items contained in the in-class interview (see Method section) were used rather than the items that formed "Factor VII: Desirability," as it was reasoned that these would be better indicators of this response style.

Each of the 190 items were correlated with each of the compound variables. Any item that: (a) failed to correlate significantly with its intended construct (compound variable) or (b) correlated significantly higher with some unintended construct was excluded from further consideration.

Using these criteria, the following items were eliminated:

Achievement Motivation Scale: 14, 25, 56, 90*, 91, 99*, 172.

Internal-External Locus of Control Scale: 15, 18, 22*, 28, 43, 45, 59, 76, 80, 81, 87, 102, 104, 113, 115, 118, 124, 130, 132*, 139, 156, 157, 158, 161.

Depression/Hopelessness Scale: 19, 31, 37, 52, 143, 164, 169.

Cynicism Scale: 47, 120, 148.

Paranoia Scale: none.

Defensiveness Scale: 48, 146, 183.

Social Desirability Scale: none.

Infrequency Scale: 1, 96, 136, 155.

The asterisked items are those which would have been retained on the basis of the factor analysis of the previous section; however, none of these items loaded their respective factors more than .42, so they would have been discarded if only the highest loading items were retained. It should be noted that some items were retained as a result of the multiple item analysis, that would have been discarded on the basis of the factor analysis, for one of the following reasons:

1. Items split between two or more factors;
2. Items loading a stylistic responding factor.

They have not been discarded at this point of the analysis, in keeping with the policy of making the criteria for item rejection rather lax at the outset but increasingly more stringent. (See Appendix Table A-5.)

Purification of Achievement Motivation, Locus of Control, and Intelligence Scales

While the initial factor analysis of all 190 attitudinal items demonstrated a good factor structure with little construct overlap, the four intelligence facet scores were not included in that analysis. In order to render the main constructs of this investigation--achievement motivation, locus of control, and intelligence--as distinct from one another as possible, and to remove any remaining non-intellective construct overlap, those variables were factor analyzed as follows:

1. The achievement motivation and locus of control items that survived the multiple item analysis procedure were factor-analyzed among the White middle class subsample of respondents, utilizing equimax rotation of six factors as indicated by the first of these principal factor solutions. (See Figure 6.) Five of these analyses were conducted, sequentially deleting items as indicated, until there was virtually no construct overlap at the item level.

2. The four intelligence facet scores were included with this set of achievement motivation and locus of control items, and two more factor analyses were performed with equimax rotations of seven principal factors, deleting a few

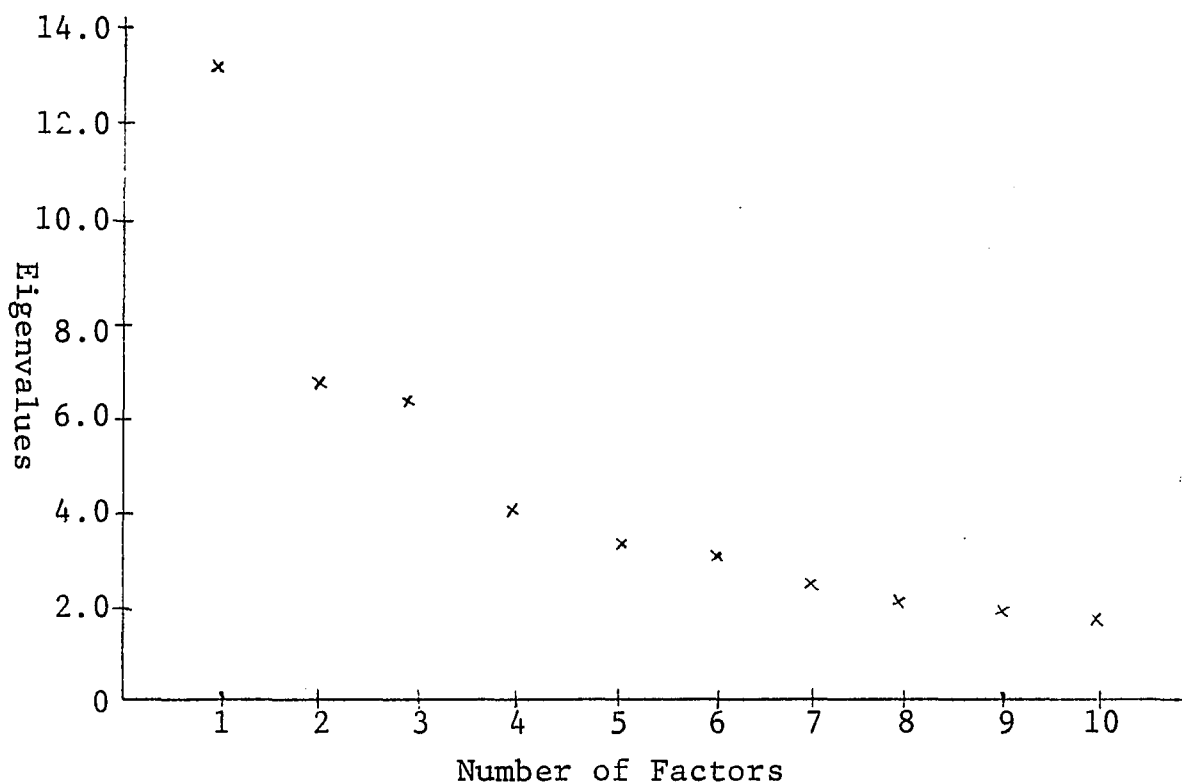


Figure 6. Scree Plot of Principal Factor Analysis of Ac and IE Items: White Middle Class Sample.

more items as indicated. This produced a strong intelligence factor (facet loadings = $-.57$ to $-.70$), with no contamination of the two achievement motivation or four locus of control factors: the highest loading of an intelligence facet on a non-intelligence factor was $-.16$ and the highest loading of an achievement motivation or locus of control item on the intelligence factor was $-.28$ with only seven of 85 items exhibiting loadings as high as $.25$ to $.28$.

3. To make certain of the distinctiveness of the main constructs of this investigation, in terms of the non-overlapping items contained in the factors which mark these constructs, the seven (two achievement motivation, four locus of control, and one intelligence) factors were also rotated via a promax solution. A few more deletions were made, and the resulting promax rotated pattern loadings are presented in the "Total" column of Table 13. The items that proved factorially invariant among subgroups are presented first and those that did not are listed at the bottom of the table. Since the accompanying varimax solutions, as well as the final equimax solutions, were virtually identical to the promax solutions, these are not presented.

That this solution is indeed nearly perfectly orthogonal may be seen from the interfactor correlation matrix (Table 14).*

*It should be noted that these correlations are among factor scores--scale scores weighted by factor loadings. Correlations among unweighted scale scores, as used in the path analyses, need not be uncorrelated.

Table 13

Promax Factor Loadings (Above .20)
White Middle Class Sample

Item	Ac-1: Effort		Ac-2: Result		IE-1: External Control		IE-2: Internal Control		IE-3: Luck, Fate, Chance		IE-4: System Modifiability		Intelligence			
	Tot.	Male Fem.	Tot.	Male Fem.	Tot.	Male Fem.	Tot.	Male Fem.	Tot.	Male Fem.	Tot.	Male Fem.	Tot.	Male Fem.		
Items Factorially Invariant Across Subgroups																
4(Ac-PRF)	<u>-.45</u>	<u>-.49</u>	<u>-.40</u>													
6(IE-1)						<u>.27</u>		<u>-.26</u>		<u>.29</u>				<u>-.27</u>		
7(IE-4)						<u>-.43</u>	<u>-.34</u>	<u>-.40</u>			<u>.25</u>	<u>.30</u>	<u>.20</u>	<u>-.21</u>		
9(J-3)						<u>-.30</u>	<u>-.23</u>	<u>-.32</u>		<u>.32</u>						
10(IE-2)		<u>.24</u>								<u>-.50</u>	<u>-.58</u>	<u>-.46</u>				
12(IE-4)				<u>.24</u>				<u>.59</u>	<u>.62</u>	<u>.55</u>			<u>.51</u>	<u>.59</u>	<u>.44</u>	
16(Ac-PRF)	<u>.55</u>	<u>.59</u>	<u>.55</u>			<u>-.26</u>						<u>.21</u>				
17(D-1)		<u>.27</u>				<u>-.49</u>	<u>-.51</u>	<u>-.39</u>						<u>.29</u>		
21(Ac-PRF)				<u>.60</u>	<u>.81</u>	<u>.58</u>		<u>.22</u>								
26(IE-1)		<u>.25</u>		<u>-.25</u>		<u>-.40</u>	<u>-.44</u>	<u>-.42</u>	<u>-.36</u>	<u>-.38</u>	<u>-.38</u>					
27(IE-2)								<u>.46</u>	<u>.65</u>	<u>.43</u>						
30(Ac-PRF)				<u>.46</u>	<u>.73</u>	<u>.51</u>	<u>-.23</u>					<u>.32</u>	<u>.29</u>	<u>.22</u>		
34(J-1)						<u>-.70</u>	<u>-.77</u>	<u>-.66</u>	<u>-.31</u>							
40(Ac-PRF)	<u>-.45</u>	<u>-.49</u>	<u>-.45</u>								<u>.32</u>			<u>-.21</u>		
42(IE-3)										<u>.64</u>	<u>.68</u>	<u>.63</u>				
46(IE-2)								<u>.49</u>	<u>.60</u>	<u>.45</u>	<u>.29</u>	<u>.29</u>	<u>.22</u>	<u>.28</u>		
50(J-3)	<u>-.25</u>	<u>-.30</u>	<u>-.21</u>			<u>-.22</u>	<u>-.30</u>	<u>.25</u>		<u>.61</u>	<u>.48</u>	<u>.66</u>				
53(IE-4)		<u>.23</u>						<u>-.25</u>	<u>-.27</u>	<u>-.26</u>		<u>-.47</u>	<u>-.57</u>	<u>-.40</u>		
54(IE-2)								<u>.53</u>	<u>.40</u>	<u>.59</u>						
60(IE-3)											<u>.26</u>					
63(J-3)									<u>.25</u>		<u>.54</u>	<u>.48</u>	<u>.62</u>			
66(Ac-PRF)				<u>.57</u>	<u>.80</u>	<u>.56</u>					<u>.55</u>	<u>.53</u>	<u>.54</u>	<u>.21</u>		
70(IE-3)							<u>.50</u>	<u>.57</u>	<u>.51</u>		<u>.70</u>	<u>.71</u>	<u>.69</u>			
76(IE-2)									<u>-.23</u>							
78(Ac)	<u>.70</u>	<u>.73</u>	<u>.79</u>				<u>-.22</u>			<u>.28</u>	<u>.35</u>					
79(Ac-PRF)				<u>.46</u>	<u>.43</u>	<u>.53</u>	<u>-.22</u>									
88(IE-1)								<u>-.44</u>	<u>-.40</u>	<u>-.49</u>						
94(IE-3)											<u>.52</u>	<u>.77</u>	<u>.50</u>	<u>.22</u>		
101(IE-3)											<u>.60</u>	<u>.71</u>	<u>.48</u>			
103(Ac)	<u>.67</u>	<u>.67</u>	<u>.73</u>						<u>-.23</u>							
105(Ac-PRF)				<u>.62</u>	<u>.71</u>	<u>.54</u>			<u>.24</u>							
111(Ac-PRF)	<u>.64</u>	<u>.57</u>	<u>.75</u>			<u>-.29</u>										
114(Ac-PRF)	<u>-.53</u>	<u>-.57</u>	<u>-.48</u>	<u>.34</u>	<u>.48</u>	<u>.34</u>							<u>-.24</u>	<u>.28</u>		
119(Ac-PRF)	<u>.64</u>	<u>.70</u>	<u>.61</u>													
120(IE-4)							<u>-.26</u>	<u>-.22</u>				<u>.56</u>	<u>.74</u>	<u>.37</u>		
125(Ac-PRF)	<u>.54</u>	<u>.54</u>	<u>.56</u>	<u>-.25</u>	<u>-.34</u>	<u>-.25</u>		<u>-.22</u>						<u>.24</u>		
129(IE-4)					<u>-.25</u>			<u>.31</u>	<u>-.21</u>		<u>-.23</u>	<u>-.44</u>	<u>-.54</u>	<u>-.52</u>		
134(IE-2)							<u>.44</u>	<u>.45</u>	<u>.34</u>		<u>-.27</u>	<u>.35</u>	<u>.26</u>	<u>.24</u>		
142(Ac)	<u>.71</u>	<u>.72</u>	<u>.64</u>													
144(IE-4)							<u>-.21</u>	<u>-.22</u>				<u>-.63</u>	<u>-.60</u>	<u>-.61</u>		
148(IE-4)																
150(Ac-PRF)				<u>.54</u>	<u>.41</u>	<u>.62</u>			<u>.22</u>							
152(IE-4)												<u>.54</u>	<u>.52</u>	<u>.50</u>		
153(IE-1)		<u>.21</u>				<u>-.55</u>	<u>-.49</u>	<u>-.61</u>								
157(IE-2)									<u>.32</u>	<u>.35</u>	<u>.36</u>		<u>.25</u>			
162(Col-2)	<u>-.29</u>	<u>-.30</u>			<u>.28</u>											
166(IE-1)						<u>-.48</u>	<u>-.32</u>	<u>-.52</u>			<u>-.37</u>	<u>.39</u>	<u>.48</u>			
168(Ac-PRF)	<u>.52</u>	<u>.40</u>	<u>.55</u>							<u>-.24</u>						
173(Ac)	<u>.68</u>	<u>.78</u>	<u>.62</u>										<u>-.26</u>	<u>.26</u>		
179(IE-1)						<u>-.42</u>	<u>-.47</u>	<u>-.35</u>								
182(Ac-PRF)	<u>-.59</u>	<u>-.66</u>	<u>-.48</u>	<u>.29</u>	<u>.28</u>	<u>.32</u>			<u>.27</u>							
Word																
Selection									<u>.22</u>				<u>-.30</u>			
Word Analogy									<u>-.30</u>					<u>.53</u>	<u>.72</u>	<u>.47</u>
Figure														<u>.61</u>	<u>.73</u>	<u>.54</u>
Selection												<u>.30</u>		<u>.62</u>	<u>.66</u>	<u>.65</u>
Figure																
Analogy														<u>.71</u>	<u>.70</u>	<u>.74</u>

Table 13 (continued)

Item	Ac-1: Effort Total Whites	Ac-2: Result Total Whites	IE-1: External Control Total Whites	IE-2: Internal Control Total Whites	IE-3: Luck, Fate, Chance Total Whites	IE-4: System Modifiability Total Whites	Intelligence Total Whites
Items <u>Not</u> Factorially Invariant Across Subgroups							
25(Ac-PRF)	<u>.39</u>	-.22	.28				
41(IE-2)						<u>.53</u>	
43(D-1)			.30	<u>-.48</u>			
45(IE-1)			<u>-.53</u>				
55(IE-3)			<u>.34</u>	<u>-.38</u>	.27		
61(Ac)	<u>.61</u>						
69(IE-1)			<u>-.67</u>		.38		
84(Ac-PRF)	<u>-.47</u>			.22			
93(Lev-2)				<u>-.37</u>		<u>.48</u>	
106(IE-1)					.24		.26
109(J-3)			<u>-.46</u>		<u>-.37</u>		
122(Ac)		<u>.36</u>					
123(J-1)			<u>-.52</u>				
124(IE-1)	.23		<u>-.43</u>		-.22		
128(Ac-PRF)	<u>-.53</u>		<u>-.27</u>	-.41			
141(IE-1)			<u>-.42</u>				
159(IE-3)					<u>.37</u>		
160(Ac-PRF)		<u>-.48</u>					
175(IE-1)	.29		.32	<u>-.43</u>	.30		
184(IE-4)			<u>-.63</u>				
186(Ac)	-.63						
188(J-1)			<u>-.46</u>	.23	-.29		

Note 1. Only factor loadings greater than .20 are shown.

Note 2. The following item description abbreviations are used:
 Ac-PRF: Personality Research Form Achievement Scale item
 Ac: Augmented Achievement Motivation item
 IE-1: External Rotter I-E Scale item
 IE-2: Internal Rotter I-E Scale item
 IE-3: Luck/Fate/Chance Rotter I-E Scale item
 IE-4: System Modifiability Rotter I-E Scale item
 D-1: External Dean Alienation Scale item
 J-1: External James I-E Scale item
 J-3: Luck/Fate/Chance James I-E Scale item
 Col-2: Internal Collins I-E Scale item
 Lev-2: Internal Levenson I-E Scale item

Note 3. Highest loadings are underlined.

Note 4. Only the total sample loadings--which led to their consideration in the first place--are shown for those items which did not prove to be factorially invariant across male and female subsamples.

Note 5. That most of the (slight) departures from factorial invariance are found in the male subsample is not surprising since the total White middle class sample was 60% female and only 40% male.

Table 14
Interfactor Correlation Matrix: Primary Factors
White Middle Class Sample

	<u>Ac-1</u>	<u>Ac-2</u>	<u>IE-1</u>	<u>IE-2</u>	<u>IE-3</u>	<u>IE-4</u>
Ac-2	-.24					
IE-1	.15	-.04				
IE-2	.12	-.02	.07			
IE-3	-.09	-.01	.01	-.15		
IE-4	-.16	-.08	-.02	.10	-.01	
IQ	-.21	.05	-.25	.00	-.12	-.03

Factorial Invariance Among Subgroups

To insure that the same factor structure obtained for the total White sample also held among White males and females, separate factor analyses were conducted among White middle class males and White middle class females, using the final item pool retained for the total White middle class sample, and using principal factoring with equimax rotation for the initial pass on these items, and promax rotations for three more principal factor solutions for each subsample. Items were deleted at each step, and these deleted items appear at the bottom of Table 13. The items that formed

invariant factor structures are listed in the upper part of the table, those that did not in the lower part of the table.

Inspection of the factor loadings for male and female, as well as total White middle class samples shows good factorial invariance as well as good construct separation; in fact, the ranges of interfactor correlations for the White male and female subsamples were as follows:

Males: .01-.14,

Females: .01-.19, except that IE-1 and IE-4 correlated .24 with one another, a not surprising result, in view of the results of this section.

Internal Consistency of Final Sets of Items

The coefficient alphas for the final sets of items can be seen in Table 15. These coefficients compare very favorably with those obtained from the White middle class subjects for the PRF achievement and Rotter locus of control scales in their entirety (see Table 16).

This is as would be expected, given the high correlations between the final scales selected in this investigation and those scales usually defined in the literature; i.e. PRF-Ac (Jackson, 1967b); IE (Rotter, 1966); IE-1, IE-2, IE-3, IE-4 (Collins, 1974). The correlations between these scales and the scales used in the present investigation can be seen in Table 17. These are part-whole correlations: most of the items that comprise the "final" scales to be used in this investigation derive from the "total" scales

Table 15
Coefficient Alphas for Final Set of Items
White Middle Class Sample

Scale	White Middle Class	
	Male	Female
Total Achievement ($\underline{n} = 19$)	<u>.86</u>	<u>.81</u>
Ac-1: Effort ($\underline{n} = 13$)	.84	.84
Ac-2: Result ($\underline{n} = 6$)	.79	.68
Total Internal-External Locus of Control ($\underline{n} = 32$)	<u>.83</u>	<u>.79</u>
IE-1: ($\underline{n} = 9$)	.62	.64
IE-2: ($\underline{n} = 6$)	.58	.56
IE-3: ($\underline{n} = 9$)	.83	.80
IE-4: ($\underline{n} = 8$)	.80	.65

Table 16
Coefficient Alphas for Total Scales
White Middle Class Sample

Scale	White Middle Class	
	Male	Female
PRF-Ac scale ($\underline{n} = 29$)	.85	.78
Rotter I-E scale ($\underline{n} = 46$)	.83	.80
Col-IE-1 ($\underline{n} = 16$)	.72	.79
Col-IE-2 ($\underline{n} = 13$)	.68	.55
Col-IE-3 ($\underline{n} = 7$)	.70	.53
Col-IE-4 ($\underline{n} = 10$)	.65	.43

Table 17
Correlations between Literature Scales
and Scales Used in Present Investigation
White Middle Class Sample

Scale	White Middle Class	
	Male	Female
Total achievement scale (19 items) and PRF-Ac scale (29 items)	.89	.86
Total I-E scale (32 items) and Rotter IE scale (46 items)	.90	.87
IE-1 (9 items) and Collins IE-1 (16 items)	.85	.80
IE-2 (6 items) and Collins IE-2 (13 items)	.88	.82
IE-3 (9 items) and Collins IE-3 (7 items)	.89	.83
IE-4 (8 items) and Collins IE-4 (10 items)	.87	.81

as quoted in the literature, and only a few are items chosen to augment these latter scales. The interested reader may determine the relative contributions of the items in the total (literature) scales and the augmented items in the purified scales, by reference to Table 13.

Interrelationships Among Intelligence Facets

The facets of intelligence are related as follows:

	<u>Word Selection</u>		<u>Word Analogy</u>		<u>Figure Selection</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Word Analogy	.53	.46				
Figure Selection	.37	.33	.32	.26		
Figure Analogy	.35	.30	.45	.36	.51	.58

The correlations between verbal intelligence and figural intelligence, and total intelligence, are as follows:

	<u>Verbal Intelligence</u>		<u>Figural Intelligence</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Total Intelligence	.79	.75	.88	.92

Moreover, verbal intelligence and figural intelligence are correlated .45 among White males, and .43 among White females.

Factor analysis of the four intelligence facets resulted in only one significant eigenvalue for both males and females (2.22 and 1.48, respectively) and all facets loaded a single factor as follows:

	<u>Factor Loadings</u>	
	<u>Males</u>	<u>Females</u>
Word Selection	.64	.55
Word Analogy	.64	.55
Figure Selection	.57	.64
Figure Analogy	.67	.68

It is therefore justifiable to consider the four intelligence facets as forming a unitary construct among White subjects and proceed with the testing of the hypothesis using the total intelligence score.

Development of Compound Dependent Variables

The dependent variables available for this investigation are as follows:

- claimed high school grade point average
- claimed college grade point average
- class grade

The other measures of performance--actual high school and college grade point averages--could not be obtained from most of the colleges from which the sample was drawn, due to refusal of registrars or unwillingness of participating professors to allow requests to be made for this information. However, several investigators have shown claimed grade point averages to be highly related to actual grade point averages.

The intercorrelations of the available dependent variables are as follows:

	<u>Claimed High School GPA</u>		<u>Claimed College GPA</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Claimed College GPA	.09	.34		
Class Grade	-.03	.24	.41	.33

Thus, while all three variables are interrelated for White females to some degree, only class grade and claimed college GPA are related for males.

Factor analyses of the male intercorrelation matrix produced one eigenvalue above 1.0, and a 1-factor solution showed loadings on this factor of claimed college GPA and class grade of .54 each, and no loading of claimed high school GPA; even when a 2-factor solution was performed, claimed high school GPA did not load the second factor significantly.

Factor analysis of the female intercorrelation matrix produced one eigenvalue above 1.0, and a 1-factor solution showed all variables loading this factor: claimed high school GPA = .48, claimed college GPA = .55, class grade = .47.

Thus, as was suggested by the raw intercorrelation matrices, there is good reason to regard a composite of claimed college GPA and class grade, and the single dependent variable, claimed high school GPA, independently for males, and to create a composite of claimed high school GPA, claimed college GPA, and class grade for females, as follows:

White middle class male dependent variables:

DEPVAR = (claimed college GPA and class grade)/2

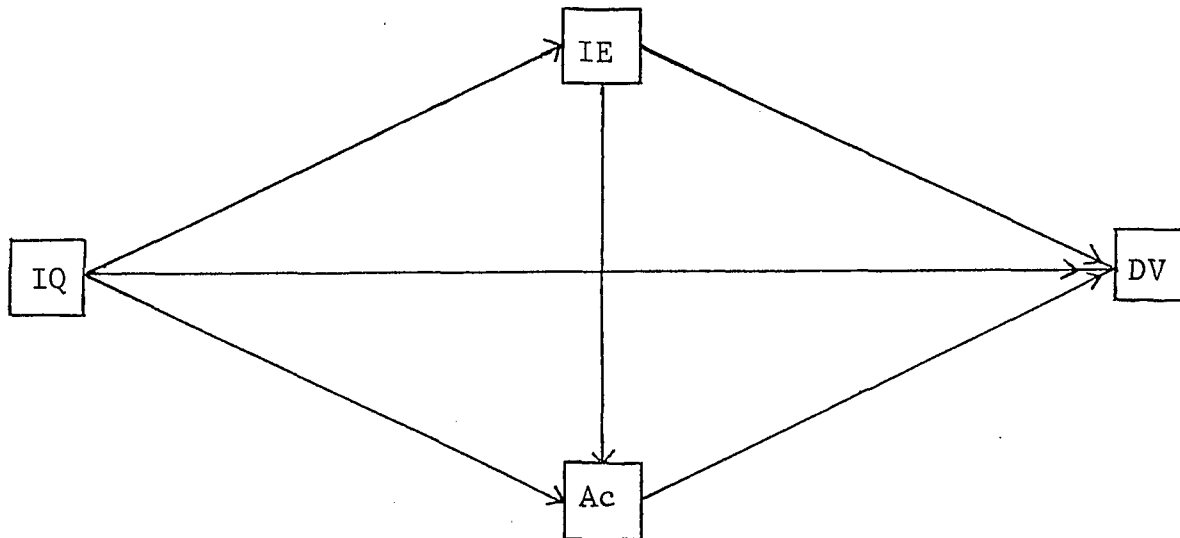
CLMHSGPA = claimed high school GPA

White middle class female dependent variable:

TOTDEPVAR = (claimed high school GPA and claimed college GPA and class grade)/3

Tests of Hypotheses

The following causal model was used to test the main hypothesis of this investigation:



where IQ = intelligence, IE = internal-external locus of control, Ac = achievement motivation, and DV = dependent variable--some measure of achievement, per se.

Thus this model implies that actual achievement is determined by:

IQ → DV: ability per se

IE → DV: internal locus of control per se

Ac → DV: achievement motivation per se

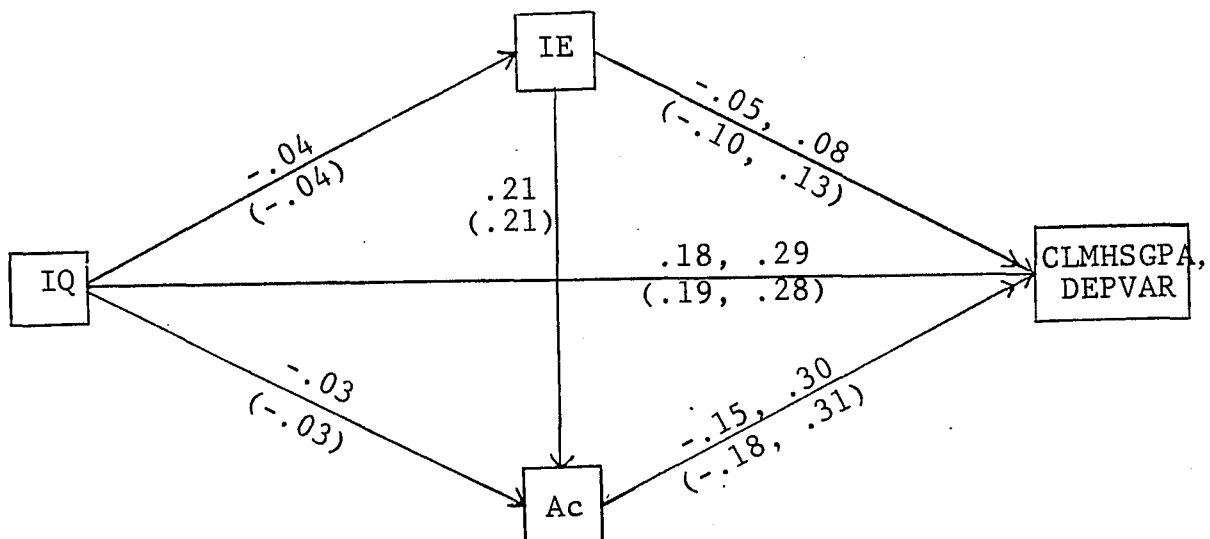
IQ → IE → DV: ability which makes possible the formation of internal locus of control

IQ → Ac → DV: ability which makes possible the formation of achievement motivation

IQ → IE → Ac → DV: ability which makes possible the formation of internal locus of control, which makes possible the formation of achievement motivation.

This latter path represents the causal model for the central hypothesis of this study.

The model was tested, for both White middle class males and females, using the final purified Ac and IE scales, total intelligence, and dependent variables as described in the previous section. The results are presented in Figures 7 and 8 for males and females separately (the zero-order correlation coefficients below each arrow in parentheses, the partial [path] coefficients above each arrow).



Note. Where two coefficients appear, the first one has been calculated with claimed high school GPA as the dependent variable and the second one has been calculated with a compound dependent variable composed of claimed college GPA and class grade (DEPVAR).

Figure 7. Path Diagram: White Middle Class Males.
Purified Variables.

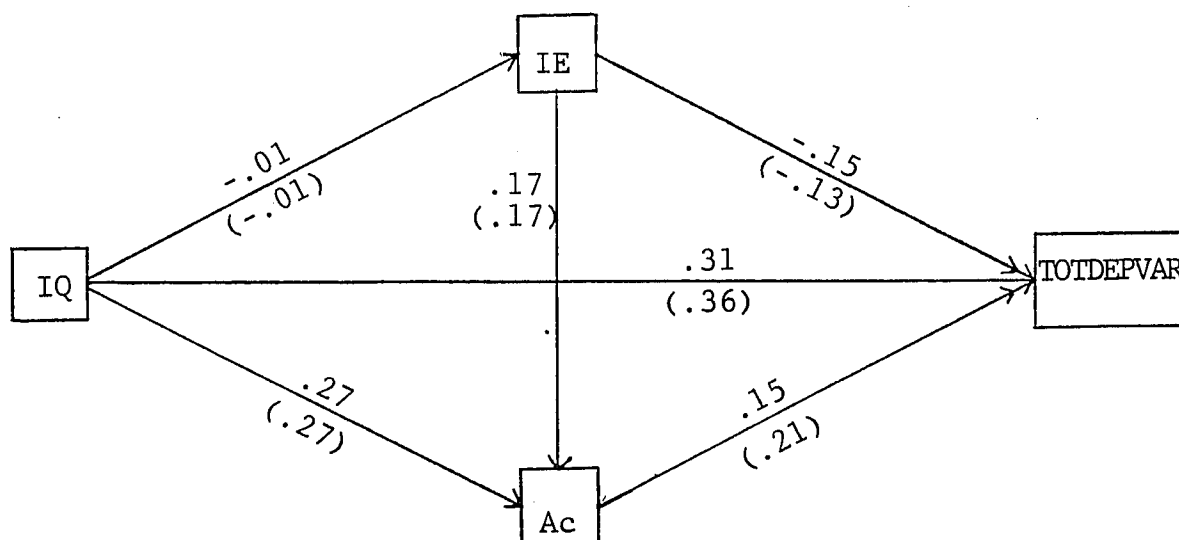


Figure 8. Path Diagram: White Middle Class Females.
Purified Variables.

These path coefficients are all low and obviously constrained by the low zero-order correlations. In fact the only significant effects are . . .

- Intelligence on achievement for both males and females
 - Achievement motivation on achievement for males
 - Intelligence on achievement motivation for females
- . . . and even these values are on the low side and only reflect outcomes that have been well known for between 50 and 100 years.

The decomposition of these results are presented in Tables 18 and 19, for males and females separately.

As may be seen in Tables 18 and 19, none of the indirect effects--on which confirmation of the hypothesis depends--

Table 18

Decomposition Table: White Middle Class Males

	<u>Purified Variables</u>					
	<u>IQ:IE</u>	<u>IQ:Ac</u>	<u>IQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total						
Covariance	-.04	-.03	.19, .28	.21	-.10, .13	-.15, .30
<u>Causal</u> <u>Effects</u>						
Direct	-.04	-.03	.18, .29	.21	-.05, .08	-.18, .31
Indirect	None	--	.01, -.01	None	-.04, .06	None
Total	-.04	-.03	.19, .28	.21	-.09, .14	-.18, .31
Non-Causal						
Effects	None	None	None	--	-.01, -.01	.03, -.01

Note. Where two coefficients appear, the first one is calculated using claimed HSGPA as the dependent variable, the second using a compound variable composed of claimed college GPA and class grade.

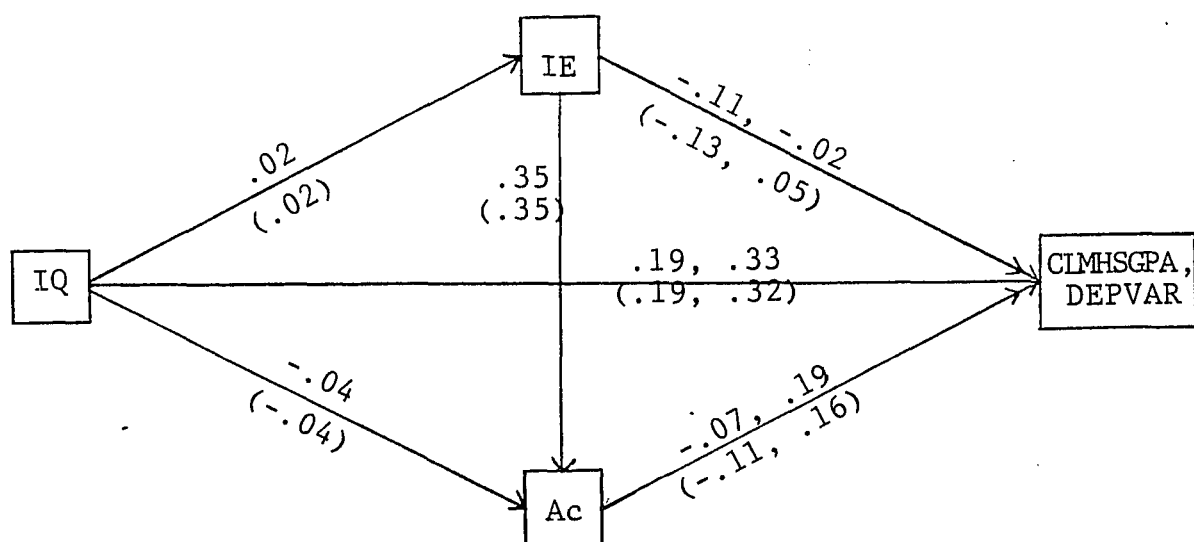
Table 19

Decomposition Table: White Middle Class Females

	<u>Purified Variables</u>					
	<u>IQ:IE</u>	<u>IQ:Ac</u>	<u>IQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total Covariance	-.01	.27	.36	.17	-.13	.21
<u>Causal Effects</u>						
Direct	-.01	.27	.31	.17	-.15	.15
Indirect	None	--	.05	None	.03	None
Total	-.01	.27	.36	.17	-.12	.15
Non-Causal Effects	None	None	None	--	-.01	.06

even approaches significance. Therefore the hypothesis is unequivocally disconfirmed.

Since the main cause of the rejection of the hypothesis was the almost non-existent relationships between intelligence and internal-external locus of control, and intelligence and achievement motivation, and since this may have resulted from the purification of construct measures, these analyses were repeated, using the Rotter (1966) I-E Scale and the PRF-Ac Scale (Jackson, 1967b) as reported in the literature, without any augmentation or deletions. These results are presented in Figures 9 and 10 and Tables 20 and 21.



Note. Where two coefficients appear, the first one has been calculated with claimed high school GPA as the dependent variable, and the second one has been calculated with claimed college GPA and class grade as the compound dependent variable, DEPVAR.

Figure 9. Path Diagram: White Middle Class Males.
Scales as Reported in Literature.

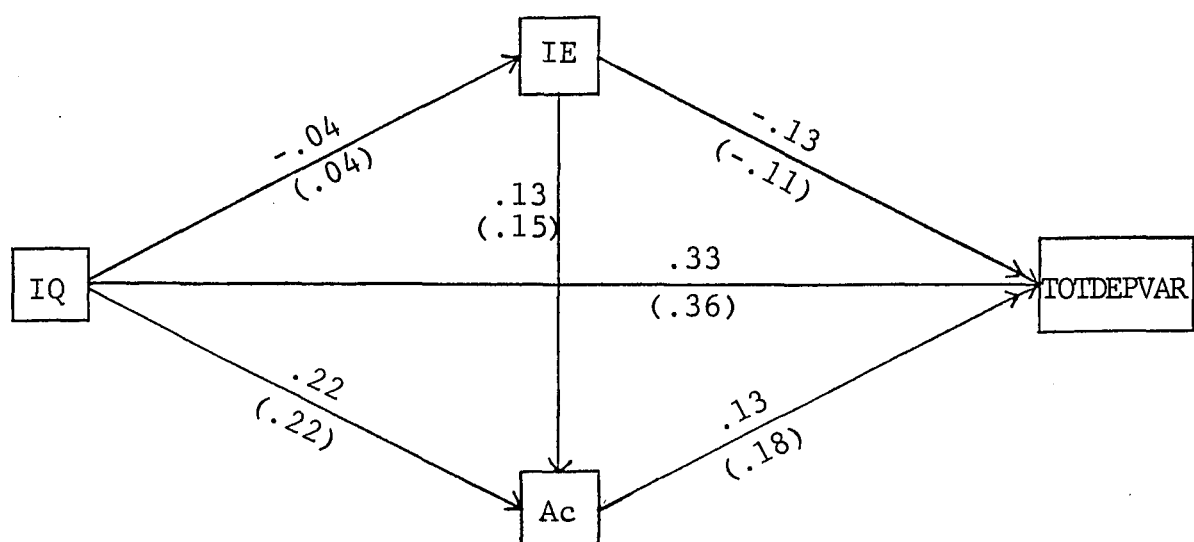


Figure 10. Path Diagram: White Middle Class Females.
Scales as Reported in Literature.

Table 20

Decomposition Table: White Middle Class Males

	<u>Scales as Reported in the Literature</u>					
	<u>IQ:IE</u>	<u>IQ:Ac</u>	<u>IQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>AC:DV</u>
Total Covariance	.02	-.04	.19, .32	.35	-.13, .05	-.11, .16
<u>Causal Effects</u>						
Direct	.02	-.05	.19, .33	.35	-.11, -.02	-.07, .19
Indirect	None	.01	-- , -.01	None	-.02, .07	None
Total	.02	-.04	.19, .32	.35	-.13, .05	-.07, .19
Non-Causal Effects	None	None	None	--	-- , --	-.04, -.03

Note. Where two numbers appear, the first one is for coefficients calculated using claimed high school GPA as the dependent variable, the second using a compound variable composed of claimed college GPA and class grade.

Table 21

Decomposition Table: White Middle Class Females

	<u>Scales as Reported in the Literature</u>					
	<u>IQ:IE</u>	<u>IQ:Ac</u>	<u>IQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total Covariance	-.04	.22	.36	.13	-.11	.18
<u>Causal Effects</u>						
Direct	-.04	.22	.33	.13	-.13	.13
Indirect	None	--	.03	None	.01	None
Total	-.04	.22	.36	.13	-.12	.13
Non-Causal Effects	None	None	None	--	.01	.05

Once again, none of the indirect effects, on which the hypothesis depends, even approach significance and, again, the main reason for rejection of the hypothesis is the almost non-existent relationships between intelligence and internal-external locus of control, and (for males only) the low relationship between intelligence and achievement motivation.

As a last resort, the relationship between locus of control and achievement motivation was tested for recursivity--i.e. the model $IQ \rightarrow Ac \rightarrow IE \rightarrow D.V.$ was tested--again to no avail: no amount of other correlation--zero order or

direct path--can surmount the extremely low IQ-Ac and IQ-IE relationships.

Because of these extremely low relationships, no attempt was made to test the hypothesis among White middle class males and females, using either the facets of achievement motivation or internal-external locus of control delineated in the present investigation or the locus of control facets reported by Collins (1974). These correlations are contained in Table 22.

Table 22
Correlations of Other Independent Variables
with Intelligence
White Middle Class Sample

	<u>White Middle Class</u>	
	<u>Males</u>	<u>Females</u>
Ac-Effort	-.05	.27
Ac-Result	.03	.06
IE-1, IE-1 (Collins)	.06, .08	.21, .21
IE-2, IE-2 (Collins)	-.14, -.13	-.09, -.21
IE-3, IE-3 (Collins)	-.10, -.12	-.01, -.11
IE-4, IE-4 (Collins)	.11, .22	-.12, -.02

Thus none of these zero-order correlations is high enough to warrant any further hypothesis testing using independent variable facets, and the central hypothesis is unequivocally rejected among White middle class respondents of both sexes.

(While some of these may be of borderline statistical significance, it is extremely unlikely that they would survive cross-validation or the repetition of this research, hence they are not discussed.)

The Extent of Stylistic Responding

In order to assess to what degree responses to the achievement motivation and locus of control items were influenced by various kinds of response styles, the following indices were created, in all cases using achievement motivation and locus of control items not included in the final factors/facets used to test the hypothesis:

1. NEXT: the number of times a respondent utilized extreme response categories: "agree completely" and "disagree completely" were coded "2," "agree somewhat" and "disagree somewhat" were coded "1," and "neither agree nor disagree" was coded "0"; 44 items were available for this purpose.
2. NTRU: the number of times a respondent answered in the affirmative--"agree completely" or "agree somewhat"; 44 items were available for this purpose.
3. NFAL: the number of times a respondent answered in the negative--"disagree somewhat" or "disagree completely"; 44 items were available for this purpose.
4. These items were also categorized as to whether they were socially desirable or undesirable and keyed for these responses; 19 items were judged socially desirable (NSD) and 25 items were judged socially undesirable (NSUD).

5. In addition the following indices were constructed: NFALSD--items that were socially desirable but answered false ($\underline{n} = 19$); NFALSUD--items that were socially undesirable and answered false ($\underline{n} = 25$).

6. INFR = an 11-item infrequency scale, denoting careless responding.

7. DEF = a 7-item scale denoting defensive responding.

The intercorrelations of these indices with the factors that evolved, as well as the variables used to test the hypothesis, are contained in Table 23, for White male respondents.

From these data, it is apparent that while stylistic responding has some influence on the original PRF-Ac scale and, in particular, the Rotter IE-scale, these influences have been largely removed by the procedures of the previous sections, in line with Jackson's (1967a) contention that the influence of stylistic responding decreases as content saturation is increased. The only exception is the IE-1 facet (External Locus of Control) which is still influenced by acquiescence, to some degree.

The intercorrelations of the response style indices with the factors and the variables used to test the hypothesis are contained in Table 24, for White female respondents.

While stylistic responding had less influence on the original PRF-Ac and Rotter I-E scales to begin with, among White females as compared to males, this influence has been further reduced by the procedures of the previous sections.

Table 23

Correlations of Response Styles with Factors
(and Facets), and Variables Used to Test
the Hypothesis: White Middle Class Males

	<u>NEXT</u>	<u>NTRU</u>	<u>NFAL</u>	<u>NSD</u>	<u>NSUD</u>	<u>NFAL</u> <u>SD</u>	<u>NFAL</u> <u>SUD</u>	<u>INFR</u>	<u>DEF</u>
<u>Total Ac</u>	-.16	.22	-.11	-.12	.22	-.12	-.12	-.07	.19
Ac-Effort	-.22	.11	-.14	-.18	.24	-.12	-.12	-.06	.04
Ac-Result	-.16	.17	.11	.10	.01	-.02	-.02	-.02	.23
<u>Total IE</u>	.05	.23	-.23	.10	.21	-.12	-.12	.16	-.09
IE-1	-.11	<u>.34</u>	<u>-.32</u>	-.10	.24	-.05	-.05	-.10	-.09
IE-2	-.03	.24	.04	-.01	-.08	-.07	-.07	-.12	-.19
IE-3	.22	.01	.03	.14	-.13	-.10	-.10	.24	.03
IE-4	-.03	.04	-.12	.15	.21	-.03	-.03	.19	-.04
Total IQ	-.05	-.03	.16	.05	-.24	-.02	-.02	-.21	.17
PRF-Ac	<u>-.25</u>	.22	<u>-.31</u>	-.10	<u>.36</u>	-.03	<u>-.33</u>	-.17	.24
IE (Rotter)	<u>-.30</u>	<u>.50</u>	<u>-.43</u>	-.23	<u>.44</u>	-.13	<u>-.41</u>	-.21	-.17

Note. Underlined coefficients are significant at at least the .05 level.

Table 24

Correlations of Response Styles with Factors
(and Facets), and Variables Used to Test
the Hypothesis: White Middle Class Females

	<u>NEXT</u>	<u>NTRU</u>	<u>NFAL</u>	<u>NSD</u>	<u>NSUD</u>	<u>NFAL</u> <u>SD</u>	<u>NFAL</u> <u>SUD</u>	<u>INFR</u>	<u>DEF</u>
<u>Total Ac</u>	-.19	.16	-.20	-.12	.24	-.12	-.20	-.24	.04
Ac-Effort	.21	.17	<u>-.29</u>	-.18	<u>.26</u>	-.12	<u>-.28</u>	.14	.12
Ac-Result	.17	.01	.10	.10	.01	-.02	.10	.20	.15
<u>Total IE</u>	.07	.20	-.18	.10	.21	-.12	.14	.11	-.01
IE-1	-.18	.21	<u>-.35</u>	-.10	<u>.38</u>	-.05	<u>-.41</u>	.11	.06
IE-2	.00	-.07	.04	-.01	-.08	-.07	.08	.02	-.01
IE-3	.10	-.02	.13	.14	-.13	-.10	.21	.05	-.03
IE-4	.08	-.17	-.12	.15	.21	-.03	-.11	.15	.03
Total IQ	.05	-.21	.16	.05	-.24	-.02	.16	-.09	-.06
PRF-Ac	<u>-.29</u>	.16	<u>-.40</u>	-.12	<u>.25</u>	-.12	<u>-.48</u>	<u>.26</u>	.18
IE (Rotter)	.07	.23	-.18	.10	.21	-.12	-.14	.11	.00

Note. Underlined coefficients are significant at at least the .05 level.

The only sizeable influence that remains is that of acquiescence and desirability on IE-1 (External Locus of Control).

Black/Hispanic Subsample

Factor Analysis of All Items, Including Intelligence Facets toward the End of the Analysis

The initial attempt to find a stable and reasonable factor structure for the Black/Hispanic subgroup was conducted as follows:

1. Starting with all 118 of the achievement motivation and locus of control items, a principal component solution was performed on all 111 Blacks and Hispanics that comprised this subsample. (Principal components rather than principal factors was used because the correlation matrix was singular, there being more items than subjects.) A scree plot* showed that seven factors, accounting for 38% of the total variance, should be rotated and these were rotated to equimax criterion.

2. Based on analysis of this equimax solution, seven items were deleted, making feasible further analysis via principal factoring, and these were conducted as follows, deleting items sequentially as suggested by these solutions.

- a. Four 7-factor equimax solutions.

- b. One 6-factor equimax solution because reduction to 88 items now seemed to imply rotation of six factors.

*Since (as will be seen) it proved impossible to produce meaningful Black/Hispanic factor structures, scree plots will not be presented.

c. Three additional 6-factor equimax solutions, reducing to 71 the number of achievement motivation and locus of control items.

d. A 6- and 7-factor equimax solution including the four intelligence facets. The 7-factor solution was run first, expecting 7 factors by reason of the addition of the intelligence facets; however, a scree plot of eigenvalues showed that only six factors should be extracted. The reason for this anomaly was that the intelligence facets still loaded non-intellective constructs--as high as .56(!). To allow the intellective facets to form their own independent factor, and because the scree plot showed that an 8-factor solution was also at least possible, both 6- and 8-factor equimax rotations were performed. Both of these also produced substantial loadings of intelligence facets on achievement motivation/locus of control constructs.

e. Further item deletions along with a 7-factor equimax solution reduced the number of non-intellective items to 63.

f. Both 7- and 8-factor equimax rotations still produced substantial correlations of non-intellective constructs with the intelligence facets, ranging as high as .62.

The final 8-factor solution, which seemed at least tentatively suggested, produced the following factors, accounting for only 25% of the total variance.

I. Achievement Motivation: Despondent Lack of Effort/
External Locus of Control.

II. Internal Locus of Control

III. External Locus of Control/(No) System Modifiability

IV. Wishful Thinking for Achievement/Intelligence:

Word Selection loading = .36

Word Analogy loading = .29

Figure Selection loading = .24

Figure Analogy loading = .21

V. Belief in Luck, Chance, Fate (intelligence facet loadings -.24, .09, -.22, .28, respectively).

VI. External Locus of Control.

VII. Intelligence: all of the intelligence facets except word selection (a vocabulary test) loaded this factor from -.33 to -.54. However, other items loaded it as well.

4. I don't mind working while other people are having fun. (.67)

24. I don't mind studying while other people are having fun. (.61)

41. People are lonely because they don't try to be friendly. (.50)

94. Becoming a success is a matter of hard work; luck has little or nothing to do with it. (.74)

118. What you get out of life is strictly a matter of what you put into it. (.43)

VIII. Achievement Motivation: Effort Only for Immediate and Tangible Success/External Locus of Control.

These factors are somewhat interesting of themselves and not surprising in view of the kind of Black/Hispanic sample with which we are dealing, i.e. a lower SES ghetto sample. That intelligence and effort/internal locus of control

should be negatively related (Factor VII) is also reasonable in view of the pervasive sense of hopelessness coupled with transitory escape so prevalent in the ghetto. However, for the purpose of testing the hypothesis that is the central concern of this research, such correlations among achievement motivation, locus of control, and intelligence, complicate the situation because construct measures are impure and overlapping. Also, a factor like Factor VII could just as easily be interpreted as either a social desirability, or an acquiescence factor--more likely the latter because of the negative relationship of some high-loading correlated items and intelligence.

Factor Analysis of All Items, Including Intelligence Facets at the Outset

Since the major problem with the results of the previous section was the substantial correlations between intelligence facets and non-intellective constructs, it was decided to redo these analyses including intelligence facets from the outset, in the hope of removing these relationships by successive deletion of non-intellective items loading intelligence facets. These analyses, in order of their implementation, were as follows, with the number of factors determined by scree plot inspection:

1. One principal components solution with equimax rotation of seven factors. (Principal factoring could not be performed because the matrix was singular: n [items = 122] > n [subjects] = 111.)

2. Five principal factor solutions with equimax rotations of seven factors.

By this procedure, virtually all intelligence facet loadings on non-intellective factors were eliminated, the highest remaining one being $-.25$, and the next highest being $-.18$. However, the intelligence facets formed a very weak factor with facet loadings as follows: word selection = $.30$, word analogy = $.35$, figure selection = $.34$, figure analogy = $.26$. Moreover, there still remained substantial loadings of non-intellective items on the intelligence factor, such as it was: two above $.50$, two above $.40$, and five above $.30$. In addition, only 20% of the total variance was explained by this solution.

The seven factors that were extracted may be described as follows:

I. Achievement Motivation: (No) Effort.

II. Achievement Motivation: Result.

III. Personal and Social External Locus of Control/
Belief in Luck, Fate, Chance. However, two internal locus of control items also load this factor ($.43$, $.46$) without reversed polarity and keyed in the positive direction, again pointing to the operation of acquiescent responding.

IV. (No) Belief in Luck, Fate, Chance. The separation of the positively keyed and negatively keyed items into two factors again suggests acquiescent responding.

V. Personal and Social Internal Locus of Control.

VI. Achievement Motivation: (No) Effort.

VII. Intelligence.

In spite of this unprepossessing factor structure, separate analyses of Black/Hispanic males and females were conducted, on the outside chance that this separation might clear things up.

For the males, since a scree plot showed neither a "break" in the eigenvalues nor even a suggestion of a point of inflection, 5-, 6-, 7-, and 8-principal factor solutions with equimax rotations were attempted. All of these solutions shared features in common:

1. Intelligence split into two factors: one containing the two verbal facets, the other containing the two figural facets.

2. Non-intellective items had substantial loadings on these factors, as high as .65 in either case.

3. None of these solutions made any particular sense.

On the other hand, a scree plot of Black/Hispanic female eigenvalues clearly indicated a 4-factor solution. These factors may be described as follows:

- I. Personal and Social External Locus of Control.

- II. Achievement Motivation: (No) Effort/Belief in Luck, Fate, Chance.

- III. Internal Locus of Control/(No) Belief in Luck, Fate, Chance/Achievement Motivation: Effort.

- IV. Achievement Motivation: Result. However, the

intelligence facets also (positively) loaded this factor:
word selection = .24, word analogy = .30, figure selection = .31, figure analogy = .46.

Again, these solutions were unsuited to the purpose of this investigation because clean measures of the "causal" constructs were not forthcoming.

An Attempt to Impose the White Factor Structure on Blacks and Hispanics

Reasoning that much of the Black and Hispanic responses to these questionnaires might be determined by various kinds of response styles which at least contribute to the relationships found in the two previous sections, an attempt was made to "anchor" the Black/Hispanic factor structure with lower SES Whites, as follows:

1. Using the final set of White items from the White subsection, a principal factor analysis was conducted among the lower SES subsample (which consisted of 91 Blacks/Hispanics and 24 Whites), with rotation of seven factors to equimax criterion. (The White subsample factor analyses were all of seven factors--two achievement motivation, four locus of control, and one intelligence facet.) This initial pass on the data resulted in a solution with a unique intelligence factor with facet loadings of .42, .62, .59, and .51, and a fairly reasonable factor structure.

2. Encouraged by this result, those items which survived the factor analysis/item deletion procedures of the

previous two sections and which were not included in the initial pass (1) on these data, were added back into the item pool. Still, a unique intelligence factor obtained with facet loadings of $-.51$, $-.66$, $-.56$, $-.50$, and with no loadings above $.20$ on any other factor. (This solution accounted for 38% of the total variance.)

3. Two more factor analyses with 7-factor equimax rotations were conducted, successively deleting items, as suggested by the results. The following factors were finally extracted:

- I. Personal and Social External Locus of Control.
- II. Internal Locus of Control.
- III. Achievement Motivation: Effort.
- IV. Belief in Luck, Chance, Fate.
- V. Intelligence (facet loadings of $.48$, $.68$, $.64$, and $.57$, with no other item loading this factor more than $.29$).
- VI. Externality/Achievement Motivation: (No) Effort.
- VII. Achievement Motivation: Result.

4. It was next determined whether or not this factor structure would hold for Blacks and Hispanics, per se, with the 24 White lower SES subjects removed from the subject pool. Unfortunately, this was not the case.

For the 82 Black/Hispanic females, while a principal factor solution with equimax rotation of seven factors produced a decent intelligence factor with facet loadings of $.48$, $.57$, $.51$, and $.41$, and no other items loaded this

factor in excess of $-.37$, the intelligence facets loaded other factors as high as $-.50$.

For the 29 Black/Hispanic males, a 7-factor principal component solution (since the 66 items across 29 subjects led to a singular matrix) with equimax rotation resulted in two intelligence factors, one consisting of verbal ability (loadings of $-.68$ and $-.77$) and the other of figural ability (loadings of $.62$ and $.59$) with numerous other items also loading these factors.

An 8-factor equimax solution (since the scree plot showed neither a break in the eigenvalues nor any definite minimum) also produced a verbal ability factor (loadings of $-.68$ and $-.81$) and a figural ability factor (loadings of $.73$ and $.65$), again with numerous and substantial loadings of other items.

The Black/Hispanic female factors may be described as follows:

- I. Achievement: (No) Effort.
- II. Achievement: Result.
- III. System Modifiability.
- IV. (No) Belief in Luck/Fate/Chance (with the figure analogy facet loading this factor $-.36$).
- V. Achievement Motivation: Result/External Locus of Control.

VI. Internal Locus of Control (with the word analogy facet loading this factor $-.50$).

VII. Intelligence.

The Black/Hispanic male factors may be described as follows:

I. (No) Belief in Luck, Fate, Chance/System Modifiability/Internal Locus of Control.

II. General Achievement Motivation/Belief in Luck, Fate, Chance/External Locus of Control.

III. General Achievement Motivation/External Locus of Control.

IV. Verbal Ability with, however, high positive loadings of Achievement: Effort and Internal Locus of Control items, the former positive, the latter negative.

V. Figural Ability with, however, high positive loadings of Internal Locus of Control items and negative high loadings of (No) Belief in Luck, Fate, Chance and (No) System Modifiability items.

VI. General Achievement Motivation.

VII. Internal Locus of Control/Achievement Motivation: Effort.

While these results are of interest, the coalescence of achievement motivation and locus of control items in the same factors and the loadings of other items on the intelligence factor(s) do not lend themselves to the testing of the

central hypothesis of this investigation, which requires a clear separation of the achievement motivation, locus of control, and intelligence constructs on the operational as well as on the conceptual level.

Moreover, the analyses conducted in this section offer further evidence that something is amiss with the Black/Hispanic subsample:

1. The two initial analyses performed with the lower SES subsample (comprised of 91 Blacks/Hispanics and 24 Whites) showed good factor structure with good construct separation and very little non-intellective construct overlap with intelligence. This was true whether or not the final set of items selected for the White subsample or these plus additional items from the final sets of items for the Black/Hispanic subsample in previous sections were used.

2. Once the few Whites were removed, the factor structure dissolved into quite different factors, some composed of mixtures of achievement motivation and locus of control facets, others including intelligence facets as well.

Thus the few White subjects did anchor the factor structure of the lower SES subsample, but, once this anchor was removed, quite different factor structures were obtained for Black/Hispanic males and females, which can be best interpreted as some agglomeration of exclusively Black/Hispanic Ghetto/Barrio views of the world and stylistic (mainly acquiescent) responding.

Of interest is the finding that Black/Hispanic females do not endorse the White higher SES view of the inefficacy of a belief in luck, fate, and chance and the efficacy of an internal locus of control, as may be seen from the negative correlation between a lack of belief in luck, fate, and chance and figural intelligence and the negative correlation between an internal locus of control and verbal intelligence. Of course these findings may just as well be interpreted in terms of stylistic responding.

That this interpretation may be the correct one is more clearly indicated by the results for the Black/Hispanic male sample, which are contradictory in terms of the signs of the relationships between intelligence facets and locus of control facets, suggesting a non-content (stylistic) mode of response.

Factor Analysis of Males and Females Separately, Including Intelligence Facets at the Outset

The last possible reason (other than stylistic responding interacting with intelligence) for the failure to obtain reasonable factor structures among male and female Blacks/Hispanics is that these subgroups have distinctly different perceptions of the world and thus do not have the same factor structures. Hence any analysis that starts with Blacks and Hispanics in total and then attempts to find the same structure across males and females, using item lists purified on the total sample of Blacks/Hispanics, is not a tenable procedure. Consequently factor analyses were

conducted for Black and Hispanic males and females separately.

Black/Hispanic Females

The analysis of the Black/Hispanic female sample proceeded as follows:

1. Three principal component solutions (since the number of items exceeded the number of subjects) starting with all achievement motivation and locus of control items and the four intelligence facets, with equimax rotation of seven factors as suggested by scree plots.

2. Two more principal component solutions with rotation of three factors, not including the intelligence facets, as suggested by a scree plot.

3. One principal component solution including the intelligence facets, with equimax rotation of four factors.

The first three factor analyses resulted in weak intelligence factors with low and shifting loadings:

F.A. #1. IQ Factor #1: figure selection = .36; IQ Factor #2: word analogy = -.52, figure selection = -.47, figure analogy = -.49; no loading anywhere exceeding .29 for word selection.

F.A. #2. IQ Factor #1: word selection = -.35; IQ Factor #2: word analogy = -.45, figure selection = -.43, figure analogy = -.44.

F.A. #3: no intelligence factor whatsoever (with 69 achievement motivation/locus of control items remaining).

Since deletion of 49 (118 - 69) items not only did not clean out intelligence facet/non-intellective factor relationships but, in fact, totally obliterated any intelligence factor, the conclusion seemed inescapable that intelligence and some of the achievement motivation and locus of control items were indeed related--at least among Black/Hispanic females--and this relationship was most likely enhanced, if not fully mediated by stylistic responding, the most likely candidate being acquiescence.

Consequently, any hope of testing the complete central hypothesis of this investigation was abandoned, and the remaining analyses were conducted without the intelligence facets.

Since the scree plot now gave definite indication of three factors, only three factors were rotated to equimax criterion and the 51 items retained on the second pass were rotated to promax criterion to make certain they were indeed orthogonal. This "solution," albeit accounting for only 14% of the total variance, is identical to the previous equimax rotation as well as the varimax solution that preceded the promax solution. It is presented as follows.

Factor I appears to be a conglomeration of items reflecting a lack of personal control from Rotter's (1966) scale (IE-1), Dean's (1969) Alienation scale (D-1) and James' (1957) IE scale (J-1); a lack of socio-political control from Rotter's scale (IE-4), and a belief in luck from Rotter's scale (IE-3) and James' scale (J-3). Moreover

these items that survived successive deletion in the search for pure construct measures all have a sort of despondent, hopeless tone. (Note the presence of a self-deprecating PRF-Ac item.) The presence of the item from Collin's (1974) scale (Col-2), which is normally construed as an internal locus of control item, and should load this factor negatively but does not, is puzzling, as is the presence of the last two items, which should also have negative loadings on this factor.

Factor I: General and Despondent External Locus of Control

<u>Item #</u>		<u>Promax Loading</u>
139 (IE-1)	There is not much use in trying to please people; if they don't like you, they don't like you.	.64
129 (IE-4)	As far as world affairs are concerned, most of us are victims of forces we can neither control nor understand.	.60
137 (J-3)	Some people are just born lucky.	.59
106 (IE-1)	Sometimes I can't understand how teachers arrive at the grades they give.	.55
145 (Col-2)	Sometimes planning works out, sometimes it doesn't; it all depends on the particular situation.	.55
43 (D-1)	Sometimes I feel that other people are just using me.	.53
153 (IE-1)	I have often found that what is going to happen will happen no matter what you do.	.52
178 (PRF-Ac)	I get disgusted with myself when I have not learned something properly.	.49
101 (IE-3)	There is really no such thing as luck.	-.49

<u>Item #</u>		<u>Promax Loading</u>
60 (IE-3)*	Getting people to do the right thing depends on ability; luck has little or nothing to do with it.	-.48
123 (J-1)*	It's not what you know but who you know that counts.	.47
144 (IE-4)	It is difficult for people to have much control over the things politicians do in office.	.45
59 (J-3)	There is a great deal of truth in astrology.	.37
161 (IE-1)	Sometimes I don't feel I have enough control over the direction my life is taking.	.36
151 (IE-2)*	What happens to me is my own doing.	-.35
15 (IE-2)	In the long run, the bad things are balanced by the good ones.	.31
130 (Lev-2)	When I get what I want, it's because I worked hard for it.	.30

Factor II consists almost exclusively of those items reflecting the effort component of achievement motivation. Adding to the negative tone of this factor is the high loading item (168) from James' scale as well as another of the same tone (87) with a much lower loading. The presence of an internal locus of control item (151) with a positive loading is puzzling.

Factor II: Achievement Motivation: (Lack of) Effort

<u>Item #</u>		<u>Promax Loading</u>
142 (Ac)	I study just hard enough to pass and no more.	.62

*Split between two or more factors.

<u>Item #</u>		<u>Promax Loading</u>
71 (PRF-Ac)	I will keep working on a problem after others have given up.	-.62
168 (J-1)	Most people are victims of circumstances beyond their control.	.56
78 (Ac)	I study because I have to, and for no other reason.	.56
173 (Ac)	I enjoy easy courses more than hard ones.	.52
111 (PRF-Ac)	I try to work just hard enough to get by.	.51
133 (Ac)	I like to do my very best in courses.	-.50
119 (PRF-Ac)	I would rather do an easy job than one involving obstacles that must be overcome.	.50
125 (PRF-Ac)	I work because I have to and for that reason only.	.48
160 (PRF-Ac)	It doesn't really matter to me whether I become one of the best in my field.	.47
61 (Ac)	I enjoy easy courses more than hard ones.	.39
87 (J-1)	There is usually no point in trying because you can't win anyway.	.37
151 (IE-2)*	What happens to me is my own doing.	.36
84 (PRF-Ac)	People have always said that I am a hard worker.	-.35
25 (PRF-Ac)*	I am sure people think that I don't have a great deal of drive.	.34
79 (PRF-Ac)	I like to be successful in the things I undertake.	-.31

*Split between two or more factors.

Factor III is primarily marked by internal locus of control items from Rotter's I-E scale (IE-2), Levenson's (1972, 1973) I-E scale (Lev-2), and James' I-E scale (J-2), and secondarily marked by that achievement motivation facet that has to do with the goal or result of achievement motivation. Also loading this factor in the expected direction is a luck item (IE-3). Curiously, two James external items (J-1) and two achievement motivation items (172 and 111) load this factor in the unexpected direction.

Factor III: Internal Locus of Control/Achievement
Motivation: Result

<u>Item #</u>		<u>Promax Loading</u>
81 (Lev-2)	My life is determined by my own actions.	.60
134 (IE-2)	People's misfortunes result from the mistakes they make.	.54
170 (IE-2)	When I make plans ahead of time, I am almost certain that I can make them turn out right.	.54
118 (J-2)	What you get out of life is strictly a matter of what you put into it.	.52
75 (PRF-Ac)	I would like to accomplish something of great significance.	.44
151 (IE-2)*	What happens to me is my own doing.	.41
105 (PRF-Ac)	My goal is to do at least a little better than anyone has done before.	.39
60 (IE-3)*	Getting people to do the right thing depends on ability; luck has little or nothing to do with it.	.36

*Split between two or more factors.

<u>Item #</u>		<u>Promax Loading</u>
89 (Dean)	The end often justifies the means.	.36
90 (PRF-Ac)	I often set goals for myself which are very difficult to reach.	.35
76 (IE-2)	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.	.34
123 (J-1)*	It's not what you know but who you know that counts.	.34
172 (PRF-Ac)	Self-improvement means nothing to me unless it leads to immediate success.	.33
25 (PRF-Ac)*	I am sure people think I don't have a great deal of drive.	-.32
34 (J-1)	People with economic power will use you if they get the chance.	.31
111 (PRF-Ac)	I try to work just hard enough to get by.	.30

That this solution is indeed orthogonal may be seen from the interfactor correlations:

	<u>Factor II</u>	<u>Factor III</u>
Factor I	-.10	-.00
Factor II		-.13

To make certain that the final solution is free of intellect facet overlap, the principal component analysis was repeated for the final set of items, but this time including the intelligence facets and rotating four factors to equimax criterion. Word selection loaded Factor III, the Internal Locus of Control/Achievement Motivation: Result factor, .32,

*Split between two or more factors.

and figure analogy loaded the Achievement Motivation: Effort factor, $-.30$. There were no other intelligence facet loadings on these factors in excess of $.16$.

Black/Hispanic Males

The analysis of the Black/Hispanic male subsample proceeded as follows, utilizing principal component analysis throughout because the small number of subjects ($n = 29$) relative to the number of items precluded principal factoring:

1. Four 6-factor equimax rotations, as indicated by scree plots, starting with all achievement motivation and locus of control items and the four intelligence facets.

2. Three 3-factor equimax rotations, as indicated by scree plots, the intelligence facets not included.

3. A 4-factor equimax rotation with the intelligence facets included.

The first four analyses resulted in no intelligence factor whatsoever, the highest intelligence facet loadings being $.36$ and $.43$ for the two figural intelligence facets on the second pass, and $.38$ for figure analogy on the fourth pass. Since, as was the case for the Black/Hispanic female sample, deletion of 70 (118 - 48) achievement motivation and locus of control items prevented the formation of an intelligence factor, testing the full hypothesis among Black/Hispanic males had to be abandoned, and the remaining analyses were conducted without the intelligence facets.

Since the scree plot gave indication of three factors, only three factors were rotated to equimax criterion and only 39 items remained after the second pass, and these were rotated to promax criterion to make sure that these three factors were orthogonal. This "solution" not surprisingly accounted for only 14% of the total variance and was identical to the previous equimax solution as well as the varimax solution that preceded the promax solution. It is presented as follows:

Factor I is marked primarily by internal locus of control items from Rotter's (1966) I-E scale (IE-2), as well as items reflecting beliefs in luck and fate (IE-3) and one item from the system modifiability facet of locus of control (IE-4). Also loading this factor is an internal item from Levenson's (1972, 1973) I-E scale (Lev-2) and two luck/chance/fate items from James' (1957) I-E scale (J-3). In all cases non-internal item loadings are of the expected sign, i.e. denoting internality. Also loading this factor are three Jackson (1967b) PRF-Ac items (PRF-Ac). Taken together the internally keyed items and the achievement motivation items seem to reflect a kind of elan regarding life.

Factor I: Internal Locus of Control/Achievement
Motivation: Effort

<u>Item #</u>		<u>Promax Loading</u>
28 (IE-2)	People who can't get others to like them don't understand how to get along with others.	.74
70 (IE-3)*	In my case, getting what I want has little or nothing to do with luck.	.64
129 (IE-4)	As far as world affairs are concerned, most of us are the victims of forces we can neither control nor understand.	-.63
130 (Lev-2)	When I get what I want, it's because I worked hard for it.	.62
187 (PRF-Ac)	I prefer to be paid for how much work I've done, not how many hours I've worked.	.60
10 (IE-2)	The idea that teachers are unfair to students is nonsense.	.60
25 (PRF-Ac)	I am sure people think I don't have a great deal of drive.	-.59
46 (IE-2)	How many friends you have depends on how nice a person you are.	.57
182 (PRF-Ac)	I enjoy things which challenge me.	.54
63 (J-3)	A belief in luck or fate is a primitive way of thinking.	.54
134 (IE-2)	People's misfortunes result from the mistakes they make.	.52
170 (IE-2)	When I make plans ahead of time, I am almost certain that I can make them turn out right.	.51
5 (Col)	People who seem lucky are really those who are good at figuring out and taking advantage of situations.	.49
98 (J-3)	I consider myself a religious person.	-.42

*Split between two or more factors.

Factor II is marked primarily by achievement motivation items, mostly reflecting the outcome or goal of achievement motivation. The rest of the items in this factor, taking the signs of the loadings into account, reflect an external view of both the personal and political aspects of the locus of control dimension. Taken together these items seem to reflect a kind of determination to get ahead in spite of a realization that one is controlled by outside forces. This is, at best, a curious factor, but interpretable for this sample.

Factor II: Achievement Motivation: Result/
External Locus of Control

<u>Item #</u>		<u>Promax Loading</u>
133 (Ac)	I like to do my very best in courses.	.69
79 (PRF-Ac)	I like to be successful in the things I undertake.	.64
186 (PRF-Ac)	I prefer taking courses that are challenging and difficult.	.61
75 (PRF-Ac)	I would like to accomplish something of great significance.	.56
34 (J-1)	People with economic power will use you if they get the chance.	.52
53 (IE-4)*	There will always be wars, no matter how hard people try to prevent them.	.49
156 (J-2)	Very few things in this world control me; I usually do what I want.	-.48
123 (J-1)	It's not what you know, but who you know that counts.	.43
22 (IE-2)	Capable people who fail to become leaders have not taken advantage of their opportunities.	.41

*Split between two or more factors.

Factor III is another factor comprised primarily of both external locus of control items from Rotter's I-E scale (IE-1), Dean's I-E scale (D-1) and other items from Rotter's I-E scale (IE-3, IE-4) loading in the external direction. Curiously, two Jackson PRF achievement scale items (PRF-Ac) dealing with the achievement goals also load this factor, as was the case with Factor II.

Factor III: External Locus of Control/
Achievement Motivation: Result

<u>Item #</u>		<u>Promax Loading</u>
55 (IE-1)	Most people don't realize the extent to which their lives are controlled by accidental happenings.	.72
43 (D-1)	Sometimes I feel other people are just using me.	.70
76 (IE-2)	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.	.66
35 (PRF-Ac)	I would like to write a great novel or play.	.55
165 (PRF-Ac)	My goal is to do at least a little better than anyone has done before.	.50
26 (IE-1)	Many times exam questions are so unrelated to course work that studying is really useless.	.49
70 (IE-3)*	In my case, getting what I want has little or nothing to do with luck.	-.43
53 (IE-4)*	There will always be wars, no matter how hard people try to prevent them.	.40

*Split between two or more factors.

Even more curious, despite the similarities between Factors II and III, they are orthogonal:

Interfactor Correlations

	<u>Factor II</u>	<u>Factor III</u>
Factor I	.02	-.06
Factor II		-.05

To see whether or not the contamination of intelligence facets has been removed, a principal component analysis was performed, including the four intelligence facets and rotating four factors to equimax criterion. Two of the four intelligence facets loaded the fourth factor by themselves: word selection = $-.53$; figure analogy = $-.39$. The other two intelligence facets did not load this factor, nor did they load any of the non-intellective factors, only one loading ($.27$) exceeding $.20$.

Internal Consistency of Final Sets of Items

These rather odd--particularly in the case of Black/Hispanic males--factors show decent internal consistency coefficients except for male Factor III, as may be seen in Table 25.

In order to achieve these levels of reliability, suitable reflections had to be made, and a few items deleted as follows:

Females: F I: 130 (Lev-2)
 F II: (none; satisfactory as it stands)
 F III: 34 (J-1), 105 (PRF-Ac), 123 (J-1)

Table 25

Internal Consistency of Black/Hispanic
Lower Class Sample Factors
Coefficient Alphas

	<u>Alpha</u>
<u>Female Factors</u>	
I. General and Despondent External Locus of Control	.81
II. Achievement Motivation: (Lack of) Effort	.78
III. Internal Locus of Control/Achievement Motivation: Result	.70
<u>Male Factors</u>	
I. Internal Locus of Control/Achievement Motivation: Effort	.80
II. Achievement Motivation: Result/External Locus of Control	.75
III. External Locus of Control/Achievement Motivation: Result	.21

Males: F I: (none)

F II: 123 (J-1), 156 (J-2)

F III: (none; no amount of deletion produced
a high alpha)

Thus, for the female sample, one of the highest loading internal items, which did not seem to belong in this factor, has been removed from Factor I, and the two external items and one of the achievement motivation items, which did not seem appropriate to Factor III, have been deleted by this analysis.

For the male sample, two items, both of which seemed reasonable in the curious context of Factor II, have been removed.

These final sets of items are the ones that will be used to represent the three male and three female factors in forthcoming analyses.

Since it seemed instructive to examine the structure of the intelligence facets for the Black/Hispanic sample this was also done for males and females separately.

For females, the coefficient alpha when all four facets were included was .58; for the verbal component per se, .42; and for the figural component per se, .60. Thus it would appear that intelligence may be regarded as a unitary construct for Black/Hispanic females, though a rather weak one.

For males, coefficient alpha when all four facets were included was .64; for the verbal component per se, .81; for the figural component per se, .88. Thus it appears that the

verbal and figural components might best be treated separately for Black/Hispanic males, as will be further demonstrated in the next section.

Interrelationships Among Intelligence Facets

The facets of intelligence are intercorrelated as follows:

	<u>Word Selection</u>		<u>Word Analogy</u>		<u>Figure Selection</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Word Analogy	.69	.61				
Figure Selection	.00	.52	.14	.49		
Figure Analogy	-.07	.42	-.04	.53	.78	.63

The correlations between verbal intelligence and figural intelligence, and total intelligence, are as follows:

	<u>Verbal Intelligence</u>		<u>Figural Intelligence</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Total Intelligence	.60	.76	.82	.88

Moreover, verbal intelligence and figural intelligence are uncorrelated for males ($r = .03$) but correlated to some degree for females ($r = .34$).

Factor analysis of the four intelligence facets resulted in two significant eigenvalues for males (1.35, 1.23) and one (1.00) for females. The factor loadings were as follows:

	Factor Loadings		
	Males		Females
	<u>I</u>	<u>II</u>	
Word Selection	-.03	.77	.46
Word Analogy	.05	.79	.46
Figure Selection	.82	.10	.59
Figure Analogy	.81	-.08	.52

Thus for males, intelligence must be considered as two separate constructs--verbal and figural, while for females intelligence may be considered as a single construct.

Development of Compound Dependent Variables

The dependent variables available for this investigation are claimed high school and college grade point averages and actual class grade, and their intercorrelations are as follows:

	Claimed High School GPA		Claimed College GPA	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Claimed College GPA	.58	.68		
Class Grade	.00	.13	.04	.35

Thus, for both males and females, claimed high school GPA and claimed college GPA are substantially related; however only female's claimed college GPA bears any relationship to actual class grade. Apparently, for this sample at least, only among females do claimed (college) GPA's have anything to do with the actual state of affairs. This result mirrors

the findings of the pre-test (Cobb, 1977) in which claimed high school GPA bore almost no relationship with actual high school GPA ($\underline{r} = .08$) or class grade ($\underline{r} = .13$) and claimed college GPA had significant but low correlations with actual high school GPA ($\underline{r} = .29$) and class grade ($\underline{r} = .24$).

(Actual high school GPA was substantially related to class grade: $\underline{r} = .60$.) These results were obtained among lower class Ghetto Blacks and Hispanics similar to those in the present investigation.

These results are not at all contradictory to the often reported high relationship between claimed and actual grade point averages. These relationships have been reported for largely middle class White samples of subjects--not for lower class Blacks and Hispanics, as in the present situation. In this connection, Moreland, Miller, and Lauca (1981) found that poor students are less accurate in evaluating their own performance, but not the performance of others, and the higher the grade, the better the accuracy of self-evaluation. Relative to this point, the average class grade of the lower class Black/Hispanic subsample was 255 (197 for males) while for the White middle class subsample it was 322 (342 for females).

Factor analysis of the Black/Hispanic male and female intercorrelation matrices produced, in each case, only one eigenvalue approaching significance (.97, .95 respectively), and the factor loadings were as follows:

	<u>Male Factor Loadings</u>	<u>Female Factor Loadings</u>
Claimed High School GPA	.69	.59
Claimed College GPA	.70	.70
Class Grade	.06	.43

Thus it is necessary to consider three independent variables for males:

CLSGRD = class grade

DEPVAR = (claimed high school GPA and claimed college GPA)/2

TOTDEPVAR = (claimed high school GPA and claimed college GPA and class grade)/3

while one dependent variable--TOTDEPVAR--will suffice for the females.

Tests of Hypotheses

It was not possible to test the hypothesis among Black/Hispanic lower class males and females, using purified construct measures as was done for the White subsample, because it was not possible to obtain coherent factors among Black/Hispanic males and females, that could be identified as achievement motivation and locus of control factors--or facets. It was possible, however, to test the hypothesis among these subgroups using the Rotter (1966) Internal-External Locus of Control Scale and the Jackson (1967b) PRF-Ac scale, as they are reported in the literature, using the intelligence variables and dependent variables suggested by the analyses of the two previous sections.

The results of this procedure are presented as follows:

-- Black/Hispanic lower class males, verbal intelligence

Figure 11: causal path diagram

Table 26: decomposition table

-- Black/Hispanic lower class males, figural intelligence

Figure 12: causal path diagram

Table 27: decomposition table

-- Black/Hispanic lower class females, total intelligence

Figure 13: causal path diagram

Table 28: decomposition table

In the figures, the path coefficients are above each arrow, the zero-order correlations below each arrow, in parentheses.

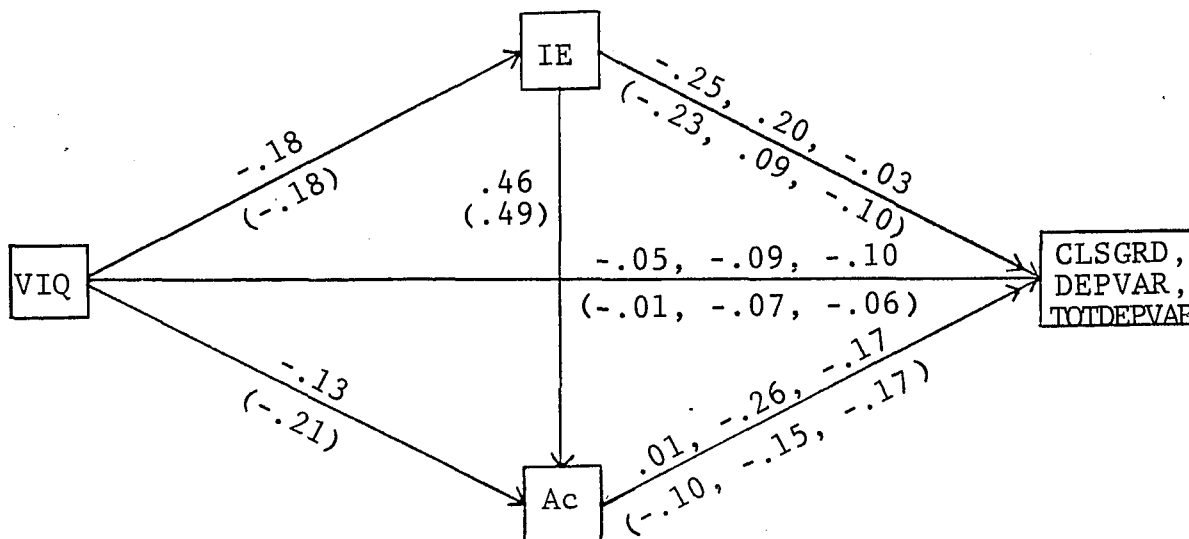
There are several differences between the results for Blacks/Hispanics and those for Whites.

1. On the whole, the IQ-Ac and IQ-IE correlations and path coefficients are somewhat higher; however the signs of these relationships are either always negative and contrary to logical considerations or sometimes positive, sometimes negative, which situation is also unacceptable on logical grounds.

2. The IE-Ac correlations and path coefficients are substantially higher.

3. The IQ-DV relationships are substantially lower for males, about the same for females.

In view of the failure to completely disentangle the Ac, IE, and IQ constructs among the Black/Hispanic subgroups, the first two results are not surprising; however that intelli-



Note. Where three coefficients appear, they have been calculated using three dependent variables: CLSGRD = class grade, DEPVAR = claimed high school and college GPA's, and TOTDEPVAR = all three, in that order.

Figure 11. Path Diagram: Black/Hispanic Lower Class Males.

Scales as Reported in Literature with Verbal Intelligence.

Table 26

Decomposition Table: Black/Hispanic Lower Class Males

	Scales as Reported in Literature with Verbal Intelligence					
	<u>VIQ:IE</u>	<u>VIQ:Ac</u>	<u>VIQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total Covariance	-.18	-.21	-.01, -.07, -.06	.49	-.23, .09, -.10	-.10, -.15, -.17
<u>Causal Effects</u>						
Direct	-.18	-.13	-.05, -.09, -.10	.46	-.25, .20, -.03	.01, -.26, -.17
Indirect	None	-.08	.04, .02, .04	None	.00, -.12, -.08	None
Total	-.18	-.21	-.01, -.07, -.06	.46	-.25, .08, -.11	.01, -.26, -.17
Non-Causal Effects	None	None	None	.03	-.02, .01, -.01	-.11, .11, .00

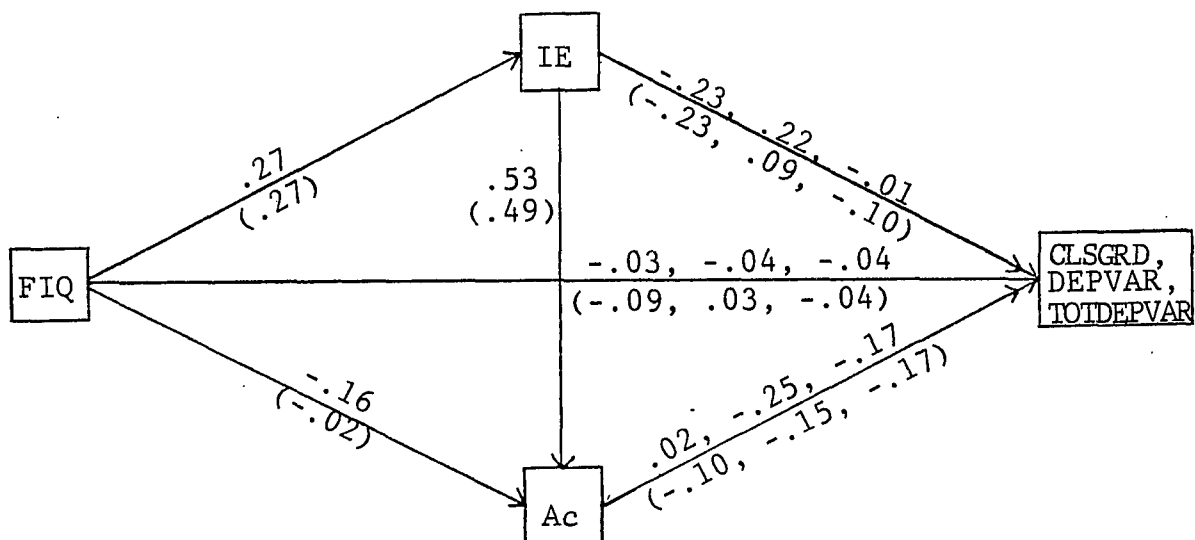
Note. Where three coefficients appear in either the figure or the table, they have been calculated using different dependent variables:

CLSGRD = class grade

DEPVAR = (claimed high school GPA and claimed college GPA)/2

TOTDEPVAR = (all three)/3

in that order.



Note. Where three coefficients appear, they have been calculated using three dependent variables: CLSGRD = class grade, DEPVAR = claimed high school and college GPA's, and TOTDEPVAR = all three; in that order.

Figure 12. Path Diagram: Black/Hispanic Lower Class Males.

Scales as Reported in Literature with Figural Intelligence.

Table 27

Decomposition Table: Black/Hispanic Lower Class Males

	<u>Scales as Reported in Literature with Figural Intelligence</u>					
	<u>FIQ:IE</u>	<u>FIQ:Ac</u>	<u>FIQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total Covariance	.27	-.02	-.09, .03, -.04	.49	-.23, .09, -.10	-.10, -.15, -.17
<u>Causal Effects</u>						
Direct	.27	-.16	-.03, -.04, -.04	.53	-.23, .22, -.01	.02, -.25, -.17
Indirect	None	.14	-.06, .07, .00	None	.01, -.13, -.09	None
Total	.27	-.02	-.09, .03, -.04	.53	-.22, .09, -.10	.02, -.25, -.17
Non-Causal Effects	None	None	None	.04	.04, -.01, .00	-.12, .10, .00

Note. Where three coefficients appear in either the figure or the table, they have been calculated using different dependent variables:

CLSGRD = class grade

DEPVAR = (claimed high school GPA and claimed college GPA)/2

TOTDEPVAR = (all three)/3
in that order.

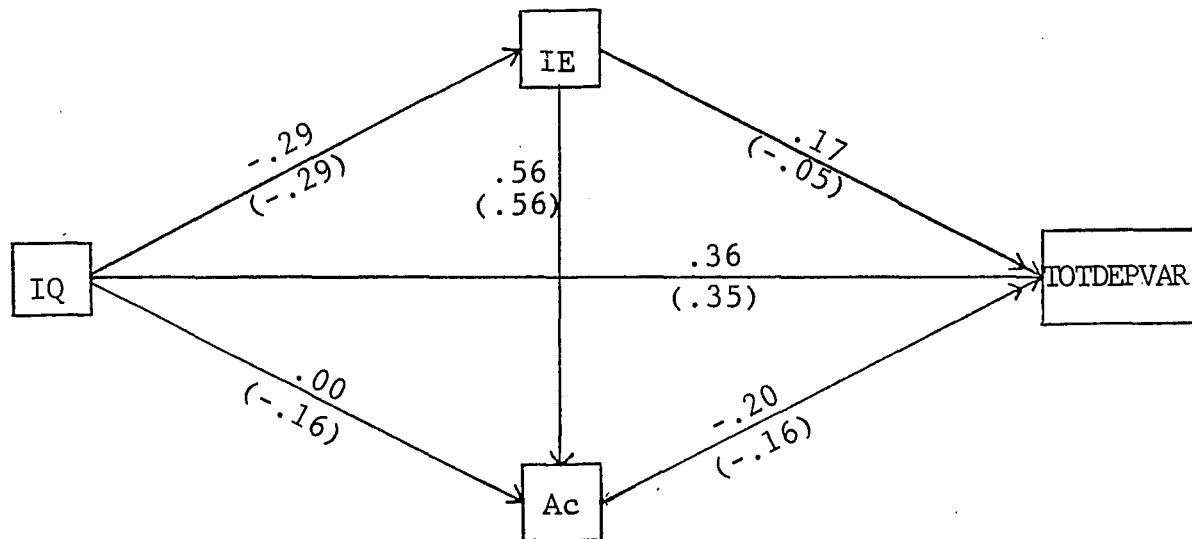


Figure 13. Path Diagram: Black/Hispanic Lower Class Females.

Scales as Reported in Literature.

Table 28

Decomposition Table: Black/Hispanic Lower Class Females

	Scales as Reported in Literature					
	<u>IQ:IE</u>	<u>IQ:Ac</u>	<u>IQ:DV</u>	<u>IE:Ac</u>	<u>IE:DV</u>	<u>Ac:DV</u>
Total Covariance	-.29	-.16	.35	.56	-.04	-.16
<u>Causal Effects</u>						
Direct	-.29	.00	.36	.56	.17	-.20
Indirect	None	-.16	-.01	None	-.11	None
Total	-.29	-.16	.35	.56	-.06	-.20
Non-Causal Effects	None	None	None	.00	-.02	.00

gence has little or no influence on achievement among Black/Hispanic males is at least surprising, at most appalling.

Despite these higher inter-relationships, the indirect paths that would support the hypothesis do not exhibit significant coefficients. Therefore the central hypothesis of this investigation is disconfirmed among both male and female Black/Hispanic lower class subjects.

That it would be a waste of time to test the hypothesis using facets of achievement motivation and locus of control may be seen in Table 29. Though somewhat higher than for White middle class subjects, the IQ-Ac and IQ-IE relationships are still of insufficient magnitude to support the required causal paths.

Table 29

Correlations of Other Independent Variables
with Intelligence
Black/Hispanic Lower Class Sample

	<u>Black/Hispanic</u>		
	<u>Males</u>		<u>Females</u>
	<u>Verbal</u>	<u>Figural</u>	<u>Total</u>
Ac-Effort	-.16	-.20	.20
Ac-Result	.10	-.03	.23
IE-1 (Collins)	.24	-.20	.27
IE-2 (Collins)	-.19	.13	-.24
IE-3 (Collins)	-.03	-.23	-.27
IE-4 (Collins)	.07	-.01	-.01

The Extent of Stylistic Responding

In order to assess the amount of stylistic (non-content) responding by Black/Hispanic males and females, the same kinds of indices were created as were done for the White subsamples, again using achievement motivation and locus of control items not included in the final factors/facets used to test the hypothesis:

1. NEXT: the number of times a respondent utilized extreme response categories: "agree completely" and "disagree completely" were coded "2," "agree somewhat" and "disagree somewhat" were coded "1," and "neither agree nor disagree" was coded "0"; 44 items were available for this purpose.

2. NTRU: the number of times a respondent answered in the affirmative--"agree completely" or "agree somewhat"; 44 items were available for this purpose.

3. NFAL: the number of times a respondent answered in the negative--"disagree somewhat" or "disagree completely"; 44 items were available for this purpose.

4. These items were also categorized as to whether they were socially desirable or undesirable and keyed for these responses; 19 items were judged socially desirable (NSD) and 25 items were judged socially undesirable (NSUD).

5. In addition the following indices were constructed: NFALSD--items that were socially desirable but answered false (n = 19); NFALSUD--items that were socially undesirable and answered false (n = 25).

6. INFR = an 11-item infrequency scale, denoting care-less responding.

7. DEF = a 7-item scale denoting defensive responding.

The intercorrelations of these indices with the factors that evolved, as well as the variables used to test the hypothesis, are contained in Table 30 for Black/Hispanic male respondents and Table 32 for Black/Hispanic female respondents.

For Black/Hispanic lower class males the main result of this analysis is compelling--and depressing: virtually all of the responses of this group can be better explained by the operation of various response styles, than by the apparently slight attention given to the intended content of these items, as may be seen in Table 30.

For the factors obtained in previous sections, the situation is as follows:

Factor I--tentatively named "Internal Locus of Control/Achievement Motivation: Effort"--is mainly a social desirability factor, as may be seen by its correlation (.46) with NSD. Its high apparent relationship with internal locus of control ($r = .77^*$) is at least partly mediated by the substantial relationship of internal locus of control and social desirability responding ($r = .52^*$). This factor bears only a slight relationship with the effort facet of

*Table not shown for purpose of brevity.

Table 30

Correlations of Response Style Indices with Factors,
and Variables Used to Test Hypothesis:
Black/Hispanic Lower Class Males

	<u>NEXT</u>	<u>NTRU</u>	<u>NFAL</u>	<u>NSD</u>	<u>NSUD</u>	NFAL <u>SD</u>	NFAL <u>SUD</u>	<u>INFR</u>	<u>DEF</u>
Factor I	.20	.18	-.01	<u>.46</u>	-.16	-.32	.17	.06	.13
Factor II	.17	.23	-.18	.22	-.13	-.22	-.09	<u>.34</u>	<u>.38</u>
Factor III	.03	<u>.41</u>	<u>-.44</u>	.19	<u>-.34</u>	-.28	<u>-.34</u>	<u>.37</u>	.15
Ac (PRF)	.22	<u>.72</u>	<u>-.40</u>	<u>.44</u>	<u>-.60</u>	-.17	<u>-.34</u>	.11	.23
IE (Rotter)	.28	<u>.44</u>	-.06	<u>.60</u>	-.05	-.32	.17	.12	.09
Verbal IQ	.22	<u>-.42</u>	<u>.44</u>	-.19	-.09	<u>.50</u>	.24	.17	-.07
Figural IQ	-.25	.01	-.20	.08	.12	.06	-.26	-.17	-.08

Note. Underlined correlation coefficients are significant at at least the .05 level.

achievement motivation ($r = -.18^*$).

Factor II--tentatively labeled "Achievement Motivation: Result/External Locus of Control"--is influenced almost as much by a combination of careless ($r = .34$) and defensive ($r = .38$) responding as it is by either the goal component of achievement motivation ($r = .64^*$) or external locus of control ($r = .53^*$). In fact, part of the apparently high correlation of the achievement motivation component with Factor II is mediated by defensive responding, since Ac-Result itself correlates .38* with defensiveness.

*Table not shown for purpose of brevity.

Factor III--tentatively labeled "External Locus of Control/Achievement Motivation: Result"--is clearly an acquiescence/social desirability factor as may be seen from its positive correlation with NTRU ($r = .41$) and its negative correlations with NFAL ($r = -.44$), NSUD ($r = -.34$) and NFALSUD ($r = -.34$). Also implicated is careless responding ($r = .37$). The apparently high correlation of this factor with external locus of control ($r = .63^*$) is at least partly mediated by the high relationships that external locus of control bear with acquiescence (NTRU = .32, NFAL = -.49) and social undesirability (NSUD = .53)*. The correlation of this factor with the goal component of achievement motivation is only .34*.

As for the scales used to test the hypothesis:

1. Responses to the PRF-Ac scale are primarily and overwhelmingly determined by a combination of acquiescence (NTRU = .72, NFAL = -.40) and desirability responding (NSD = .44, NSUD = -.60)--for Black/Hispanic males.

2. Responses to the Rotter IE scale are primarily determined by social desirability (NSD = .60), but almost as much by acquiescence (NTRU = .44).

That these interpretations are correct is buttressed by the expected relationships between response styles and verbal intelligence -- r (VIQ/NTRU) = -.42, r (VIQ/NFAL) = .44, r (VIQ/NFAL SD) = .50; since one kind of acquiescent

*Table not shown for purpose of brevity.

responding is related to low intellectual reasoning capabilities (Damarin & Messick, 1965; Edwards & Walsh, 1964; Jackson, 1967a; Messick, 1967). That low interpretive skills are operating here may be seen from a comparison of average intelligence scores for the Black/Hispanic sample with those of the White sample in Table 31.

Table 31
Intelligence Scores
White Middle Class Versus Black/Hispanic Lower Class

	White Middle Class				Black/Hispanic Lower Class			
	Males		Females		Males		Females	
	<u>X̄</u>	<u>SD</u>	<u>X̄</u>	<u>SD</u>	<u>X̄</u>	<u>SD</u>	<u>X̄</u>	<u>SD</u>
Word Selection	13.30	3.22	14.83	2.67	10.55	2.61	11.26	3.25
Word Analogy	11.41	4.49	13.61	4.18	8.55	6.21	8.00	5.10
Figure Selection	11.70	5.26	13.18	5.27	9.38	6.87	7.02	6.17
Figure Analogy	10.15	4.83	11.53	5.61	8.28	6.84	6.34	5.43
Total Intelligence	11.63	4.45	13.29	4.43	9.18	5.63	8.16	4.99

As was the case for males, most of the responses for Black/Hispanic lower class females also can be explained largely in terms of stylistic responding (Table 32).

Regarding the factors obtained in previous sections, the results are as follows:

Table 32

Correlations of Response Style Indices with Factors,
and Variables Used to Test Hypotheses:
Black/Hispanic Lower Class Females

	<u>NEXT</u>	<u>NTRU</u>	<u>NFAL</u>	<u>NSD</u>	<u>NSUD</u>	<u>NFAL</u> <u>SD</u>	<u>NFAL</u> <u>SUD</u>	<u>INFR</u>	<u>DEF</u>
Factor I	-.08	<u>.48</u>	<u>-.50</u>	.23	<u>.55</u>	<u>-.34</u>	<u>-.49</u>	.15	<u>.33</u>
Factor II	-.28	.25	<u>-.36</u>	-.11	<u>.43</u>	-.09	<u>-.41</u>	-.15	.15
Factor III	-.04	<u>.53</u>	<u>-.40</u>	.35	<u>.48</u>	<u>-.33</u>	<u>-.35</u>	.27	.04
Ac (PRF)	-.09	<u>.51</u>	<u>-.34</u>	.25	<u>.51</u>	-.20	<u>-.35</u>	-.02	.22
IE (Rotter)	-.08	<u>.60</u>	<u>-.52</u>	<u>.47</u>	<u>.52</u>	<u>-.55</u>	<u>-.41</u>	.20	.11
Total IQ	.11	-.05	.27	.19	-.23	.07	.31	-.04	.16

Note. Underlined correlation coefficients are significant at at least the .01 level.

1. Factor I--tentatively named "Internal Locus of Control/Achievement Motivation: Effect"--is heavily influenced by both acquiescent responding (NTRU = .48, NFAL = -.50) and the willingness to ascribe to socially undesirable characteristics (NSUD = .55, NFALSUD = -.49); also implicated is defensiveness (DEF = .33). There also appears to be some content responding as may be seen from the correlations of this factor with internal locus of control ($\underline{r} = .24^*$) and the effort component of achievement motivation ($\underline{r} = .36^*$). However, these relationships are most probably mediated by the substantial correlations between internal locus of control and acquiescence ($\underline{r} = -.45^*$) and

*Table not shown for purpose of brevity.

social desirability ($\underline{r} = .51^*$) and between the effort component of achievement motivation and acquiescence ($\underline{r} = .34^*$), as well as social undesirability ($\underline{r} = .44^*$).

2. This same tendency to ascribe to socially undesirable statements ($\underline{r} = .43$) is also implicated in Factor II--tentatively named "Achievement Motivation: Result/External Locus of Control." This factor bears no relationship to the goal component of achievement motivation ($\underline{r} = -.04^*$), but does show an apparent relationship with external locus of control ($\underline{r} = .41^*$), which, however, is most probably mediated by external locus of control's relationship with social desirability ($\underline{r} = .36^*$) and, particularly, social undesirability ($\underline{r} = .55^*$).

3. Factor III--tentatively named "External Locus of Control/Achievement Motivation: Result"--is mainly determined by acquiescence ($NTRU = .53$, $NFAL = -.40$), but the previously mentioned self-ascription of social undesirability characteristics ($NSUD = .48$) is also implicated. The correlation of this factor with external locus of control is $.41^*$, and its correlation with the goal component of achievement motivation is $.44^*$. Once again, however, acquiescence is involved with both of these dimensions ($\underline{r} = .36, .35$, respectively*).

Regarding the scales used to test the hypothesis, both the PRF-Ac scale and the Rotter IE scale are heavily

*Table not shown for purpose of brevity.

influenced by a combination of acquiescent and desirability responding. The PRF-Ac scale is correlated with acquiescent response tendencies ($NTRU = .51$, $NFAL = -.34$) and the tendency to endorse socially undesirable statements ($NSUD = .51$, $NFALSUD = -.35$), while acquiescence ($NTRU = .60$, $NFAL = -.52$) and both social desirability ($NSD = .47$, $NFALSD = -.55$) and undesirability ($NSUD = .52$, $NFALSUD = -.41$) are implicated in the responses to the Rotter-IE scale.

As for levels of stylistic responding, lower class Black/Hispanic males and females--particularly the former--exhibit scores on the numbers of extreme responses (NEXT), true responses (NTRU), socially desirable responses (NSD), and socially undesirable responses (NSUD), that are significantly higher than those exhibited by White middle class males and females. This latter finding, while it could reflect a tendency towards self-deprecation, more likely reflects the fact that the endorsement of a socially undesirable response requires an agreement response which, by definition, is "true." Thus this response is confounded by acquiescent responding. In fact, by similar reasoning, in all of the previous findings in which acquiescence and social desirability were seen to be operating in tandem, acquiescence is the major response determiner, with social desirability playing a relatively minor role--the very opposite of what is usually the case among White middle class subjects (Damarin & Messick, 1965). As would be expected from the results presented thus far, the White

subsamples exhibit higher usage of the negative response categories (NFAL) than do the Black/Hispanic subsamples. The very much higher levels of extremity responding among lower class Blacks and Hispanics is in line with previously reported results, and lack of verbal skill is implicated (Hamilton, 1968). All of these results, which are presented in Table 33, are significant at the .001 level of significance.

Table 33

Mean Levels of Stylistic Responding:
White Middle Class Versus Black/Hispanic
Lower Class Samples

	<u>Lower SES Black/Hispanic</u>		<u>Higher SES White</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
NEXT	16.54	15.43	9.97	10.96
NTRU	19.80	19.36	14.42	15.57
NFAL	17.27	16.62	19.05	19.57
NSD	11.51	11.25	9.18	9.89
NSUD	8.38	8.25	5.58	5.94

As for the secondary hypotheses of this investigation, both of which involve the Black/Hispanic subsample . . .

-- the failure of the model among lower class groups,

-- the equality of lower-class males and females

on achievement motivation and internal locus of control . . .

The first secondary hypothesis might appear to be confirmed among lower class Blacks and Hispanics. However, we

really can't say, since the model also failed among the White middle class sample and besides, the evidence presented regarding the overwhelming influence of stylistic responding on the Black/Hispanic sample, with the concomitant lack of content responding, dictates against any conclusion in this regard.

The other secondary hypothesis is supported: there are no sex differences in the Black/Hispanic subsample in levels of achievement motivation or internal locus of control-- or in anything else for that matter, but neither are there any sex differences in the White subsample. One reason for this latter finding could be the fact that one-quarter of the White female subsample consisted of very upwardly mobile women who had already graduated college, while such a group was not present in the White male subsample.

The mean levels of achievement motivation along with some other key variables are presented in Table 34. While some of these scores are significantly different from one another at the .05 level, these differences are trivial in terms of the scale used throughout: agree completely = 5, agree somewhat = 4, neither agree nor disagree = 3, disagree somewhat = 2, disagree completely = 1. Thus the fact that White females "agree somewhat more" to items connoting the effort component of achievement motivation or that Blacks/Hispanics are "somewhat less" external (this is of course absurd and is a function of stylistic responding) is of no consequence whatsoever. It can most parsimoniously be said

Table 34

Mean Levels of Main Variables Across Subgroups:
 White Middle Class Versus Black/Hispanic
 Lower Class Samples

	<u>White Middle Class</u>		<u>Black/Hispanic Lower Class</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
Achievement Motivation (PRF-Ac)	3.71	3.81	3.76	3.77
Achievement Motivation: Effort	3.50	3.76	3.63	3.65
Achievement Motivation: Result	4.22	4.28	4.17	4.12
Internality (Rotter I-E)	3.21	3.23	3.16	3.16
IE 1: External Locus of Control	3.53	3.40	3.10	3.21
IE 2: Internal Locus of Control	3.25	3.30	3.50	3.33
IE 3: Belief in Luck	3.36	3.22	3.49	3.31
IE 4: System Modifiability	2.96	2.95	2.69	2.78

that there are no meaningful differences among these groups, despite some "statistically significant" differences. (See Guttman, 1977; Schwartz & Dagleish, 1982 for some additional comments on "significant differences" in personality research.)

CHAPTER IV

DISCUSSION

Because the problems encountered in this investigation are quite different for White middle class as opposed to Black/Hispanic lower class subjects, they will be considered separately. The main problem in the former group is the disconfirmation of the central hypothesis of this investigation; the main problem in the latter group is that, no matter what the results of hypothesis testing, such results must be viewed against the almost total lack of content responding by Blacks and Hispanics.

White Middle Class Subsample

The main hypothesis of this investigation--that some level of intelligence is necessary for the formation of an internal locus of control, which in turn is a necessary antecedent for the formation of achievement motivation--was disconfirmed, mainly because of the low zero-order correlations and path coefficients between intelligence and locus of control: $-.04$ to $.02$ for White subjects (and $-.29$ to $.27$ for Black/Hispanic subjects). An alternative hypothesis--intelligence $\rightarrow$ achievement motivation $\rightarrow$ internal locus of control was also rejected, mainly because of the low relationships between intelligence and achievement motivation: $-.03$ to $.27$ for White subjects (and $-.21$ to $.00$ for Black/Hispanic subjects).

The low zero-order correlations previously reported in the literature between intelligence and locus of control ($-.07$ to $.34$), as well as the low reported correlations between intelligence and achievement motivation ($.02$ to $.31$) could have been taken at the outset as compelling reasons for not proceeding with this entire investigation: there was only a slim chance that, given such low zero-order correlations between variables that are antecedent to the other variables in the causal path, high enough path (partial) coefficients could occur to sustain the model. It must be concluded that this laborious undertaking probably should never have been implemented.

Even though the hypothesis was disconfirmed at the level of data, it still has a logical and intuitive appeal. Without some level of ability (intelligence), with the accompanying self-perception of capability, it would seem to be madness to think of oneself as being in control of one's environment. And how, beyond the level of wishful thinking, could one entertain thoughts of excelling in some field of endeavor if one thought that one was merely a pawn of external forces and at the mercy of the capriciousness of chance factors?

Examples of the disparity between common-sensical notions having logical and intuitive appeal and empirical "evidence" (that derives from not so rationally appealing theories) abound in psychology.

For instance Bem (1967, 1968) in the formation of his Self-Perception Theory was led to seriously entertain the notion that behavior causes attitudes. Indeed, this notion is an unavoidable consequence of this theory. Though psychologists did not "know" (in the sense of its being proven) that attitudes cause behavior, most psychologists accepted this as a pretty reasonable idea--all except those who did not understand the insufficiency of the data that, at the same time, was suggesting an inconsistency in the attitude-behavior relationship (e.g. Wicker, 1969). Given the perception that there was indeed a discrepancy in the attitude-behavior relationship, it was natural for those who harbored this misperception to seek an explanation for this discrepancy in the directionality of the relationship, by accepting Self-Perception Theory's corollary proposition that behavior causes attitudes. It was not until some ten years later that the logically acceptable alternative--that attitudes cause behavior--was "proven" for the benefit of all psychologists by Kahle and Berman (1979). Had they been more acquainted with the marketing research literature, they would have known that there was already pretty good evidence that attitudes cause behavior, and not the other way around, from lagged regression studies reported by Assael and Day (1968) and Assael and Swanson (1968). More recently, Bentler and Speckart (1981), criticizing the cross-lagged panel analysis of Kahle and Berman, have confirmed this finding using structural equation techniques (which inci-

dentally, have at least as many problems as cross-lagged panel analysis).

Another example of the transient violation of common sense in psychology is Mischel's (1968, 1971) extreme situationist position, which was never demonstrated at the level of data, but which received its main "support" from some apparent weaknesses in the trait psychology position, particularly so-called violations of trans-situational consistency of traits. It wasn't until Bowers (1973) displayed the logical weaknesses of the situationist position and Cartwright (1975) and Golding (1975), among others, demonstrated its weaknesses at the level of data, that Mischel (1976) was forced to mitigate his position.

So here we have two time-honored notions in psychology--that attitudes cause behavior and that trans-situational consistency of psychological traits holds (in terms of the rank order of individuals on these traits across situations: cf. Goldberg, 1972)--that have come under much attack and have been finally "proven." And, in the present investigation, we have a hypothesis that seems logical, in fact is quite ordinary and common-sensical, that is ponderously disconfirmed. Given the very ordinariness of the hypothesis--in fact, parts of it appear in lectures, even statistical program manuals, as examples of causal path analysis and structural equation techniques--it is very likely that other investigators have attempted to verify this hypothesis or ones similar to it, but nothing has been published because

of the negative results that probably occur.

As has been stated, the main reason for the failure of this hypothesis is the very low zero-order correlations and path coefficients relating intelligence and locus of control, as measured. A hint of what may be wrong is furnished (admittedly by hindsight) in the introduction section of this dissertation, in which available data show that while the intelligence-locus of control relationship is quite low among adults, this relationship is quite high among children. It may be that causal or structural equation modeling of adults measured at a single point of time is not appropriate, and that longitudinal data along with suitable analytic techniques are required. What is being tentatively suggested is that there is an intelligence-internal locus of control relationship among some children at some point in their development that dissolves in aggregated measurements taken when they are adults. It may be that some (unknown) sufficient level of intelligence is required for the formation of an internal locus of control in children, and whether or not children become internal in their perceptions of their roles in their milieus, is dependent on other factors that occur at some later date and obliterate the intelligence-locus of control relationship. Given a group of children, all with the required levels of ability, some will become internal, some will not, and the intelligence-locus of control connection may disappear in groups of adults.

Another possible reason for the exhibited lack of relationship between intelligence and locus of control is that the actual relationship is curvilinear and not linear. While a logically appealing rationale could be made for this possibility, no amount of higher exponents in the regression equation could raise sufficiently what is essentially no relationship exhibited by the linear regression equations, at least among White subjects. Besides, to my knowledge, Cronbach's (1975) conjecture that the contradictions in psychological data are due to higher-order interactions not specified by linear equation models, has never been demonstrated empirically for psychometric data. While this notion is logically appealing, the extent of error variance in psychometric data, along with low predictive relationships, preclude any improvement of curvilinear regressions over the linear regression model which, in a sense, is already more than adequate for most psychological data.

Still another possibility is the suppressor effect of an unspecified variable attenuating the intelligence-locus of control relationship. This is not apparent, however, from the causal analysis decomposition tables (Tables 18-21).

The middle segment in the causal path--IE $\rightarrow$ Ac--while also not exhibiting very high zero-order or path coefficients (.13 to .35), was not the main cause of rejection of the hypothesis, but did contribute to it. Why this relationship is customarily so low has long puzzled investigators. Wolk and Ducette (1971), in their article tellingly entitled

"Locus of Control and Achievement Motivation: Theoretical Overlap and Methodological Divergence," put the matter as succinctly as anyone:

The continued failure to find a consistent relationship between measures of need for achievement and locus of control, despite surface overlap in theoretical structure, remains a problem that needs to be resolved. It is possible that the relationship between the two constructs is much more complex than the linear relationship implied in simple correlational techniques. . . . It is also possible that in reality the two constructs are not the same.

Perhaps the situation is the same as the one tentatively posited for intelligence-locus of control relationships: one that obtains in the course of development but disappears later, in aggregated adult samples.

The last segment in the causal path--Ac $\rightarrow$ D.V.--also exhibited low zero-order and path coefficients (-.15 to .31) and, in a sense, this was the most unexpected finding regarding the hypothesis: if any relationship could have been counted on to yield higher coefficients, it was this one, especially for males, as reported in the literature. A possible explanation for these low coefficients is that the dependent variables (achievement measures) that were available--claimed GPA's that do not fully represent actual GPA's, and class grade that reflects only a single point in the achievement distribution--were deficient. Actual GPA's--both high school and college--could not be obtained for the great majority of subjects. While the measures that were available--claimed high school and college GPA's and class grade--were probably not that inadequate, their

use (even in various combinations) must have caused some attenuation in the achievement motivation-achievement relationship. However, commenting on this issue, Binder, Jones, and Stromig's (1970) review shows that even aptitude tests reach an asymptote of around .50 in the prediction of academic performance. Also Margran's (1978) review of the literature showed little prediction of academic achievement beyond that accounted for by intellectual ability. Thus, it may have been unwarranted at the outset to expect any higher relationship between achievement motivation and performance.

In summary, it should have been recognized at the outset that, given the low zero-order correlations that, more often than not, are reported between the variable pairs that constitute the segments of the causal sequence that reflects the main hypothesis of this investigation--i.e. intelligence and locus of control, locus of control and achievement motivation, achievement motivation and actual achievement--it was unreasonable to expect the emergence of higher-order partial correlation coefficients--and at that, three of them--of sufficient magnitude to support the hypothesis.

Of some interest, however, are the ancillary findings that occurred in the course of the analyses of these data, which do provide confirmation for some notions in psychometric theory, particularly the construct strategy of test construction, and these are as follows:

1. By taking a facet approach (Butt & Fiske, 1968) to the constructs of an investigation--in the present instance

by including items which represent other constructs which, on a rational-intuitive basis, appear to be somewhat related to the constructs of interest--it is possible to increase content saturation and decrease the influence of various response styles and biases, and thereby increase the discriminant validity of the constructs. In the present investigation, items were included from scales designed to measure depression (and "hopelessness"), cynicism, paranoia, and self-deprecation, and any of the achievement motivation and locus of control items that were found, via various correlational techniques, to be more related to the former group of constructs than to the achievement motivation and locus of control constructs, were discarded. Though this procedure can increase fidelity at the expense of bandwidth, it did not do so in the present study, as may be seen from the very high correlations between the original and purified scales (notwithstanding that these were part-whole correlations by reason of items that were common to these two sets of scales), and it certainly increased discriminant validity, as may be seen from the increased independence of these constructs as the analysis progressed.

2. Similarly, the inclusion of response style scales--desirability, defensiveness, infrequency--and the deletion of items bearing high relationships with these scales, also increased discriminant validity. This may be seen from the reduced relationships of the achievement motivation and locus of control factors and facets with indices of

stylistic responding, after this procedure as compared to their correlations prior to this procedure. In fact, only the external locus of control facet still bears a significant relationship with acquiescence and desirability after this procedure was implemented, in the White subsample.

3. There can be no doubt of the influence of stylistic responding, even when the bulk of the items derive from scales from which these influences have been purged. This may be seen from the factor analysis of the total set of items which resulted in clearly defined content factors, but also factors that could be readily identified as desirability, careless responding, defensiveness, and acquiescence.

4. The influence of extremity response style is pervasive. If it is necessary to determine the structure of a set of items via multivariate techniques, it is best to present these items in a Likert format; however if the structure is already known and the purpose of an investigation has to do with (e.g.) levels of response or even item analysis, it is a far better procedure to cast items in a dichotomous format which, by definition, removes this response style.

5. The PRF-Ac scale appears to contain two facets, one reflecting the effort component of achievement motivation and the other reflecting the result or goal of this motive. The Rotter I-E scale is also multifaceted, containing facets reflecting external locus of control, internal locus of

control, beliefs in luck, fate and chance, and system modifiability.

6. It is possible to obtain scales representing the two facets of achievement motivation and the four facets of locus of control, that are factorially invariant across subgroups--at least among White middle class respondents. This is not to say that the items chosen for this purpose in the present investigation will be factorially invariant across the subsamples of subsequent investigations, since the extent to which these results are peculiar to the present sample of subjects is unknown. Factorial invariance should be the initial concern of any investigation having respondent subgroupings as a feature.

The central hypothesis of this investigation was disconfirmed via causal path analyses of both the purified sets of constructs and those that customarily appear in the literature; i.e. the PRF-Ac scale and Rotter's I-E scale. If the hypothesis had been disconfirmed using the purified variables (with higher discriminant validity and less influence of response styles), but confirmed using the PRF-Ac and Rotter I-E scales (lower discriminant validity and more influence of response styles), this would have created an interesting dilemma.

Causal path models (Duncan, 1966; Heise, 1975) and simultaneous equation models (Johnston, 1972), as well as the newer structural equation models (Jöreskog & Sörbom, 1979; Bentler & Weeks, 1980), all require inter-relation-

ships among variables, be they manifest or latent. Rarely does anyone ever inquire as to what causes these interrelationships. While all of these models contain methods for partitioning out sampling error and error of measurement, conceived as random (usually normal) variates, none of them contain methods for partitioning out constant error--response styles and biases, halo effects, and scale factors--which are generally co-linear with content factors. A case in point are the recent studies by Bentler and Speckart (1979, 1981) which capitalize upon the inter-relationships provided by scale factors (method variance) implicit in the Fishbein and Azjen (1975) attitude model--which factors are co-linear with the content factors. While all of these models contain a "room" for constant errors in the form of specification error, these constant errors are very unlikely to find their way into this room because this very co-linearity inhibits their detection.

In point of fact, econometricians using the older simultaneous equation models (e.g. two-stage least squares regression--2SLS) do look for evidence of unspecified factors, in departures from normality in the distribution of the error (disturbance) term. These can be interpreted as due to specification errors (the failure to include an important variable in the model or mis-specification of the form of the relationship between two or more variables in the model) and can be detected from autocorrelated disturbances. Methods are available (e.g. 2 SLS) that, at

the first stage, purge the endogenous variables of this influence and, at the second stage, compute the regression equation using the purged endogenous variables. Unfortunately, at least one exogenous (external to the system) variable is required to do this, and such variables are not normally available in psychological data, except by the artifices of proclaiming one of the endogenous variables as exogenous to the system or creating a new variable that is a compositional aggregate of one of the endogenous variables.

Thus, if the hypothesis was disconfirmed with purified variables but confirmed with the usual scales as quoted in the literature, two conclusions would be possible:

1. The disconfirmation of the hypothesis with purified variables is the correct outcome and the confirmation of the hypothesis with the unpurified variables capitalized on higher zero-order and partial coefficients that were due to the influence of various response styles and biases.

2. The confirmation of the hypothesis with unpurified variables is the correct outcome and the disconfirmation of the hypothesis with the purified variables resulted from the reduced bandwidth of these variables, i.e. some facets of the constructs were deleted.

About all that could be done to justify the first alternative would be to demonstrate that the purified variables correlated very highly with the unpurified variables (i.e. had as much bandwidth) and the unpurified scales

correlated more highly with response style indices than did the purified variables (i.e. capitalized on spurious sources of variance to increase relationships among the variables). Failure to demonstrate this would render the second alternative more plausible.

With the current status of psychological theory being what it is, arguments regarding whether or not the world is orthogonal or oblique are artificial: it behooves each investigator to attempt to purify the variables in an investigation at the outset and to recognize facets of these constructs, if present. Only if it proves impossible to render the variables (or sets of variables constituting scales) coherent and non-overlapping and a logical substantive interpretation can be given for the correlations among variables, and it can be demonstrated that various sorts of method variance are not accounting for these correlations, can the variables in question be regarded as meaningfully oblique to one another. And oblique (correlated) variables are essential to any hypothesis testing system that is based on interrelations among variables.

If this procedure were followed, along with the demonstration of factorial invariance across subgroups, much of the confusion and conflicting results would be removed from psychometric investigations, which inconsistencies derive mainly from the manner in which psychologists operationalize their constructs and conceptualize their operations. (See in these regards, Fiske & Pearson, 1970.)

Black/Hispanic Lower Class Subsample

The main finding for the Black/Hispanic sample of subjects was not that the main hypothesis of this investigation was disconfirmed using the intelligence scales, the PRF-Ac scale and Rotter's I-E scale, but that it was impossible to extract factors that could be identified as these constructs, or to obtain any meaningful factor structure at all. Every conceivable strategy was implemented but it proved impossible to disentangle the achievement motivation, locus of control and intelligence facets from one another.

While it was possible to name the resulting factors (which were always different for males and females), such interpretive efforts were so unconvincing and the factors so unstable that an extensive investigation of the influence of stylistic responding was performed. While this analysis was conducted on a post hoc basis, enough indices of stylistic responding were available to make the following conclusions inescapable.

1. The responses of both the male and female subsamples of Black/Hispanic subjects had virtually nothing to do with either possible latent or the manifest meanings of the items used in this investigation; i.e. there was an almost total lack of content responding.

2. The responses of the Black/Hispanic subsamples can be almost entirely accounted for by the operation of various response styles, along with low intellectual ability and, it may be surmised, deficient reading skills.

The lack of content responding can be seen in illogical combinations of items that formed the resulting "factors." Even more convincing but not possible to demonstrate in this document because of space limitations, was the evanescent nature of the factors that were extracted, deletions of a few items changing the factor structure in surprising and implausible ways; also, it proved impossible to disentangle the intelligence facets from the achievement motivation and locus of control factors.

That the responses of the Black/Hispanic subsamples can be explained in terms of stylistic responding has been demonstrated by the substantial correlations of both male and female "factors" with indices of stylistic responding, such correlations being significantly and substantially higher than those that resulted from a similar analysis conducted on the White subsamples. Moreover, it was not only possible to identify the resulting factors as response style factors, it was almost impossible to identify them as content factors. For males, the three factors that emerged were

I. Desirability Responding

II. Defensive and Careless Responding

III. Acquiescent/Desirability Responding

. . . while the three factors that emerged among females were

I. Acquiescent/Desirability Responding

II. Desirability Responding

III. Acquiescent/Desirability Responding

These are curious and extreme results: while the psychological literature is replete with evidence for the influence of stylistic responding in personality inventories, rarely do we have evidence of content being literally displaced by response styles. For example, while Roberts and Reid (1978) report that they obtained totally different Rotter I-E factor structures for low SES Whites and Blacks enrolled in a Head Start program, they did get an apparent factor structure. (They also obtained three, and not the usual two factors from administration of the I-E scale in its forced choice format.) However, they made no effort to analyze the influence of stylistic responding and, had they done so, they might have drawn different conclusions. Also, while Gurin, Gurin, Lao, and Beattie (1969) reported a reasonable factor solution for their set of augmented I-E scale items, it must be remembered that this study was conducted among a Black middle-class sample. Seldom are subjects like the ones that formed the Black/Hispanic subsample in the present investigation--i.e. lower SES Ghetto residents--used for psychological research, rarely are they asked to complete a lengthy inventory, and almost never are the results analyzed to the extent that they have been in the present study. The implication seems clear enough: when one is attempting to obtain verbal responses from such a sample, they may not be responding to content at all, but responding in terms of response styles,

mediated by low verbal skills.

Moreover, while desirability responding usually emerges as the most serious confounding influence in personality inventories--in fact it is usually the case that desirability and acquiescence are intertwined, and acquiescence emerges most clearly in scales for which desirability has been suppressed (Damarin & Messick, 1965)--a case can be made that acquiescence is just as powerful a response determinant among the present subjects. As may be deduced from the inability to remove the relationships between intelligence and the achievement motivation and locus of control items, which may be seen from the high (up to .62) factor loadings of achievement motivation and locus of control items on intelligence factors as well as the high (up to .74) factor loadings of intelligence facets on agglomerated achievement motivation/locus of control factors, that type of acquiescent responding marked by low interpretive skills (Messick, 1967) is clearly implicated. Buttressing this argument are the significantly higher intelligence scores of both male and female middle class White subjects, as opposed to both male and female lower class Black/Hispanic subjects.

Furthermore, during my six years of teaching at Bronx Community College (from which a large part of the Black/Hispanic sample was drawn), it was the usual state of affairs that about one-third of the students lacked sufficient reading skills to be able to read, with understanding, the

Introductory Psychology test, and most of these students had extremely low Nelson-Denny reading scores. Thus acquiescence marked by low intelligence may be accompanied by acquiescence due to the inability to understand the meaning of the items, which may manifest itself as non-purposeful random (careless) responding (Jackson, 1967a).

Finally, that lower class Blacks and Hispanics should be more prone to desirability responding than middle class Whites is not surprising in view of N. W. Brown's (1977) research which shows poor Black adolescents to have a self-deprecating attitude: "They perceive themselves to be incompetent, ineffective, seeking recognition, and willing to try to attain those characteristics deemed important by society." Clearly, members of this group have good reason to try to cast themselves in a more favorable light on a paper and pencil inventory handed in to a middle class White professor; nor is it surprising that defensive responding is also implicated in this group of subjects.

Appendix Table A-1

Correlations of Recoded Items with Total Scale
 Reflecting Extent of Extremity Responding
 Total Sample

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
1	.09	36	.44*
2	.30	37	.42*
3	.39	38	.35
4	.21	39	.21
5	.36	40	.23
6	.25	41	.31
7	.35	42	.47**
8	.23	43	.44*
9	.21	44	.28
10	.20	45	.34
11	.31	46	.40*
12	.25	47	.47**
13	.47**	48	.35
14	.21	49	.42*
15	.30	50	.49**
16	.37	51	.42*
17	.36	52	.34
18	.32	53	.31
19	.42*	54	.37
20	.27	55	.45**
21	.26	56	.39
22	.37	57	.33
23	.25	58	.24
24	.26	59	.30
25	.41*	60	.39
26	.44*	61	.23
27	.35	62	.39
28	.30	63	.40*
29	.18	64	.33
30	.36	65	.45**
31	.31	66	.26
32	.34	67	.30
33	.30	68	.31
34	.33	69	.39
35	.28	70	.32

*Correlation .40-.44 ($\bar{n}$ = 48).

**Correlation .45-.49 ($\bar{n}$ = 23).

***Correlation over .50 ($\bar{n}$ = 2).

Appendix Table A-1, continued

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
71	.41*	111	.44*
72	.29	112	.43*
73	.50***	113	.36
74	.22	114	.43*
75	.23	115	.36
76	.44*	116	.13
77	.27	117	.43*
78	.36	118	.43*
79	.29	119	.43*
80	.35	120	.43*
81	.41*	121	.49**
82	.40*	122	.35
83	.45**	123	.35
84	.47**	124	.45**
85	.42*	125	.34
86	.37	126	.30
87	.41*	127	.44*
88	.35	128	.40*
89	.38	129	.40*
90	.36	130	.43*
91	.42*	131	.40*
92	.42*	132	.41*
93	.38	133	.34
94	.41*	134	.43*
95	.42*	135	.47**
96	.16	136	.17
97	.40*	137	.37
98	.21	138	.28
99	.42*	139	.37
100	.43*	140	.42*
101	.38	141	.48**
102	.39	142	.35
103	.34	143	.48**
104	.38	144	.41*
105	.40*	145	.28
106	.39	146	.29
107	.34	147	.49**
108	.48**	148	.40*
109	.49**	149	.37
110	.39	150	.34

*Correlation .40-.44 ($\underline{n} = 48$).**Correlation .45-.49 ($\underline{n} = 23$).***Correlation over .50 ($\underline{n} = 2$).

Appendix Table A-1, continued

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
151	.49**	171	.37
152	.36	172	.49**
153	.41*	173	.38
154	.39	174	.19
155	.22	175	.45**
156	.41*	176	.40*
157	.37	177	.43*
158	.36	178	.36
159	.52***	179	.36
160	.23	180	.45**
161	.41*	181	.28
162	.45**	182	.42*
163	.30	183	.30
164	.46**	184	.33
165	.35	185	.39
166	.36	186	.38
167	.40*	187	.31
168	.32	188	.38
169	.26	189	.43*
170	.37	190	.17

*Correlation .40-.44 ($\bar{n} = 48$).

**Correlation .45-.49 ($\bar{n} = 23$).

***Correlation over .50 ($\bar{n} = 2$).

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / N = 267

INEX4 DON'T MIND WORK WHILE PEOPLE HAVING FUN

TOTAC	TOTDEP	TOTIE	TOTDEF	TOTPAR	TOTCYN	TOTSD	TOTINF
0.40572	-0.30287	0.25682	0.19692	-0.16959	-0.09253	-0.08946	0.07548
0.0001	0.0001	0.0001	0.0012	0.0055	0.1315	0.1449	0.2189

INEX5 IF NOT GOOD AT SOMETHING, GIVE IT UP

TOTAC	TOTIE	TOTDEP	TOTDEF	TOTSD	TOTCYN	TOTINF	TOTPAR
0.36310	0.18330	-0.17794	0.14188	-0.10325	-0.08065	0.04855	-0.01016
0.0001	0.0026	0.0035	0.0204	0.0922	0.1889	0.4294	0.8688

INEX14 THINK MORE ABOUT FUTURE THAN PRESENT

TOTPAR	TOTAC	TOTSD	TOTDEP	TOTCYN	TOTIE	TOTINF	TOTDEF
-0.21148	0.17637	-0.15478	-0.14873	-0.13871	0.11265	-0.10803	0.09533
0.0005	0.0038	0.0113	0.0150	0.0234	0.0661	0.0781	0.1202

INEX16 OFTEN DO LESS THAN MY BEST

TOTAC	TOTDEF	TOTDEP	TOTPAR	TOTIE	TOTSD	TOTINF	TOTCYN
0.48536	0.27594	-0.26022	-0.20254	0.20097	-0.18261	-0.12597	-0.07278
0.0001	0.0001	0.0001	0.0009	0.0010	0.0027	0.0397	0.2359

INEX21 LIKE TASKS REQUIRING SKILL AND EFFORT

TOTAC	TOTINF	TOTDEP	TOTSD	TOTIE	TOTDEF	TOTCYN	TOTPAR
0.28699	-0.19082	-0.15357	0.03887	0.03614	-0.02972	-0.01111	-0.01047
0.0001	0.0017	0.0120	0.5271	0.5566	0.6287	0.8566	0.8648

INEX25 PEOPLE THINK I DON'T HAVE DRIVE

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTINF	TOTSD	TOTDEF	TOTCYN
0.48698	-0.39622	0.32863	-0.27519	-0.17378	-0.16183	0.14834	-0.13763
0.0001	0.0001	0.0001	0.0001	0.0044	0.0081	0.0153	0.0245

INEX30 LIKE TO SAY I'VE DONE JOB WELL

TOTINF	TOTAC	TOTDEF	TOTDEP	TOTPAR	TOTSD	TOTCYN	TOTIE
-0.38655	0.26166	-0.17288	-0.10478	-0.06182	-0.04428	0.01934	-0.01568
0.0001	0.0001	0.0046	0.0875	0.3142	0.4712	0.7531	0.7987

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX40 ENJOY WORK MORE THAN PLAY

TOTAC	TOTDEP	TOTIE	TOTDEF	TOTINF	TOTSD	TOTPAR	TOTCYN
0.26793	-0.13573	0.12245	0.11836	0.11766	0.03113	-0.02094	0.01183
0.0001	0.0266	0.0456	0.0534	0.0548	0.6129	0.7335	0.8474

INEX56 NEGLECT MY LIFE BECUASE I WORK SO HARD

TOTAC	TOTINF	TOTPAR	TOTSD	TOTIE	TOTDEP	TOTCYN	TOTDEF
0.15438	0.11651	0.09594	0.08411	-0.04801	0.04163	0.03701	-0.01901
0.0115	0.0573	0.1178	0.1706	0.4347	0.4981	0.5471	0.7572

INEX61 ENJOY EASY COURSES MORE THAN HARD ONES

TOTAC	TOTPAR	TOTIE	TOTDEP	TOTCYN	TOTSD	TOTINF	TOTDEF
0.51244	-0.21430	0.20258	-0.16374	-0.15383	-0.12081	-0.09773	0.05206
0.0001	0.0004	0.0009	0.0073	0.0118	0.0485	0.1111	0.3968

INEX64 REALLY DON'T ENJOY HARD WORK

TOTAC	TOTDEP	TOTCYN	TOTIE	TOTPAR	TOTSD	TOTINF	TOTDEF
0.44741	-0.23239	-0.22178	0.14346	-0.12994	-0.11424	-0.08693	-0.00810
0.0001	0.0001	0.0003	0.0190	0.0338	0.0623	0.1566	0.8951

INEX66 LIKE TO BE AUTHORITY IN SOME FIELD

TOTINF	TOTDEF	TOTDEP	TOTAC	TOTCYN	TOTPAR	TOTSD	TOTIE
-0.17978	-0.14568	-0.13855	0.12901	0.11941	0.10303	0.06550	0.04175
0.0032	0.0172	0.0236	0.0351	0.0513	0.0929	0.2863	0.4970

INEX71 KEEP WORKING ON PROBLEM OTHERS GIVEN UP

TOTAC	TOTIE	TOTDEP	TOTDEF	TOTPAR	TOTCYN	TOTSD	TOTINF
0.51727	0.24292	-0.21690	0.13866	-0.06171	-0.04969	-0.03870	0.02174
0.0001	0.0001	0.0004	0.0235	0.3151	0.4187	0.5289	0.7236

INEX75 WOULD LIKE TO ACCOMPLISH SOMETHING GREAT

TOTAC	TOTINF	TOTCYN	TOTDEP	TOTSD	TOTPAR	TOTDEF	TOTIE
0.25151	-0.17005	0.08993	-0.03843	0.03178	-0.02805	0.02184	0.02147
0.0001	0.0053	0.1428	0.1496	0.6051	0.6481	0.7224	0.7269

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX78 STUDY BECAUSE I HAVE TO

TOTAC	TOTPAR	TOTDEP	TOTSD	TOTIE	TOTCYN	TOTINF	TOTDEF
0.57159	-0.29612	-0.29586	-0.25547	0.22945	-0.17273	-0.15362	0.09137
0.0001	0.0001	0.0001	0.0001	0.0002	0.0048	0.0120	0.1365

INEX79 LIKE TO BE SUCCESSFUL IN THINGS

TOTINF	TOTAC	TOTDEP	TOTSD	TOTPAR	TOTIE	TOTCYN	TOTDEF
-0.31161	0.29707	-0.17067	-0.12575	-0.11144	0.03614	0.03359	-0.02251
0.0001	0.0001	0.0052	0.0400	0.0691	0.5565	0.5848	0.7143

INEX84 PEOPLE SAID I AM A HARD WORKER

TOTAC	TOTINF	TOTDEP	TOTDEF	TOTIE	TOTPAR	TOTSD	TOTCYN
0.43553	-0.20631	-0.18306	0.16185	0.14684	-0.13776	-0.09297	-0.06827
0.0001	0.0007	0.0027	0.0081	0.0163	0.0244	0.1297	0.2663

INEX90 SET GOALS WHICH ARE DIFFICULT

TOTSD	TOTDEF	TOTIE	TOTAC	TOTPAR	TOTCYN	TOTDEP	TOTINF
0.12344	-0.11429	-0.10393	0.09305	0.09089	0.08174	0.06988	0.15221
0.0439	0.0622	0.0901	0.1294	0.1385	0.1830	0.2552	0.6003

INEX91 WORRY MORE ABOUT GRADE THAN LEARNING

TOTAC	TOTDEP	TOTIE	TOTSD	TOTDEF	TOTPAR	TOTINF	TOTCYN
0.41869	-0.32396	0.26255	-0.22854	0.19159	-0.17529	-0.09637	-0.08132
0.0001	0.0001	0.0001	0.0002	0.0017	0.0041	0.1162	0.1853

INEX99 UNREALISTIC BECOMING THE BEST

TOTAC	TOTIE	TOTDEP	TOTSD	TOTDEF	TOTCYN	TOTINF	TOTPAR
0.34777	0.27784	-0.16545	-0.13570	0.11339	0.05738	-0.05497	-0.02335
0.0001	0.0001	0.0067	0.0266	0.0643	0.3503	0.3710	0.7041

INEX103 GO TO SCHOOL TO IMPROVE EARNING

TOTAC	TOTCYN	TOTPAR	TOTDEP	TOTIE	TOTSD	TOTINF	TOTDEF
0.49075	-0.26574	-0.17194	-0.16191	0.15798	-0.10491	-0.09450	-0.00795
0.0001	0.0001	0.0048	0.0080	0.0097	0.0871	0.1235	0.8971

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / $N = 267$

INEX105 MY GOAL IS TO DO BETTER THAN ANYONE

TOTCYN	TOTPAR	TOTSD	TOTDEF	TOTAC	TOTDEP	TOTINF	TOTIE
0.20014	0.15849	0.13767	-0.12631	0.09939	0.01877	0.01058	-0.00564
0.0010	0.0095	0.0245	0.0392	0.1052	0.7601	0.8634	0.9269

INEX111 WORK HARD ENOUGH TO GET BY

TOTAC	TOTDEP	TOTPAR	TOTSD	TOTINF	TOTIE	TOTCYN	TOTDEF
0.62549	-0.34110	-0.27183	-0.26677	-0.25388	0.22088	-0.17097	0.15601
0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0051	0.0107

INEX114 LIKE TO SOLVE PUZZLES AND PROBLEMS

TOTAC	TOTIE	TOTDEP	TOTCYN	TOTINF	TOTPAR	TOTSD	TOTDEF
0.41438	0.17556	-0.13524	-0.08255	-0.07374	-0.04132	-0.03502	0.02577
0.0001	0.0040	0.0271	0.1787	0.2298	0.4962	0.5688	0.6750

INEX119 WOULD RATHER DO AN EASY JOB

TOTAC	TOTDEP	TOTPAR	TOTCYN	TOTIE	TOTINF	TOTSD	TOTDEF
0.58749	-0.29704	-0.25195	-0.24571	0.19027	-0.12028	-0.11464	0.10172
0.0001	0.0001	0.0001	0.0001	0.0018	0.0496	0.0614	0.0977

INEX125 WORK ONLY BECAUSE I HAVE TO

TOTAC	TOTDEP	TOTPAR	TOTIE	TOTINF	TOTSD	TOTCYN	TOTDEF
0.50259	-0.33510	-0.24187	0.23119	-0.18690	-0.18429	-0.14585	-0.00569
0.0001	0.0001	0.0001	0.0001	0.0022	0.0025	0.0171	0.9262

INEX128 LIKE TO DO MY VERY BEST

TOTAC	TOTDEP	TOTDEF	TOTIE	TOTSD	TOTPAR	TOTINF	TOTCYN
0.45187	-0.33376	0.29127	0.23767	-0.11621	-0.11617	-0.09700	-0.04135
0.0001	0.0001	0.0001	0.0001	0.0579	0.0581	0.1138	0.5011

INEX133 LIKE TO DO MY BEST IN COURSES

TOTAC	TOTINF	TOTDEP	TOTDEF	TOTIE	TOTSD	TOTCYN	TOTPAR
0.49916	-0.23924	-0.18795	0.11960	0.09105	-0.09045	0.05147	-0.05006
0.0001	0.0001	0.0020	0.0509	0.1378	0.1405	0.4022	0.4152

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX142 STUDY JUST HARD ENOUGH TO PASS

TOTAC	TOTDEP	TOTPAR	TOTIE	TOTCYN	TOTSD	TOTDEF	TOTINF
0.56734	-0.28802	-0.23810	0.23118	-0.23070	-0.21794	0.18607	-0.16323
0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0023	0.0075

INEX150 LIKE TO DO THINGS BETTER THAN OTHERS

TOTAC	TOTIE	TOTINF	TOTDEP	TOTSD	TOTCYN	TOTDEF	TOTPAR
0.21543	0.12044	-0.09055	-0.07135	0.05966	0.24342	-0.02445	-0.00876
0.0004	0.0493	0.1400	0.2453	0.3315	0.4799	0.6908	0.8867

INEX160 DOESN'T MATTER IF ONE OF THE BEST

TOTAC	TOTCYN	TOTIE	TOTPAR	TOTDEP	TOTSD	TOTINF	TOTDEF
0.30375	0.09454	0.08723	0.07953	-0.05273	-0.01989	-0.01107	0.00311
0.0001	0.1233	0.1552	0.1951	0.3908	0.7463	0.8571	0.9597

INEX168 RARELY DO EXTRA STUDYING TO IMPROVE

TOTAC	TOTDEP	TOTCYN	TOTPAR	TOTINF	TOTIE	TOTSD	TOTDEF
0.45255	-0.25434	-0.18299	-0.15206	-0.14009	0.11449	-0.07956	0.05529
0.0001	0.0001	0.0027	0.0129	0.0220	0.0418	0.1950	0.3682

INEX172 SELF-IMPROVEMENT NOTHING UNLESS SUCCESS

TOTAC	TOTSD	TOTPAR	TOTDEP	TOTINF	TOTIE	TOTCYN	TOTDEF
0.39033	-0.28447	-0.25475	-0.24704	-0.20997	0.19854	-0.10647	0.05515
0.0001	0.0001	0.0001	0.0001	0.0006	0.0011	0.0825	0.3694

INEX173 ENJOY EASY COURSES MORE THAN HARD ONES

TOTAC	TOTPAR	TOTDEP	TOTCYN	TOTIE	TOTSD	TOTINF	TOTDEF
0.59076	-0.26456	-0.22751	-0.22718	0.18798	-0.14069	-0.13017	0.07153
0.0001	0.0001	0.0002	0.0002	0.0020	0.0215	0.0335	0.2441

INEX182 ENJOY THINGS WHICH CHALLENGE ME

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTINF	TOTCYN	TOTSD	TOTDEF
0.57772	-0.41417	0.28229	-0.22366	-0.21066	-0.15803	-0.12717	0.11841
0.0001	0.0001	0.0001	0.0002	0.0005	0.0097	0.0378	0.0533

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX186 PREFER COURSES THAT ARE CHALLENGING

TOTAC	TOTDEP	TOTIE	TOTCYN	TOTPAR	TOTINF	TOTDEF	TOTSD
0.53788	-0.24133	0.18913	-0.15979	-0.14961	-0.11954	0.04662	-0.04166
0.0001	0.0001	0.0019	0.0089	0.0144	0.0510	0.4481	0.4979

INEX5 LUCKY ARE THOSE WHO FIGURE OUT

TOTIE	TOTCYN	TOTINF	TOTDEP	TOTPAR	TOTDEF	TOTAC	TOTSD
0.12869	0.12210	0.09377	0.07971	-0.03954	0.03083	-0.01879	-0.00897
0.0356	0.0462	0.1391	0.1942	0.5200	0.6160	0.7599	0.8840

INEX6 NOT WISE TO PLAN TOO FAR AHEAD

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTCYN	TOTINF	TOTDEF
0.39994	-0.31201	-0.26187	0.19795	-0.14099	-0.12590	-0.10978	0.10307
0.0001	0.0001	0.0001	0.0011	0.0212	0.0398	0.0733	0.1928

INEX9 MORE SUPERSTITIOUS THAN MANY PEOPLE

TOTIE	TOTAC	TOTSD	TOTDEP	TOTPAR	TOTDEF	TOTCYN	TOTINF
0.31303	0.16791	-0.13275	-0.13219	-0.12432	0.12307	-0.05551	0.02452
0.0001	0.0060	0.0301	0.0308	0.0424	0.0445	0.3663	0.6901

INEX10 THAT TEACHERS ARE UNFAIR IS NONSENSE

TOTIE	TOTPAR	TOTAC	TOTSD	TOTINF	TOTDEF	TOTDEP	TOTCYN
0.27465	-0.15844	0.13398	-0.11573	0.09442	0.09034	-0.07343	-0.04633
0.0001	0.0095	0.0286	0.0590	0.1238	0.1410	0.2317	0.4509

INEX12 WE CAN WIPE OUT CORRUPTION

TOTIE	TOTDEP	TOTDEF	TOTAC	TOTSD	TOTINF	TOTCYN	TOTPAR
0.30532	-0.16171	0.14541	0.13282	-0.04759	0.02931	0.01736	0.00723
0.0001	0.0081	0.0174	0.0300	0.4387	0.6335	0.7776	0.9064

INEX15 BAD THINGS BALANCED BY GOOD ONES

TOTDEP	TOTIE	TOTINF	TOTPAR	TOTSD	TOTCYN	TOTAC	TOTDEF
-0.14852	0.18955	-0.08097	-0.04825	-0.04699	-0.03578	0.02311	0.11087
0.0151	0.1445	0.1872	0.4324	0.4445	0.5605	0.7070	0.8597

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX17 DON'T KNOW WHO OR WHAT TO BELIEVE

TOTDEF	TOTIE	TOTPAR	TOTAC	TOTCYN	TOTSD	TOTINF	TOTDEF
-0.37528	0.37144	-0.26672	0.24843	-0.19923	-0.17512	-0.13787	0.39673
0.0001	0.0001	0.0001	0.0001	0.0011	0.0041	0.0243	0.1148

INEX18 THINGS JUST DON'T WORK OUT

TOTDEF	TOTIE	TOTPAR	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.56079	-0.46707	0.39223	0.36627	-0.26629	0.23666	-0.19390	0.13450
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0015	0.0280

INEX22 PEOPLE FAIL WHO HAVE NOT TAKEN ADVANTAGE

TOTCYN	TOTPAR	TOTAC	TOTDEF	TOTINF	TOTSD	TOTDEF	TOTIE
0.18290	0.13438	-0.07922	0.06961	0.05606	0.05154	-0.03211	0.01865
0.0027	0.0281	0.1969	0.2570	0.3615	0.4016	0.6015	0.7616

INEX23 THINGS READERS TELL YOU TRUE

TOTIE	TOTPAR	TOTCYN	TOTINF	TOTSD	TOTDEF	TOTAC	TOTDEF
0.30279	-0.18752	-0.15009	-0.10938	-0.10295	0.09982	0.08974	-0.05600
0.0001	0.0021	0.0141	0.0744	0.0932	0.1035	0.1436	0.3621

INEX26 EXAM QUESTIONS UNRELATED TO COURSE

TOTIE	TOTPAR	TOTSD	TOTDEF	TOTAC	TOTINF	TOTCYN	TOTDEF
0.33827	-0.37111	-0.28863	-0.24744	0.21362	-0.19855	-0.15720	0.12905
0.0001	0.0001	0.0001	0.0001	0.0004	0.0011	0.0101	0.0351

INEX27 PEOPLE GET THE RESPECT THEY DESERVE

TOTIE	TOTDEF	TOTDEF	TOTPAR	TOTCYN	TOTSD	TOTAC	TOTINF
0.27968	-0.21937	0.17558	-0.15007	-0.07212	-0.04504	0.03686	-0.01413
0.0001	0.0003	0.0040	0.0141	0.2402	0.4636	0.5487	0.8183

INEX28 OTHERS WON'T LIKE IF I DIDN'T GET ALONG

TOTDEF	TOTIE	TOTAC	TOTPAR	TOTSD	TOTINF	TOTCYN	TOTDEF
0.12027	0.11812	-0.07113	-0.06004	0.03104	-0.02427	0.00785	-0.00740
0.0496	0.0539	0.2468	0.3284	0.6136	0.6931	0.8984	0.9642

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX32 CAN CHANGE WHAT HAPPENS BY WHAT YOU DO

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTINF	TOTCYN
0.26880	-0.11710	-0.10835	0.10681	-0.05905	0.05833	-0.05704	0.02834
0.0001	0.0560	0.0772	0.0815	0.3365	0.3424	0.3532	0.6448

INEX41 PEOPLE ARE LONELY BECAUSE THEY DON'T TRY

TOTIE	TOTDEF	TOTINF	TOTDEP	TOTSD	TOTCYN	TOTPAR	TOTAC
0.27115	0.19148	0.09717	-0.09410	0.05442	-0.03054	-0.02547	0.02444
0.0001	0.0017	0.1132	0.1251	0.3757	0.6193	0.6787	0.6910

INEX42 IMPOSSIBLE TO BELIEVE THAT LUCK PLAYS A

TOTIE	TOTAC	TOTDEF	TOTDEP	TOTSD	TOTINF	TOTPAR	TOTCYN
0.28497	0.09965	0.08574	-0.07742	0.05205	0.04902	-0.04451	0.03063
0.0001	0.1042	0.1624	0.2073	0.3970	0.4250	0.4689	0.6183

INEX43 FEEL OTHER PEOPLE ARE USING ME

TOTPAR	TOTIE	TOTDEP	TOTDEF	TOTSD	TOTCYN	TOTAC	TOTINF
-0.39627	0.37704	-0.32803	0.27702	-0.26048	-0.18193	0.10033	-0.01683
0.0001	0.0001	0.0001	0.0001	0.0001	0.0028	0.1019	0.7843

INEX45 GRADES ARE INFLUENCED BY ACCIDENT

TOTIE	TOTPAR	TOTINF	TOTSD	TOTDEP	TOTAC	TOTCYN	TOTDEF
0.29758	-0.24678	-0.21063	-0.20128	-0.19143	0.16892	-0.09674	0.05353
0.0001	0.0001	0.0005	0.0009	0.0017	0.0057	0.1148	0.3836

INEX46 FRIENDS DEPEND ON HOW NICE YOU ARE

TOTIE	TOTDEP	TOTDEF	TOTCYN	TOTINF	TOTPAR	TOTAC	TOTSD
0.22203	-0.13513	0.12461	-0.11101	0.03765	-0.02163	-0.01721	-0.01073
0.0003	0.0273	0.0419	0.0701	0.5401	0.7249	0.7795	0.8614

INEX50 BELIEF IN FATE AVOID RESPONSIBILITY

TOTIE	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTCYN	TOTDEP	TOTINF
0.41411	-0.20412	0.17765	-0.11802	0.10675	-0.10612	-0.10147	0.10246
0.0001	0.0008	0.0036	0.0541	0.0817	0.0835	0.0980	0.9681

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX53 THERE WILL ALWAYS BE WARS

TOTIE	TOTINF	TOTPAR	TOTCYN	TOTDEP	TOTDEF	TOTSD	TOTAC
0.26659	0.08091	0.07477	-0.07139	-0.05001	-0.04987	0.02353	-0.01912
0.0001	0.1875	0.2233	0.2450	0.4157	0.4170	0.7019	0.7558

INEX54 RARELY SUCH A THING AS AN UNFAIR TEST

TOTIE	TOTDEF	TOTDEP	TOTPAR	TOTCYN	TOTSD	TOTAC	TOTINF
0.34525	0.23086	-0.15241	-0.11848	-0.09710	-0.09611	0.08309	0.02657
0.0001	0.0001	0.0127	0.0532	0.1134	0.1172	0.1759	0.6656

INEX55 LIVES ARE CONTROLLED BY ACCIDENT

TOTIE	TOTPAR	TOTDEP	TOTSD	TOTCYN	TOTINF	TOTAC	TOTDEF
0.45317	-0.26711	-0.19559	-0.19183	-0.18961	-0.18385	0.17546	0.10360
0.0001	0.0001	0.0013	0.0016	0.0019	0.0026	0.0040	0.0911

INEX59 GREAT DEAL OF TRUTH IN ASTROLOGY

TOTIE	TOTCYN	TOTPAR	TOTSD	TOTDEP	TOTINF	TOTAC	TOTDEF
0.27299	-0.22764	-0.22656	-0.17408	-0.10252	-0.09908	0.09597	0.03049
0.0001	0.0002	0.0002	0.0043	0.0946	0.1062	0.1177	0.6199

INEX60 GETTING PEOPLE TO DO DEPENDS ON ABILITY

TOTIE	TOTDEF	TOTPAR	TOTCYN	TOTAC	TOTDEP	TOTSD	TOTINF
0.41824	0.15178	-0.14315	0.07448	0.05500	-0.02839	0.02296	0.00356
0.0001	0.0130	0.0193	0.2251	0.3707	0.6442	0.7088	0.9539

INEX63 BELIEF IN LUCK OR FATE IS PRIMITIVE

TOTIE	TOTDEP	TOTPAR	TOTDEF	TOTCYN	TOTINF	TOTAC	TOTSD
0.29958	-0.08714	-0.08438	0.07700	-0.06676	0.04320	0.03047	-0.01712
0.0001	0.1557	0.1692	0.2098	0.2771	0.4821	0.6201	0.7806

INEX69 ONCE POLITICIAN ELECTED, LITTLE CONTROL

TOTIE	TOTCYN	TOTAC	TOTDEP	TOTDEF	TOTPAR	TOTSD	TOTINF
0.23636	-0.12704	0.12520	-0.12171	0.11147	-0.10961	-0.06879	-0.00341
0.0001	0.0380	0.0409	0.0469	0.0690	0.0738	0.2627	0.9558

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX70 WHAT I WANT HAS LITTLE TO DO WITH LUCK

TOTIE	TOTDEF	TOTAC	TOTDEP	TOTINF	TOTSD	TOTPAR	TOTCYN
0.38057	0.16645	0.15361	-0.08445	0.36121	-0.05965	-0.05429	0.03666
0.0001	0.0054	0.0120	0.1689	0.3190	0.3315	0.3769	0.5508

INEX76 MISFORTUNES RESULT OF LACK OF ABILITY

TOTPAR	TOTINF	TOTAC	TOTCYN	TOTDEF	TOTIE	TOTDEP	TOTSD
0.18364	0.16578	-0.15236	0.14189	0.14183	0.08115	0.01884	-0.01255
0.0026	0.0056	0.0127	0.0204	0.0204	1.1862	0.7593	1.8383

INEX80 SOMEONE LIKES YOU LITTLE TO DO WITH YOU

TOTINF	TOTAC	TOTIE	TOTDEP	TOTDEF	TOTPAR	TOTCYN	TOTSD
-0.20195	0.16734	0.12473	-0.11467	-0.11013	-0.10129	-0.08117	-0.07953
0.0009	0.0050	0.0417	0.0613	0.0724	0.0986	0.1861	0.1951

INEX81 MY LIFE IS DETERMINED BY MY ACTIONS

TOTIE	TOTDEP	TOTPAR	TOTDEF	TOTAC	TOTSD	TOTINF	TOTCYN
0.36435	-0.29872	-0.20642	0.19567	0.15411	-0.10655	-0.06783	-0.02947
0.0001	0.0001	0.0007	0.0013	0.0117	0.0822	0.2694	0.6317

INEX85 UNHAPPY THINGS PARTLY DUE TO BAD LUCK

TOTIE	TOTDEF	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTINF	TOTCYN
0.42516	0.26656	-0.26547	-0.19713	0.15745	-0.14534	0.08571	-0.06074
0.0001	0.0001	0.0001	0.0012	0.0100	0.0175	0.1626	0.3227

INEX87 NO POINT IN TRYING CAUSE YOU CAN'T WIN

TOTDEP	TOTAC	TOTINF	TOTIE	TOTSD	TOTPAR	TOTCYN	TOTDEF
-0.39371	0.30533	-0.27344	0.26153	-0.24108	-0.20974	-0.15970	0.01411
0.0001	0.0001	0.0001	0.0001	0.0001	0.0006	0.0089	0.8185

INEX88 WORTH OFTEN PASSES UNRECOGNIZED

TOTIE	TOTDEP	TOTPAR	TOTSD	TOTCYN	TOTAC	TOTINF	TOTDEF
0.26501	-0.18097	-0.18038	-0.14469	-0.13328	0.06177	-0.05765	-0.00945
0.0001	0.0030	0.0031	0.0180	0.0295	0.3145	0.3480	0.8778

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX93 ANY CHILD CAN GROW UP TO BE ANYTHING

TOTIE	TOTDEF	TOTDEP	TOTINF	TOTAC	TOTPAR	TOTSD	TOTCYN
0.31395	0.16872	-0.14589	0.09099	0.06755	0.05924	-0.05040	-0.00489
0.0001	0.0057	0.0171	0.1381	0.2714	0.3349	0.4121	0.9366

INEX94 SUCCESS IS A MATTER OF HARD WORK

TOTIE	TOTDEF	TOTDEP	TOTINF	TOTPAR	TOTSD	TOTCYN	TOTAC
0.41397	0.15349	-0.11770	0.06626	-0.06263	-0.05681	-0.01095	-0.00514
0.0001	0.0120	0.0547	0.2807	0.3079	0.3552	0.8587	0.9333

INEX101 NO SUCH THING AS "LUCK"

TOTIE	TOTINF	TOTDEF	TOTCYN	TOTSD	TOTAC	TOTPAR	TOTDEP
0.34235	0.15302	0.08607	-0.08582	0.07786	-0.01548	-0.01131	-0.00529
0.0001	0.0123	0.1608	0.1620	0.2047	0.8013	0.8541	0.9315

INEX102 NECESSARY TO PLEASE TO GET WHAT YOU WANT

TOTIE	TOTAC	TOTPAR	TOTDEF	TOTCYN	TOTSD	TOTINF	TOTDEP
0.28262	0.23144	-0.16847	0.15723	-0.14109	-0.12027	0.08013	-0.07148
0.0001	0.0001	0.0058	0.0101	0.0211	0.0496	0.1918	0.2444

INEX104 YOU CAN BE SURE OF NOTHING

TOTIE	TOTCYN	TOTAC	TOTDEP	TOTINF	TOTPAR	TOTDEF	TOTSD
0.26183	-0.20866	0.13682	-0.12042	0.09204	-0.06001	0.03279	0.12959
0.0001	0.0006	0.0254	0.0493	0.1336	0.3286	0.5938	0.6303

INEX106 CAN'T UNDERSTAND HOW TEACHERS GRADE

TOTIE	TOTPAR	TOTCYN	TOTDEF	TOTSD	TOTINF	TOTDEP	TOTAC
0.32419	-0.24062	-0.22074	0.16760	-0.13605	-0.11543	-0.10200	0.06028
0.0001	0.0001	0.0003	0.0060	0.0262	0.0596	0.0963	0.3265

INEX109 WHAT HAPPENS TO PEOPLE RESULT OF FATE

TOTIE	TOTDEP	TOTCYN	TOTAC	TOTPAR	TOTSD	TOTINF	TOTDEF
0.45612	-0.31213	-0.27213	0.22485	-0.19779	-0.18846	-0.17667	0.02889
0.0001	0.0001	0.0001	0.0002	0.0012	0.0020	0.0038	0.6384

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 267

INEX113 WE ARE SO MANY COGS IN LIFE

TOTDEP	TOTIE	TOTAC	TOTPAR	TOTCYN	TOTINF	TOTSD	TOTDEF
-0.23815	0.21045	0.20044	-0.18049	-0.16326	-0.37763	-0.07335	0.00599
0.0001	0.0005	0.0010	0.0031	0.0075	0.2061	0.2323	0.9224

INEX115 USUALLY GET PEOPLE TO DO WHAT I WANT

TOTDEP	TOTAC	TOTINF	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTDEF
-0.29694	0.28537	-0.21938	0.21407	-0.17025	-0.09087	-0.05114	0.02858
0.0001	0.0001	0.0003	0.0004	0.0053	0.1385	0.4053	0.6420

INEX118 YOU GET OUT OF LIFE WHAT YOU PUT INTO IT

TOTIE	TOTDEP	TOTPAR	TOTSD	TOTDEF	TOTAC	TOTINF	TOTCYN
0.30745	-0.27865	-0.18137	-0.16474	0.09805	0.07922	-0.06382	0.01555
0.0001	0.0001	0.0029	0.0070	0.1099	0.1969	0.2988	0.8004

INEX120 AVERAGE CITIZEN CAN INFLUENCE GOVERNMENT

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTDEF	TOTCYN	TOTSD	TOTINF
0.37970	-0.22518	0.20028	-0.19447	0.11042	0.09485	-0.07975	-0.06591
0.0001	0.0002	0.0010	0.0014	0.0716	0.1221	0.1939	0.2832

INEX123 IT'S NOT WHAT YOU KNOW BUT WHO YOU KNOW

TOTIE	TOTAC	TOTCYN	TOTSD	TOTPAR	TOTDEF	TOTDEP	TOTINF
0.46183	0.20000	-0.18949	-0.17021	-0.14706	0.13703	-0.12396	0.04492
0.0001	0.0010	0.0019	0.0053	0.0162	0.0251	0.0430	0.4648

INEX124 I HAVE LITTLE INFLUENCE OVER THINGS

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTINF	TOTCYN
0.52779	-0.52275	-0.36153	0.32205	-0.30155	0.20944	-0.08991	-0.08761
0.0001	0.0001	0.0001	0.0001	0.0001	0.0006	0.1429	0.1534

INEX129 MOST OF US ARE THE VICTIMS OF FORCES

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTCYN	TOTSD	TOTDEF	TOTINF
0.42731	-0.22070	0.19395	-0.18364	-0.17422	-0.15101	0.10564	-0.01906
0.0001	0.0003	0.0014	0.0026	0.0043	0.0135	0.0849	0.7566

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX130 GET WHAT I WANT BECAUSE I WORK HARD

TOTAC	TOTIE	TOTDEF	TOTDEP	TOTSD	TOTCYN	TOTINF	TOTPAR
0.22803	0.21098	0.19954	-0.16432	-0.10132	0.04932	-0.02065	-0.01324
0.0002	0.0005	0.0010	0.0071	0.0985	0.4222	0.7370	0.8296

INEX132 LITTLE CONTROL WHETHER PEOPLE LIKE YOU

TOTIE	TOTPAR	TOTAC	TOTDEP	TOTCYN	TOTINF	TOTSD	TOTDEF
0.35462	-0.26995	0.25437	-0.24085	-0.12040	-0.11862	-0.03221	0.00655
0.0001	0.0001	0.0001	0.0001	0.0494	0.0529	0.6002	0.9152

INEX134 PEOPLE'S MISFORTUNES FROM MISTAKES

TOTDEF	TOTIE	TOTINF	TOTAC	TOTPAR	TOTCYN	TOTSD	TOTDEP
0.17263	0.10735	0.08885	-0.08494	-0.08309	0.04648	-0.02729	0.01870
0.0047	0.0000	0.1477	0.1664	0.1759	0.4494	0.6570	0.7610

INEX137 SOME PEOPLE ARE JUST BORN LUCKY

TOTIE	TOTPAR	TOTDEP	TOTAC	TOTCYN	TOTSD	TOTDEF	TOTINF
0.48400	-0.21593	-0.20917	0.20887	-0.20015	-0.13385	0.10787	0.02200
0.0001	0.0004	0.0006	0.0006	0.0010	0.0288	0.0785	0.7205

INEX139 NOT MUCH USE TRYING TO PLEASE PEOPLE

TOTIE	TOTDEP	TOTCYN	TOTSD	TOTAC	TOTPAR	TOTDEF	TOTINF
0.39316	-0.31012	-0.27180	-0.17868	0.17857	-0.17784	0.08643	0.00631
0.0001	0.0001	0.0001	0.0034	0.0034	0.0035	0.1591	0.9183

INEX141 WITHOUT BREAKS CANNOT BE LEADER

TOTIE	TOTAC	TOTPAR	TOTDEP	TOTCYN	TOTSD	TOTINF	TOTDEF
0.41597	0.29606	-0.24822	-0.22183	-0.19446	-0.13634	-0.10588	0.10353
0.0001	0.0001	0.0001	0.0003	0.0014	0.0259	0.0842	0.0914

INEX144 DIFFICULT TO CONTROL POLITICIANS

TOTIE	TOTDEP	TOTSD	TOTAC	TOTCYN	TOTPAR	TOTDEF	TOTINF
0.36832	-0.22054	-0.16219	0.12636	-0.09280	-0.05595	0.02965	0.01328
0.0001	0.0003	0.0079	0.1391	0.1304	0.3625	0.6296	0.8291

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX148 PEOPLE CAN CONTROL WORLD EVENTS

TOTIE	TOTCYN	TOTDEP	TOTSD	TOTINF	TOTAC	TOTDEF	TOTPAR
0.29684	0.20199	-0.14093	-0.10589	0.04699	0.04391	0.03261	0.02975
0.0001	0.0009	0.0213	0.0842	0.4445	0.4749	0.5958	0.6284

INEX151 WHAT HAPPENS IS MY OWN DOING

TOTIE	TOTPAR	TOTDEP	TOTDEF	TOTAC	TOTCYN	TOTSD	TOTINF
0.46211	-0.29987	-0.24416	0.19455	0.17373	-0.13373	-0.13183	-0.08905
0.0001	0.0001	0.0001	0.0014	0.0044	0.0289	0.0313	0.1467

INEX153 WHAT IS GOING TO HAPPEN WILL HAPPEN

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTCYN	TOTINF	TOTSD	TOTDEF
0.50958	-0.32097	0.26717	-0.25576	-0.21973	-0.15061	-0.15046	0.05301
0.0001	0.0001	0.0001	0.0001	0.0003	0.0138	0.0139	0.3883

INEX156 FEW THINGS CONTROL ME

TOTIE	TOTDEP	TOTSD	TOTAC	TOTPAR	TOTDEF	TOTINF	TOTCYN
0.24840	-0.21064	-0.13677	0.12870	-0.12214	0.10253	0.09608	-0.07249
0.0001	0.0005	0.0254	0.0356	0.0462	0.0945	0.1173	0.2378

INEX157 DIRECT CONNECTION BETWEEN STUDY AND GRAD

TOTIE	TOTSD	TOTDEP	TOTPAR	TOTDEF	TOTAC	TOTINF	TOTCYN
0.23917	-0.20218	-0.18394	-0.17592	0.14604	0.14129	-0.11815	0.03797
0.0001	0.0009	0.0026	0.0039	0.0169	0.0209	0.0538	0.5367

INEX158 THERE'S A SUCKER BORN EVERY MINUTE

TOTCYN	TOTIE	TOTDEP	TOTPAR	TOTAC	TOTDEF	TOTSD	TOTINF
0.30070	-0.28135	0.20992	0.19270	-0.13643	-0.09711	0.07922	0.14732
0.0001	0.0001	0.0006	0.0016	0.0258	0.1134	0.1969	0.4413

INEX159 TRUSTING TO FATE NEVER TURNED OUT WELL

TOTIE	TOTPAR	TOTSD	TOTCYN	TOTINF	TOTAC	TOTDEP	TOTDEF
0.31918	-0.18222	-0.15156	-0.15099	-0.09830	0.08389	-0.07493	0.02204
0.0001	0.0028	0.0132	0.0135	0.1090	0.1717	0.2223	0.7200

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX161 NOT ENOUGH CONTROL OVER MY LIFE

TOTIE	TOTDEP	TOTSD	TOTPAR	TOTAC	TOTDEF	TOTCYN	TOTINF
0.49222	-0.43540	-0.31298	-0.28502	0.26042	0.19109	-0.18530	-0.06110
0.0001	0.0001	0.0001	0.0001	0.0001	0.0017	0.0024	0.3199

INEX162 BAD THINGS HAPPEN BECAUSE DIDN'T FIGURE

TOTCYN	TOTDEF	TOTIE	TOTSD	TOTAC	TOTDEP	TOTINF	TOTPAR
0.16333	0.18762	0.08457	0.07687	-0.07413	0.05821	0.03000	0.00694
0.0087	0.1534	0.1683	0.2105	0.2273	0.3434	0.6255	0.9101

INEX166 JOB DEPENDS ON RIGHT PLACE RIGHT TIME

TOTIE	TOTAC	TOTPAR	TOTSD	TOTCYN	TOTDEP	TOTDEF	TOTINF
0.38832	0.24843	-0.21077	-0.20566	-0.19238	-0.18547	0.15389	-0.07963
0.0001	0.0001	0.0005	0.0007	0.0016	0.0023	0.0118	0.1946

INEX170 MAKE PLANS CERTAIN TURN OUT RIGHT

TOTIE	TOTDEP	TOTPAR	TOTDEF	TOTSD	TOTINF	TOTAC	TOTCYN
0.32012	-0.24823	-0.12575	0.12035	-0.11536	-0.09949	0.09809	0.05125
0.0001	0.0001	0.0400	0.0495	0.0598	0.1048	0.1098	0.4043

INEX175 SO HARD TO PREDICT, MIGHT AS WELL FLIP C

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTCYN	TOTINF	TOTDEF
0.47301	-0.36293	-0.30428	0.26925	-0.23430	-0.16192	-0.05101	-0.01537
0.0001	0.0001	0.0001	0.0001	0.0001	0.0080	0.4065	0.8026

INEX179 BOSS WAS IN THE RIGHT PLACE FIRST

TOTIE	TOTDEP	TOTPAR	TOTSD	TOTCYN	TOTAC	TOTDEF	TOTINF
0.42067	-0.24089	-0.23643	-0.23098	-0.19759	0.19045	0.06266	-0.01404
0.0001	0.0001	0.0001	0.0001	0.0012	0.0018	0.3077	0.8193

INEX184 WORLD IS RUN BY FEW PEOPLE IN POWER

TOTIE	TOTCYN	TOTAC	TOTDEP	TOTSD	TOTPAR	TOTDEF	TOTINF
0.38781	-0.28003	0.23900	-0.22125	-0.19248	-0.16293	0.05812	-0.03460
0.0001	0.0001	0.0001	0.0003	0.0016	0.0075	0.3441	0.5735

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 267

INEX37 EXPERIENCES HAVE PREPARED ME FOR FUTURE

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTINF	TOTDEF	TOTCYN
0.38698	-0.34243	-0.20966	0.17809	0.15112	0.09465	-0.07450	0.01884
0.0001	0.0001	0.0006	0.0035	0.0134	0.1229	0.2250	0.7593

INEX38 GIVE UP BECAUSE CAN'T MAKE THINGS BETTER

TOTDEP	TOTAC	TOTIE	TOTINF	TOTCYN	TOTPAR	TOTSD	TOTDEF
0.52101	-0.38994	-0.24144	0.22546	0.18069	0.17966	0.15863	-0.14459
0.0001	0.0001	0.0001	0.0002	0.0030	0.0032	0.0094	0.0181

INEX49 EXPECT TO GET MORE GOOD THAN AVERAGE

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTINF	TOTDEF	TOTSD	TOTCYN
0.36520	-0.25576	-0.22177	0.11000	0.04575	-0.04437	0.04100	0.00676
0.0001	0.0001	0.0003	0.0728	0.4566	0.4703	0.5048	0.9125

INEX52 EXPECT I WILL BE HAPPIER THAN I AM NOW

TOTDEF	TOTSD	TOTCYN	TOTPAR	TOTDEP	TOTAC	TOTIE	TOTINF
-0.18245	0.17739	0.16729	0.15841	0.12642	-0.11804	-0.08500	-0.03769
0.0028	0.0036	0.0061	0.0095	0.0390	0.0540	0.1661	0.5398

INEX57 UNLIKELY I WILL GET REAL SATISFACTION

TOTDEP	TOTINF	TOTAC	TOTSD	TOTIE	TOTPAR	TOTCYN	TOTDEF
0.49807	0.34727	-0.31482	0.22006	-0.20661	0.16618	0.10100	-0.02374
0.0001	0.0001	0.0001	0.0003	0.0007	0.0065	0.0996	0.6993

INEX65 EACH DAY HOLDS MY INTEREST

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTDEF	TOTINF
0.52656	-0.27161	-0.23803	0.20085	0.16688	0.16013	-0.10922	0.08883
0.0001	0.0001	0.0001	0.0010	0.0063	0.0088	0.0748	0.1478

INEX67 HAVE GREAT FAITH IN THE FUTURE

TOTDEP	TOTIE	TOTAC	TOTINF	TOTCYN	TOTSD	TOTDEF	TOTPAR
0.35340	-0.19492	-0.12398	0.05688	0.05497	-0.04250	0.01972	-0.00851
0.0001	0.0014	0.0430	0.3546	0.3710	0.4892	0.7483	0.8900

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX74 CAN'T IMAGINE WHAT MY LIFE WILL BE

TOTDEP	TOTIE	TOTSD	TOTAC	TOTPAR	TOTDEF	TOTCYN	TOTINF
0.49254	-0.19524	0.16084	-0.10092	0.09225	-0.05253	0.01957	0.00566
0.0001	0.0013	0.0085	0.0999	0.1327	0.3929	0.7503	0.9266

INEX82 THINGS GOING BADLY CAN'T STAY THAT WAY

TOTDEP	TOTIE	TOTCYN	TOTAC	TOTINF	TOTSD	TOTDEF	TOTPAR
0.17353	-0.10338	-0.09073	-0.07989	0.06777	0.05425	-0.05081	0.04110
0.0045	0.0918	0.1392	0.1931	0.2699	0.3773	0.4083	0.5037

INEX92 NEVER SEEM TO BE REALLY HAPPY

TOTDEP	TOTIE	TOTSD	TOTPAR	TOTAC	TOTCYN	TOTINF	TOTDEF
0.65907	-0.34318	0.29949	0.27255	-0.25863	0.17855	0.11148	-0.08908
0.0001	0.0001	0.0001	0.0001	0.0001	0.0034	0.0692	0.1466

INEX95 FUTURE LOOKS VAGUE AND UNCERTAIN

TOTDEP	TOTIE	TOTSD	TOTPAR	TOTAC	TOTCYN	TOTDEF	TOTINF
0.59080	-0.30024	0.23075	0.22305	-0.21505	0.10347	-0.08568	0.03449
0.0001	0.0001	0.0001	0.0002	0.0004	0.0915	0.1627	0.1686

INEX97 ENJOY ALMOST EVERYTHING I DO

TOTDEP	TOTIE	TOTDEF	TOTAC	TOTPAR	TOTCYN	TOTSD	TOTINF
0.50605	-0.27720	-0.24358	-0.21391	0.16347	0.13544	0.09082	-0.00234
0.0001	0.0011	0.0001	0.0004	0.0074	0.0269	0.1388	0.9696

INEX100 I AM DEPRESSED MOST OF THE TIME

TOTDEP	TOTAC	TOTSD	TOTPAR	TOTIE	TOTCYN	TOTINF	TOTDEF
0.68115	-0.36004	0.34342	0.31293	-0.30347	0.22031	0.21659	-0.05483
0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0004	0.3722

INEX108 HAVE LITTLE TO LOOK FORWARD TO

TOTDEP	TOTAC	TOTIE	TOTSD	TOTPAR	TOTINF	TOTCYN	TOTDEF
0.69350	-0.40027	-0.34236	0.30539	0.24764	0.18202	0.14385	-0.12139
0.0001	0.0001	0.0001	0.0001	0.0001	0.0028	0.0187	0.1475

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / $PROR > |R|$ UNDER $H_0: \rho = 0$ / $N = 267$

INEX110 I AM AS HAPPY AS MY FRIENDS

TOTDEP	TOTIE	TOTPAR	TOTCYN	TOTAC	TOTSD	TOTINF	TOTDEF
0.26992	-0.22274	0.15642	0.12950	-0.06054	0.04581	0.03245	-0.01421
0.0001	0.0002	0.0105	0.0344	0.3244	0.4561	0.5976	0.8173

INEX117 DO NOT FEEL SAD AT THE PRESENT TIME

TOTDEP	TOTPAR	TOTIE	TOTSD	TOTCYN	TOTAC	TOTINF	TOTDEF
0.56225	0.31196	-0.31150	0.27086	0.18977	-0.17640	0.14682	-0.08551
0.0001	0.0001	0.0001	0.0001	0.0018	0.0033	0.0164	0.1636

INEX121 OTHERS ENJOY LIFE MORE THAN I DO

TOTDEP	TOTPAR	TOTIE	TOTSD	TOTAC	TOTINF	TOTCYN	TOTDEF
0.66957	0.38124	-0.37650	0.34907	-0.33133	0.18547	0.16766	-0.13810
0.0001	0.0001	0.0001	0.0001	0.0001	0.0023	0.0060	0.0240

INEX127 I HAVE A DULL LIFE

TOTDEP	TOTIE	TOTAC	TOTPAR	TOTSD	TOTDEF	TOTCYN	TOTINF
0.64956	-0.30290	-0.28902	0.28776	0.25940	-0.17701	0.12781	0.03303
0.0001	0.0001	0.0001	0.0001	0.0001	0.0037	0.0369	0.5911

INEX131 SEE UNPLEASANTNESS AHEAD

TOTDEP	TOTPAR	TOTAC	TOTSD	TOTIE	TOTINF	TOTCYN	TOTDEF
0.62916	0.29052	-0.28226	0.25577	-0.23599	0.20883	0.09933	-0.07215
0.0001	0.0001	0.0001	0.0001	0.0001	0.0006	0.1053	0.2400

INEX135 DON'T EXPECT TO GET WHAT I WANT

TOTDEP	TOTIE	TOTAC	TOTSD	TOTPAR	TOTINF	TOTCYN	TOTDEF
0.63323	-0.34887	-0.29716	0.27217	0.26716	0.14695	0.12700	-0.05241
0.0001	0.0001	0.0001	0.0001	0.0001	0.0163	0.0367	0.3937

INEX138 SOMETIMES THINK OF KILLING MYSELF

TOTDEP	TOTSD	TOTIE	TOTAC	TOTDEF	TOTPAR	TOTCYN	TOTINF
0.50872	0.34212	-0.31962	-0.24573	-0.23835	0.19309	0.06677	-0.03610
0.0001	0.0001	0.0001	0.0001	0.0001	0.0015	0.2770	0.5570

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / N = 257

INEX143 DON'T GET WHAT WANT SO FOOLISH TO WANT

TOTDEF	TOTAC	TOTIE	TOTPAR	TOTSD	TOTINF	TOTCYN	TOTDEF
0.45672	-0.34236	-0.33001	0.30998	0.29003	0.22728	0.07477	-0.00777
0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.2233	0.8995

INEX147 JUST DON'T GET THE BREAKS

TOTDEF	TOTAC	TOTIE	TOTPAR	TOTSD	TOTINF	TOTCYN	TOTDEF
0.55511	-0.45322	-0.41886	0.39246	0.35902	0.24531	0.15064	-0.06678
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.3137	0.2769

INEX164 EXPECT TO SUCCEED IN WHAT CONCERNS ME

TOTDEF	TOTAC	TOTIE	TOTINF	TOTPAR	TOTDEF	TOTSD	TOTCYN
0.23415	-0.22105	-0.16449	0.14367	0.05136	-0.03394	0.03038	0.01768
0.0001	0.0003	0.0071	0.0188	0.4032	0.5809	0.6212	0.7737

INEX167 MY FUTURE IS BRIGHT

TOTDEF	TOTAC	TOTPAR	TOTIE	TOTSD	TOTINF	TOTCYN	TOTDEF
0.57390	-0.26903	0.24614	-0.22096	0.17267	0.16854	0.15788	-0.09278
0.0001	0.0001	0.0001	0.0003	0.0047	0.0058	0.0098	0.1308

INEX169 I AM HAPPY IN MY PRESENT LINE

TOTDEF	TOTPAR	TOTIE	TOTCYN	TOTAC	TOTDEF	TOTSD	TOTINF
0.27758	0.23774	-0.23535	0.18375	-0.14553	-0.12085	0.09094	0.03631
0.0001	0.0001	0.0001	0.0026	0.0173	0.0495	0.1193	0.5547

INEX177 PRESENT SITUATION SEEMS HOPELESS

TOTDEF	TOTSD	TOTPAR	TOTINF	TOTAC	TOTIE	TOTCYN	TOTDEF
0.60491	0.31071	0.30297	0.20153	-0.28442	-0.25795	0.21220	0.05923
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.3352

INEX181 LOOK FORWARD TO MORE GOOD TIMES THAN BAD

TOTDEF	TOTAC	TOTSD	TOTIE	TOTPAR	TOTINF	TOTCYN	TOTDEF
0.50564	-0.26858	0.22452	-0.22070	0.14226	0.15112	0.09714	-0.02242
0.0001	0.0001	0.0002	0.0003	0.0025	0.0034	0.1132	0.1278

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX185 LOOK FORWARD TO FUTURE WITH HOPE

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTDEF	TOTINF	TOTCYN
0.58837	-0.32740	-0.27885	0.27892	0.19617	-0.16562	0.10698	0.07416
0.0001	0.0001	0.0001	0.0006	0.0013	0.0067	0.0810	0.2272

INEX189 MY FUTURE OFTEN SEEMS DARK TO ME

TOTDEP	TOTPAR	TOTIE	TOTSD	TOTAC	TOTDEF	TOTCYN	TOTINF
0.66066	0.34509	-0.32980	0.29051	-0.20688	-0.19867	0.17135	0.01967
0.0001	0.0001	0.0001	0.0001	0.0007	0.0011	0.0050	0.7490

INEX47 PEOPLE ARE NOT ALWAYS OUT TO TRICK YOU

TOTPAR	TOTCYN	TOTAC	TOTIE	TOTDEP	TOTINF	TOTSD	TOTDEF
0.19802	0.17317	-0.16049	-0.14007	0.12855	0.08848	0.05870	-0.00038
0.0011	0.0045	0.0086	0.0221	0.0358	0.1493	0.3393	0.9950

INEX120 AVERAGE CITIZEN CAN INFLUENCE GOVERNMENT

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTDEF	TOTCYN	TOTSD	TOTINF
0.37970	-0.22518	0.20028	-0.19447	0.11042	0.09486	-0.07975	-0.06591
0.0001	0.0002	0.0010	0.0014	0.0716	0.1221	0.1939	0.2832

INEX148 PEOPLE CAN CONTROL WORLD EVENTS

TOTIE	TOTCYN	TOTDEP	TOTSD	TOTINF	TOTAC	TOTDEF	TOTPAR
0.29684	0.20199	-0.14093	-0.10589	0.04699	0.04391	0.03261	0.02975
0.0001	0.0009	0.0213	0.0842	0.4445	0.4749	0.5958	0.6284

INEX149 MOST PEOPLE ARE DECENT AND TRUSTWORTHY

TOTCYN	TOTIE	TOTPAR	TOTDEP	TOTAC	TOTSD	TOTDEF	TOTINF
0.65677	-0.26634	0.21659	0.18198	-0.15986	0.15847	-0.08132	0.06737
0.0001	0.0001	0.0004	0.0028	0.0089	0.0095	0.1853	0.2727

INEX154 PEOPLE ARE BASICALLY GOOD

TOTCYN	TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTINF	TOTDEF
0.55615	-0.28352	0.26943	0.24153	-0.18107	0.17901	0.12984	-0.03935
0.0001	0.0001	0.0001	0.0001	0.0030	0.0733	0.0340	0.5220

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

INEX158 THERE'S A SUCKER BORN EVERY MINUTE

INEX163 SOMEONE IS GETTING AWAY WITH SOMETHING

INEX171 I AM WILLING TO TRUST MOST PEOPLE

INEX176 POLITICIANS ARE ALWAYS ROTTEN

INEX51 SOMEONE TYRING TO MAKE MY LIFE DIFFICULT

INEX62 OFTEN FEEL I AM IN GREAT DANGER

INEX73 MORE SUCCESSFUL IF PEOPLE NOT AGAINST ME

[illegible]

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX112 NO ONE HAS IT IN FOR ME

TOTPAR	TOTIE	TOTDEP	TOTSD	TOTINF	TOTCYN	TOTDEF	TOTAC
0.57249	-0.19635	0.17392	0.14640	0.13357	0.06394	-0.04906	-0.02738
0.0001	0.0013	0.0044	0.0167	0.0292	0.2979	0.4247	0.6561

INEX140 NEVER FEEL LIKE ROBOT SOMEONE DIRECTING

TOTPAR	TOTAC	TOTIE	TOTSD	TOTDEP	TOTDEF	TOTCYN	TOTINF
0.57853	-0.21622	-0.20707	0.20489	0.17626	-0.13741	0.07458	0.07199
0.0001	0.0004	0.0007	0.0008	0.0039	0.0247	0.2245	0.2477

INEX180 NO ONE IS MAKING THINGS GO WRONG

TOTPAR	TOTDEP	TOTIE	TOTDEF	TOTCYN	TOTAC	TOTSD	TOTINF
0.62707	0.27190	-0.26746	-0.20823	0.19988	-0.15417	0.14362	0.06452
0.0001	0.0001	0.0001	0.0006	0.0010	0.0117	0.0189	0.2935

INEX111 SOMETIMES I USE MY FRIENDS

TOTDEF	TOTSD	TOTPAR	TOTAC	TOTCYN	TOTIE	TOTINF	TOTDEP
0.54130	-0.15584	-0.09233	0.07796	-0.02964	0.02672	0.01955	-0.01938
0.0001	0.0108	0.1324	0.2042	0.6297	0.6635	0.7505	0.7525

INEX29 HAVE NEVER CHEATED

TOTDEF	TOTINF	TOTIE	TOTCYN	TOTSD	TOTAC	TOTDEP	TOTPAR
0.57283	0.19389	0.14534	-0.14421	0.08550	0.07133	0.03994	0.03554
0.0001	0.0015	0.0175	0.0184	0.1636	0.2454	0.5158	0.5631

INEX48 ALWAYS LIVED UP TO MY RESPONSIBILITIES

TOTDEF	TOTDEP	TOTAC	TOTIE	TOTPAR	TOTINF	TOTCYN	TOTSD
0.34140	-0.30898	0.24423	0.18711	-0.16729	-0.13993	-0.08123	-0.06135
0.0001	0.0001	0.0001	0.0021	0.0061	0.0222	0.1855	0.3180

INEX68 SOMETIMES I GET MAD AT MY FRIENDS

TOTDEF	TOTIE	TOTINF	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTCYN
0.61321	0.15536	0.14946	-0.06193	-0.04381	0.04348	-0.03718	0.02300
0.0001	0.0110	0.0145	0.3134	0.4759	0.4792	0.5453	0.7083

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 267

INEX86 ALWAYS ADMIT MY ERRORS

TOTDEF	TOTAC	TOTDEP	TOTIE	TOTPAR	TOTSD	TOTINF	TOTCYN
0.56877	0.22151	-0.21537	0.20773	-0.18268	-0.05988	-0.02230	-0.07774
0.0001	0.0003	0.0004	0.0006	0.0027	0.3297	0.7168	0.8999

INEX107 SOMETIMES I GET MAD AT MY FRIENDS

TOTDEF	TOTINF	TOTIE	TOTPAR	TOTSD	TOTDEP	TOTAC	TOTCYN
0.57294	0.15450	0.10887	-0.06353	-0.06117	-0.02477	-0.01269	-0.00340
0.0001	0.0115	0.1000	0.3010	0.3199	0.6870	0.8365	0.9559

INEX126 SOMETIMES I SAY BAD THINGS ABOUT FRIENDS

TOTDEF	TOTIE	TOTSD	TOTPAR	TOTDEP	TOTAC	TOTINF	TOTCYN
0.62716	0.24380	-0.17563	-0.16805	-0.15695	0.03570	0.03368	-0.01207
0.0001	0.0001	0.0040	0.0059	0.0102	0.5614	0.5838	0.8443

INEX146 PUT GOOD OF COUNTRY ABOVE MY INTERESTS

TOTPAR	TOTINF	TOTDEP	TOTSD	TOTDEF	TOTAC	TOTIE	TOTCYN
0.25997	0.19938	0.18247	0.15564	0.12943	0.02159	-0.01796	-0.00360
0.0001	0.0011	0.0028	0.0109	0.0345	0.7254	0.7702	0.9533

INEX165 GET ANGRY WHEN PEOPLE TEASE ME

TOTDEF	TOTPAR	TOTIE	TOTAC	TOTDEP	TOTSD	TOTCYN	TOTINF
0.54939	-0.27450	0.25264	0.19938	-0.18972	-0.14345	-0.06689	0.04167
0.0001	0.0001	0.0001	0.0011	0.0018	0.0190	0.2761	0.4978

INEX183 TRY TO GET OUT OF JOBS I DON'T ENJOY

TOTIE	TOTAC	TOTPAR	TOTDEF	TOTDEP	TOTSD	TOTCYN	TOTINF
0.17114	0.15997	-0.14875	0.13263	-0.11896	-0.08683	-0.06669	0.04983
0.0050	0.0088	0.0150	0.0303	0.0522	0.1571	0.2776	0.4174

PRCLST5

TOTSD	TOTDEP	TOTIE	TOTAC	TOTPAR	TOTDEF	TOTINF	TOTCYN
0.46511	0.25327	-0.21612	-0.15025	0.14613	-0.08606	0.06368	0.04680
0.0001	0.0001	0.0004	0.0140	0.0169	0.1602	0.2999	0.4463

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

PRCLST10

TOTSD	TOTDEP	TOTPAR	TOTAC	TOTIE	TOTINF	TOTDEF	TOTCYN
0.45918	0.24640	0.23100	-0.19720	-0.16727	0.16527	0.04633	-0.00228
0.0001	0.0001	0.0001	0.0012	0.0061	0.0068	0.4509	0.9705

PRCLST18

TOTSD	TOTCYN	TOTINF	TOTPAR	TOTDEP	TOTDEF	TOTIE	TOTAC
0.38094	-0.06553	0.06104	0.05683	0.04991	-0.03949	-0.02857	-0.02340
0.0001	0.2860	0.3284	0.3549	0.4166	0.5206	0.6421	0.7034

PRCLST22

TOTSD	TOTDEP	TOTPAR	TOTAC	TOTINF	TOTIE	TOTCYN	TOTDEF
0.56796	0.24790	0.15846	-0.14489	0.14180	-0.11299	0.07600	-0.02380
0.0001	0.0001	0.0095	0.0178	0.0205	0.0653	0.2158	0.6986

POCLST5

TOTSD	TOTDEP	TOTAC	TOTIE	TOTPAR	TOTDEF	TOTINF	TOTCYN
0.48747	0.28236	-0.23496	-0.21369	0.17933	-0.14361	0.11906	0.10793
0.0001	0.0001	0.0001	0.0004	0.0033	0.0189	0.0520	0.0783

POCLST10

TOTSD	TOTPAR	TOTDEP	TOTIE	TOTDEF	TOTCYN	TOTAC	TOTINF
0.38854	0.20900	0.19128	-0.13837	-0.12342	0.10705	-0.10351	0.05189
0.0001	0.0006	0.0017	0.0237	0.0439	0.0808	0.0914	0.3984

POCLST18

TOTSD	TOTIE	TOTPAR	TOTDEP	TOTINF	TOTAC	TOTCYN	TOTDEF
0.34708	-0.12434	0.11821	0.11569	0.09254	-0.05233	0.03394	0.00036
0.0001	0.0424	0.0537	0.0591	0.1315	0.3944	0.5808	0.9953

POCLST22

TOTSD	TOTPAR	TOTDEF	TOTDEP	TOTAC	TOTINF	TOTCYN	TOTIE
0.46550	0.13255	-0.10600	0.10432	-0.05893	0.05383	0.04067	-0.03969
0.0001	0.0304	0.0838	0.0889	0.3375	0.3810	0.5082	0.5184

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

PRHOST5

TOTSD	TOTPAR	TOTDEP	TOTAC	TOTIE	TOTINF	TOTCYN	TOTDEF
0.47673	0.27057	0.24748	-0.18941	-0.18202	0.11868	0.09670	-0.02640
0.0001	0.0001	0.0001	0.0019	0.0028	0.0527	0.1149	0.6676

PRHOST10

TOTSD	TOTDEP	TOTPAR	TOTIE	TOTINF	TOTAC	TOTCYN	TOTDEF
0.44775	0.23843	0.23231	-0.17504	0.06471	-0.05108	0.04394	-0.03960
0.0001	0.0001	0.0001	0.0867	0.2921	0.4058	0.4746	0.5193

PRHOST18

TOTSD	TOTPAR	TOTIE	TOTDEP	TOTINF	TOTDEF	TOTCYN	TOTAC
0.42460	0.12411	-0.12276	0.11950	0.11824	-0.05139	0.04626	-0.00252
0.0001	0.0427	0.0451	0.0511	0.0536	0.4030	0.4516	0.9674

PRHOST22

TOTSD	TOTDEP	TOTPAR	TOTIE	TOTAC	TOTCYN	TOTINF	TOTDEF
0.55220	0.26062	0.19939	-0.15600	-0.13893	0.08976	0.08556	-0.06387
0.0001	0.0001	0.0011	0.0107	0.0232	0.1436	0.1633	0.2984

POHOST5

TOTSD	TOTDEP	TOTIE	TOTAC	TOTPAR	TOTINF	TOTCYN	TOTDEF
0.50630	0.30472	-0.25413	-0.18391	0.16867	0.09701	0.09524	-0.03713
0.0001	0.0001	0.0001	0.0026	0.0057	0.1133	0.1206	0.5458

POHOST10

TOTSD	TOTPAR	TOTDEP	TOTIE	TOTAC	TOTCYN	TOTDEF	TOTINF
0.48275	0.18561	0.17842	-0.16256	-0.12042	0.06867	-0.06046	0.02730
0.0001	0.0023	0.0034	0.0078	0.0494	0.2635	0.3250	0.6570

POHOST18

TOTSD	TOTIE	TOTDEF	TOTPAR	TOTDEP	TOTAC	TOTINF	TOTCYN
0.47258	-0.26547	-0.21698	0.19170	0.17207	-0.14775	0.02921	-0.01514
0.0001	0.0001	0.0004	0.0016	0.0048	0.0157	0.6347	0.8054

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

POHOST22

TOTSD	TOTDEP	TOTIE	TOTPAR	TOTAC	TOTCYN	TOTDEF	TOTINF
0.56090	0.29153	-0.21782	0.17731	-0.13882	0.11622	-0.07462	0.07084
0.0001	0.0001	0.0003	0.0037	0.0233	0.0579	0.2243	0.2487

PRCLST1

TOTINF	TOTCYN	TOTIE	TOTDEF	TOTSD	TOTDEP	TOTAC	TOTPAR
0.28062	0.09752	0.06716	0.05813	-0.02203	-0.01660	0.01506	0.01492
0.0001	0.1115	0.2742	0.3441	0.7201	0.7872	0.7939	0.8083

PRCLST14

TOTINF	TOTPAR	TOTAC	TOTCYN	TOTIE	TOTDEP	TOTSD	TOTDEF
0.35269	0.12596	-0.10146	0.08419	-0.06244	0.05092	0.01666	0.01169
0.0001	0.0397	0.0980	0.1702	0.3094	0.4073	0.7864	0.8492

PRCLST27

TOTINF	TOTAC	TOTPAR	TOTDEP	TOTSD	TOTIE	TOTDEF	TOTCYN
0.49115	-0.24711	0.16954	0.15613	0.13150	-0.11220	-0.04359	0.04141
0.0001	0.0001	0.0055	0.0065	0.0317	0.0672	0.4782	0.5004

POCLST1

TOTINF	TOTDEP	TOTPAR	TOTAC	TOTIE	TOTSD	TOTDEF	TOTCYN
0.33717	0.10230	0.08942	-0.07650	-0.07543	0.07515	0.05606	-0.05446
0.0001	0.0937	0.1450	0.2128	0.2193	0.2210	0.3616	0.3754

POCLST14

TOTINF	TOTSD	TOTAC	TOTPAR	TOTCYN	TOTDEF	TOTDEP	TOTIE
0.39329	0.21254	-0.12571	0.12160	0.06113	0.05677	0.05204	-0.01775
0.0001	0.0005	0.0401	0.0471	0.3196	0.3554	0.3970	0.7728

POCLST27

TOTINF	TOTPAR	TOTDEP	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTIE
0.43236	0.14991	0.11525	0.17847	-0.10834	-0.04804	-0.01973	-0.00894
0.0001	0.0142	0.0600	0.0768	0.0772	0.4344	0.7482	0.8844

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

PRHOST1

TOTINF	TOTSD	TOTIE	TOTDEP	TOTDEF	TOTAC	TOTCYN	TOTPAR
0.25947	-0.07893	0.06850	-0.05911	0.04731	-0.03098	0.01456	-0.01200
0.0001	0.1986	0.2647	0.3359	0.4414	0.6143	0.8127	0.8453

PRHOST14

TOTINF	TOTPAR	TOTSD	TOTAC	TOTDEP	TOTIE	TOTDEF	TOTCYN
0.36739	0.18085	0.13352	-0.12313	0.12364	-0.06353	-0.06348	0.04265
0.0001	0.0030	0.0292	0.0444	0.0910	0.3010	0.3014	0.4878

PRHOST27

TOTINF	TOTPAR	TOTAC	TOTSD	TOTDEP	TOTCYN	TOTDEF	TOTIE
0.46899	0.12537	-0.12343	0.08888	0.07489	-0.06363	-0.03126	0.01799
0.0001	0.0437	0.0439	0.1475	0.2226	0.3002	0.6111	0.7699

POHOST1

TOTINF	TOTDEF	TOTDEP	TOTSD	TOTCYN	TOTIE	TOTAC	TOTPAR
0.20319	0.14992	-0.05432	-0.04036	-0.02846	-0.01656	-0.01362	0.04646
0.0008	0.0142	0.3766	0.5114	0.6434	0.7877	0.8247	0.9164

POHOST14

TOTINF	TOTSD	TOTDEP	TOTDEF	TOTAC	TOTPAR	TOTCYN	TOTIE
0.38362	0.15684	0.12773	0.09244	-0.09217	0.05956	-0.02259	-0.01546
0.0001	0.0103	0.0370	0.1319	0.1331	0.3323	0.7133	0.8268

POHOST27

TOTINF	TOTDEP	TOTPAR	TOTSD	TOTDEF	TOTAC	TOTIE	TOTCYN
0.44328	0.15793	0.15373	0.13699	0.12167	-0.08234	-0.05500	-0.03187
0.0001	0.0097	0.0119	0.0252	0.0470	0.1798	0.3707	0.6041

INEX1 MY LIFE WAS SAVED BY A HEART OPERATION

TOTINF	TOTIE	TOTSD	TOTAC	TOTCYN	TOTDEP	TOTPAR	TOTDEF
0.23634	-0.13380	0.10862	-0.09842	0.08634	0.04811	0.03808	-0.02103
0.0001	0.0288	0.0764	0.1086	0.1595	0.4337	0.5356	0.7323

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > R UNDER H0:RHO=0 / N = 267							
INEX20	COULD TALK BEFORE I WENT TO SCHOOL						
TOTINF	TOTAC	TOTDEP	TOTCYN	TOTPAR	TOTIE	TOTSD	TOTDEF
0.40209	-0.18249	0.17497	0.11154	0.08984	-0.07735	0.06004	-0.03226
0.0001	0.0028	0.0041	0.0688	0.1432	0.2077	0.3284	0.5998
INEX39	RUNNING TIRES ME MORE THAN WALKING						
TOTINF	TOTAC	TOTDEP	TOTIE	TOTSD	TOTPAR	TOTDEF	TOTCYN
0.27616	0.08754	-0.04625	0.04087	-0.02843	0.01137	0.00605	-0.00092
0.0001	0.1537	0.4517	0.5061	0.6437	0.8532	0.9216	0.9883
INEX58	SOME DAYS ARE WARMER THAN OTHERS						
TOTINF	TOTDEP	TOTAC	TOTCYN	TOTPAR	TOTIE	TOTDEF	TOTSD
0.32021	0.08715	-0.07589	-0.04526	0.04247	0.03738	-0.03168	0.01803
0.0001	0.1556	0.2164	0.4615	0.4896	0.5430	0.6063	0.7694
INEX77	TALK TO SOMEONE ALMOST EVERY DAY						
TOTINF	TOTAC	TOTDEP	TOTDEF	TOTPAR	TOTSD	TOTCYN	TOTIE
0.24159	-0.18118	0.15561	0.09059	0.03850	0.03785	0.03566	-0.03432
0.0001	0.0030	0.0109	0.1399	0.5311	0.5380	0.5618	0.5766
INEX96	HAVE NO TROUBLE COUNTING TO TWENTY						
TOTINF	TOTCYN	TOTIE	TOTPAR	TOTSD	TOTAC	TOTDEF	TOTDEP
0.20807	-0.11698	0.09645	-0.08135	-0.06534	-0.05679	0.03718	0.00007
0.0006	0.0562	0.1159	0.1851	0.2874	0.3553	0.5452	0.9991
INEX116	I AMKE ALL MY OWN CLOTHES AND SHOES						
TOTINF	TOTDEP	TOTPAR	TOTCYN	TOTAC	TOTIE	TOTSD	TOTDEF
0.28708	0.17028	0.13455	0.10137	-0.08314	-0.06804	0.05542	-0.03950
0.0001	0.0053	0.0279	0.0984	0.1756	0.2679	0.3671	0.5204
INEX136	I HAVE ATTENDED SCHOOL BEFORE						
TOTINF	TOTPAR	TOTCYN	TOTIE	TOTDEP	TOTDEF	TOTAC	TOTSD
0.26605	0.07600	0.06067	-0.05136	0.05055	0.04158	-0.02144	0.01633
0.0001	0.2158	0.3234	0.4033	0.4107	0.4987	0.7273	0.7905

APPENDIX TABLE A-2

TOTAL SAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 267

INEX155 RARELY USE FOOD OR DRINK

TOTINF	TOTAC	TOTPAR	TOTDEP	TOTSD	TOTDEF	TOTCYN	TOTIE
0.31377	-0.19521	0.16554	0.11011	0.09540	0.08886	0.02563	-0.01975
0.0001	0.0013	0.0067	0.0725	0.1199	0.1475	0.6767	0.7480

INEX174 USUALLY WEAR CLOTHES AROUND OTHER PEOPLE

TOTINF	TOTPAR	TOTSD	TOTDEP	TOTDEF	TOTAC	TOTIE	TOTCYN
0.33833	0.17346	0.13093	0.13071	0.10827	-0.07830	-0.05576	0.03677
0.0001	0.0045	0.0325	0.0328	0.0774	0.2022	0.3641	0.5497

INEX190 I HAVE NEVER RIDDEN IN AN AUTOMOBILE

TOTINF	TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTDEF	TOTCYN
0.18388	0.14233	-0.09434	-0.05887	0.05717	0.05262	0.03043	-0.02715
0.0026	0.0200	0.1241	0.3380	0.3521	0.3913	0.6206	0.6587

Appendix Table A-3

Equimax Loadings Among Subsamples
(7-Factor Principal Factor Solution)

[illegible]

Note. See questionnaire in Appendix for item descriptions corresponding to item numbers.

Table abbreviations: T = Total; M = Males; F = Females;
W = White, L = Lower SES; Mi = Middle SES.

Appendix Table A-4

Correlations of Items with Total Scale Reflecting
Extent of Extremity Responding
White Subsample

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
1	.06	36	.49**
2	.30	37	.41*
3	.39	38	.46**
4	.21	39	.16
5	.32	40	.20
6	.28	41	.31
7	.28	42	.41*
8	.15	43	.39
9	.20	44	.25
10	.22	45	.27
11	.30	46	.36
12	.21	47	.54***
13	.45**	48	.40*
14	.19	49	.33
15	.35	50	.45**
16	.44*	51	.40*
17	.40*	52	.23
18	.31	53	.26
19	.40*	54	.37
20	.24	55	.43*
21	.19	56	.35
22	.30	57	.35
23	.29	58	.27
24	.21	59	.31
25	.38	60	.42*
26	.43*	61	.30
27	.36	62	.38
28	.20	63	.40*
29	.18	64	.43*
30	.31	65	.47**
31	.38	66	.24
32	.30	67	.44*
33	.19	68	.28
34	.30	69	.32
35	.24	70	.43*

*Correlation .40-.44 ($\underline{n} = 36$).

**Correlation .45-.49 ($\underline{n} = 22$).

***Correlation over .50 ($\underline{n} = 12$).

Appendix Table A-4, continued

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
71	.47**	111	.49**
72	.27	112	.46**
73	.55***	113	.37
74	.19	114	.43*
75	.28	115	.35
76	.47**	116	.10
77	.24	117	.36
78	.35	118	.44*
79	.37	119	.42*
80	.39	120	.38
81	.41*	121	.50***
82	.38	122	.32
83	.44*	123	.42*
84	.45**	124	.48**
85	.40*	125	.43*
86	.37	126	.21
87	.40*	127	.38
88	.29	128	.38
89	.36	129	.40*
90	.38	130	.46**
91	.46**	131	.35
92	.53***	132	.38
93	.33	133	.41*
94	.48**	134	.38
95	.42*	135	.43*
96	.23	136	.04
97	.36	137	.38
98	.22	138	.25
99	.33	139	.37
100	.44*	140	.48**
101	.41*	141	.47**
102	.31	142	.45**
103	.39	143	.51***
104	.37	144	.31
105	.39	145	.29
106	.39	146	.29
107	.23	147	.51***
108	.53***	148	.38
109	.54***	149	.37
110	.42*	150	.23

*Correlation .40-.44 ($\bar{n}$ = 36).**Correlation .45-.49 ($\bar{n}$ = 22).***Correlation over .50 ($\bar{n}$ = 12).

Appendix Table A-4, continued

<u>Item #</u>	<u>Item-Total Correlation</u>	<u>Item #</u>	<u>Item-Total Correlation</u>
151	.49**	171	.46**
152	.34	172	.53***
153	.40*	173	.49**
154	.37	174	.26
155	.18	175	.50***
156	.30	176	.39
157	.35	177	.44*
158	.28	178	.29
159	.49**	179	.28
160	.19	180	.54***
161	.37	181	.26
162	.41*	182	.47
163	.23	183	.25
164	.37	184	.24
165	.26	185	.42*
166	.37	186	.50***
167	.39	187	.30
168	.41*	188	.37
169	.24	189	.41*
170	.38	190	.19

*Correlation .40-.44 ($\bar{n} = 36$).

**Correlation .45-.49 ($\bar{n} = 22$).

***Correlation over .50 ($\bar{n} = 12$).

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX4 DON'T MIND WORK WHILE PEOPLE HAVING FUN

TOTAC	TOTDEP	TOTIE	TOTCYN	TOTPAR	TOTDEF	TOTSD	TOTINF
0.39261	-0.30734	0.26256	-0.21652	-0.19679	0.17490	-0.15649	-0.11664
0.0001	0.0001	0.0009	0.0066	0.0138	0.0290	0.0511	0.8367

INEX8 IF NOT GOOD AT SOMETHING, GIVE IT UP

TOTAC	TOTIE	TOTDEF	TOTSD	TOTINF	TOTDEP	TOTCYN	TOTPAR
0.34069	0.19644	0.08893	-0.08831	0.08633	-0.08531	-0.07629	0.02086
0.0001	0.0140	0.2696	0.2730	0.2839	0.2897	0.3313	0.7960

INEX14 THINK MORE ABOUT FUTURE THAN PRESENT

TOTPAR	TOTAC	TOTDEP	TOTSD	TOTCYN	TOTIE	TOTDEF	TOTINF
-0.20262	0.19692	-0.16116	-0.15743	-0.12001	0.09571	0.08168	-0.05891
0.0112	0.0137	0.0444	0.0497	0.1356	0.2346	0.3108	0.4651

INEX16 OFTEN DO LESS THAN MY BEST

TOTAC	TOTDEP	TOTDEF	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTINF
0.57594	-0.27820	0.26698	0.25914	-0.22003	-0.18153	-0.13691	-0.05322
0.0001	0.0004	0.0008	0.0011	0.0058	0.0233	0.0353	0.5093

INEX21 LIKE TASKS REQUIRING SKILL AND EFFORT

TOTAC	TOTINF	TOTDEP	TOTCYN	TOTDEF	TOTSD	TOTIE	TOTPAR
0.31252	-0.25230	-0.12565	0.07628	-0.07190	0.04787	-0.04405	0.04364
0.0001	0.0015	0.1181	0.3439	0.3724	0.5529	0.5851	0.5886

INEX25 PEOPLE THINK I DON'T HAVE DRIVE

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTSD	TOTDEF	TOTINF	TOTCYN
0.51307	-0.42547	0.30413	-0.26896	-0.17362	0.14925	-0.07079	-0.06925
0.0001	0.0001	0.0001	0.0007	0.0302	0.0629	0.3799	0.3933

INEX30 LIKE TO SAY I'VE DONE JOB WELL

TOTINF	TOTAC	TOTDEF	TOTIE	TOTPAR	TOTDEP	TOTCYN	TOTSD
-0.33554	0.26094	-0.20223	-0.07297	-0.04475	-0.03490	0.03169	0.00827
0.0001	0.0011	0.0114	0.3653	0.5791	0.6653	0.6946	0.9154

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX40 ENJOY WORK MORE THAN PLAY

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTDEF	TOTINF
0.32469	-0.24012	0.11331	-0.10063	-0.09101	-0.08062	0.04536	-0.04213
0.0001	0.0025	0.1590	0.2113	0.2585	0.3171	0.5739	0.6016

INEX56 NEGLECT MY LIFE BECAUSE I WORK SO HARD

TOTPAR	TOTAC	TOTINF	TOTCYN	TOTSD	TOTIE	TOTDEP	TOTDEF
0.15944	0.11901	0.09323	0.05330	0.04508	-0.03994	0.03638	-0.01426
0.0468	0.1339	0.2470	0.5087	0.5763	0.6206	0.6521	0.2617

INEX61 ENJOY EASY COURSES MORE THAN HARD ONES

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTCYN	TOTINF	TOTSD	TOTDEF
0.58176	-0.25928	0.24435	-0.22975	-0.17662	-0.13507	-0.12753	0.11118
0.0001	0.0011	0.0021	0.0039	0.0274	0.0927	0.1126	0.1670

INEX64 REALLY DON'T ENJOY HARD WORK

TOTAC	TOTDEP	TOTCYN	TOTIE	TOTPAR	TOTSD	TOTDEF	TOTINF
0.54572	-0.36878	-0.23348	0.22296	-0.18487	-0.13591	0.11293	-0.10114
0.0001	0.0001	0.0034	0.0051	0.0209	0.0937	0.1604	0.2090

INEX66 LIKE TO BE AUTHORITY IN SOME FIELD

TOTINF	TOTDEP	TOTCYN	TOTAC	TOTDEF	TOTPAR	TOTSD	TOTIE
-0.17852	-0.14849	0.14104	0.13050	-0.12622	0.10657	0.06936	0.05487
0.0258	0.0643	0.0790	0.1044	0.1164	0.1854	0.3896	0.4963

INEX71 KEEP WORKING ON PROBLEM OTHERS GIVEN UP

TOTAC	TOTIE	TOTDEP	TOTDEF	TOTPAR	TOTSD	TOTCYN	TOTINF
0.52234	0.30488	-0.24935	0.16829	-0.11008	-0.08770	-0.03074	-0.01923
0.0001	0.0001	0.0017	0.0357	0.1713	0.2763	0.7233	0.8117

INEX75 WOULD LIKE TO ACCOMPLISH SOMETHING GREAT

TOTAC	TOTINF	TOTIE	TOTCYN	TOTDEP	TOTPAR	TOTDEF	TOTSD
0.30576	-0.16458	0.13918	0.09671	-0.08482	-0.05364	0.04110	0.03810
0.0001	0.0401	0.0931	0.2297	0.2925	0.5060	0.6104	0.6360

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX78 STUDY BECAUSE I HAVE TO

TOTAC	TOTPAR	TOTIE	TOTDEP	TOTDEF	TOTSD	TOTCYN	TOTINF
0.62524	-0.34815	0.29730	-0.25264	0.20617	-0.19838	-0.16889	-0.06544
0.0001	0.0001	0.0002	0.0015	0.0098	0.0130	0.0351	0.4170

INEX79 LIKE TO BE SUCCESSFUL IN THINGS

TOTAC	TOTINF	TOTPAR	TOTDEP	TOTSD	TOTCYN	TOTDEF	TOTIE
0.32623	-0.24384	-0.16862	-0.15603	-0.08886	0.08138	0.06161	0.74838
0.0001	0.0022	0.0354	0.0518	0.2700	0.3125	0.4448	0.6167

INEX84 PEOPLE SAID I AM A HARD WORKER

TOTAC	TOTINF	TOTDEP	TOTDEF	TOTIE	TOTSD	TOTPAR	TOTCYN
0.47325	-0.23923	-0.18863	0.18561	0.12031	-0.09998	-0.08505	-0.04549
0.0001	0.0026	0.0184	0.0203	0.1347	0.2143	0.2911	0.5729

INEX90 SET GOALS WHICH ARE DIFFICULT

TOTAC	TOTIE	TOTDEF	TOTDEP	TOTSD	TOTPAR	TOTCYN	TOTINF
0.14002	-0.15556	-0.14609	0.03620	0.05325	0.05129	0.04146	-0.01839
0.0460	0.0525	0.0688	0.2846	0.5091	0.5249	0.6073	0.8198

INEX91 WORRY MORE ABOUT GRADE THAN LEARNING

TOTAC	TOTIE	TOTDEP	TOTPAR	TOTSD	TOTDEF	TOTCYN	TOTINF
0.41958	0.33428	-0.29636	-0.28550	-0.24151	0.22600	-0.08143	0.00235
0.0001	0.0001	0.0002	0.0003	0.0024	0.0046	0.3122	0.9797

INEX99 UNREALISTIC BECOMING THE BEST

TOTAC	TOTIE	TOTDEF	TOTSD	TOTDEP	TOTCYN	TOTPAR	TOTINF
0.30489	0.28005	0.12521	-0.09806	-0.07296	0.05471	0.04910	-0.03372
0.0001	0.0004	0.1194	0.2233	0.3654	0.4975	0.5428	0.6760

INEX103 GO TO SCHOOL TO IMPROVE EARNING

TOTAC	TOTCYN	TOTPAR	TOTDEP	TOTIE	TOTSD	TOTDEF	TOTINF
0.57100	-0.31752	-0.28893	-0.15523	0.17134	-0.13930	0.09616	-0.06381
0.0001	0.0001	0.0003	0.0206	0.0335	0.0829	0.2324	0.4287

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX105 MY GOAL IS TO DO BETTER THAN ANYONE

TOTCYN	TOTAC	TOTPAR	TOTDEF	TOTINF	TOTSD	TOTDEP	TOTIE
0.25616	0.21935	0.18751	-0.17238	-0.28368	0.06893	-0.05561	0.04044
0.0012	0.0059	0.0191	0.0314	0.2990	0.3926	0.4905	0.6162

INEX111 WORK HARD ENOUGH TO GET BY

TOTAC	TOTDEP	TOTPAR	TOTIE	TOTSD	TOTDEF	TOTCYN	TOTINF
0.71547	-0.36433	-0.32534	0.26077	-0.23665	0.22531	-0.19821	-0.14885
0.0001	0.0001	0.0001	0.0010	0.0029	0.0047	0.0131	0.1637

INEX114 LIKE TO SOLVE PUZZLES AND PROBLEMS

TOTAC	TOTIE	TOTINF	TOTDEP	TOTSD	TOTDEF	TOTPAR	TOTCYN
0.39157	0.12904	-0.11919	-0.10376	-0.08473	-0.05060	-0.04276	-0.02427
0.0001	0.1034	0.1383	0.1974	0.2929	0.5304	0.5961	0.7636

INEX119 WOULD RATHER DO AN EASY JOB

TOTAC	TOTDEP	TOTPAR	TOTCYN	TOTIE	TOTDEF	TOTSD	TOTINF
0.68382	-0.30726	-0.30306	-0.23984	0.18905	0.13464	-0.13358	-0.08134
0.0001	0.0001	0.0001	0.0026	0.0181	0.0938	0.0964	0.3128

INEX125 WORK ONLY BECAUSE I HAVE TO

TOTAC	TOTDEP	TOTPAR	TOTINF	TOTCYN	TOTIE	TOTSD	TOTDEF
0.57787	-0.28311	-0.23800	-0.20015	-0.18491	0.14733	-0.14113	0.02099
0.0001	0.0003	0.0028	0.0122	0.0208	0.0665	0.0789	0.7948

INEX128 LIKE TO DO MY VERY BEST

TOTAC	TOTDEP	TOTDEF	TOTIE	TOTPAR	TOTINF	TOTSD	TOTCYN
0.49647	-0.37227	0.33285	0.29333	-0.15103	-0.11237	-0.10484	-0.08629
0.0001	0.0001	0.0001	0.0002	0.0598	0.1609	0.1927	0.2842

INEX133 LIKE TO DO MY BEST IN COURSES

TOTAC	TOTINF	TOTDEF	TOTDEP	TOTIE	TOTPAR	TOTSD	TOTCYN
0.52180	-0.24331	0.20164	-0.17607	0.16098	-0.15131	-0.03830	0.0164
0.0001	0.0022	0.0116	0.0279	0.0447	0.0594	0.6350	0.9838

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX142 STUDY JUST HARD ENOUGH TO PASS

TOTAC	TOTIE	TOTPAR	TOTCYN	TOTDEF	TOTDEP	TOTINF	TOTSD
0.57542	0.28643	-0.27710	-0.25334	0.23727	-0.23677	-0.14753	-0.13587
0.0001	0.0003	0.0005	0.0009	0.0029	0.0029	0.0802	0.0908

INEX150 LIKE TO DO THINGS BETTER THAN OTHERS

TOTAC	TOTINF	TOTDEP	TOTCYN	TOTIE	TOTPAR	TOTDEF	TOTSD
0.26724	-0.14879	-0.12018	0.11315	0.09645	0.12875	0.02552	0.01127
0.0007	0.0638	0.1351	0.1594	0.2310	0.7217	0.7518	1.8894

INEX160 DOESN'T MATTER IF ONE OF THE BEST

TOTAC	TOTIE	TOTPAR	TOTDEF	TOTCYN	TOTDEP	TOTINF	TOTSD
0.24317	0.14013	0.13182	0.04666	-0.01190	-0.01040	-0.00902	0.00343
0.0022	0.0810	0.1036	0.5630	0.8828	0.8975	0.9110	0.9661

INEX165 RARELY DO EXTRA STUDYING TO IMPROVE

TOTAC	TOTDEP	TOTPAR	TOTINF	TOTCYN	TOTIE	TOTDEF	TOTSD
0.42002	-0.21617	-0.16270	-0.15454	-0.11922	0.09073	0.05616	-0.04173
0.0001	0.0067	0.0424	0.0541	0.1382	0.2597	0.4062	0.6137

INEX172 SELF-IMPROVEMENT NOTHING UNLESS SUCCESS

TOTAC	TOTPAR	TOTDEP	TOTSD	TOTIE	TOTCYN	TOTDEF	TOTINF
0.43237	-0.38287	-0.34714	-0.32767	0.33275	-0.18508	0.17953	-0.11156
0.0001	0.0001	0.0001	0.0001	0.0001	0.0207	0.0249	0.1695

INEX173 ENJOY EASY COURSES MORE THAN HARD ONES

TOTAC	TOTPAR	TOTDEP	TOTCYN	TOTIE	TOTINF	TOTSD	TOTDEF
0.65262	-0.35822	-0.31377	-0.27453	0.26010	-0.16065	-0.13371	0.12615
0.0001	0.0001	0.0001	0.0005	0.0010	0.0451	0.0961	0.1166

INEX182 ENJOY THINGS WHICH CHALLENGE ME

TOTAC	TOTDEP	TOTIE	TOTPAR	TOTINF	TOTCYN	TOTSD	TOTDEF
0.63703	-0.39834	0.29660	-0.25090	-0.19012	-0.15511	-0.12488	0.11497
0.0001	0.0001	0.0002	0.0016	0.0174	0.0532	0.1204	0.1530

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 156

INEX186 PREFER COURSES THAT ARE CHALLENGING

TOTAC	TOTDEP	TOTIE	TOTINF	TOTPAR	TOTDEF	TOTCYN	TOTSD
0.64671	-0.26556	0.22092	-0.21661	-0.20649	0.14656	-0.13830	-0.11100
0.0001	0.0008	0.0056	0.0066	0.0097	0.0679	0.0851	0.1677

INEX5 LUCKY ARE THOSE WHO FIGURE OUT

TOTIE	TOTPAR	TOTINF	TOTDEF	TOTCYN	TOTSD	TOTAC	TOTDEP
0.19125	-0.12633	0.09882	-0.08415	0.05493	-0.04628	0.02219	0.00678
0.0168	0.1161	0.2197	0.2963	0.4958	1.5661	0.7833	0.9330

INEX6 NOT WISE TO PLAN TOO FAR AHEAD

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTCYN	TOTINF
0.45300	-0.32066	-0.27235	0.19123	-0.16310	0.12796	-0.08053	-0.04022
0.0001	0.0001	0.0006	0.0168	0.0419	0.1114	0.3176	0.6181

INEX9 MORE SUPERSTITIOUS THAN MANY PEOPLE

TOTIE	TOTAC	TOTPAR	TOTSD	TOTCYN	TOTDEF	TOTDEP	TOTINF
0.35570	0.16423	-0.12178	-0.11315	-0.09858	0.09352	-0.05265	0.01182
0.0001	0.0405	0.1299	0.1596	0.2208	0.2456	0.5139	0.9820

INEX10 THAT TEACHERS ARE UNFAIR IS NONSENSE

TOTIE	TOTPAR	TOTSD	TOTDEF	TOTAC	TOTINF	TOTCYN	TOTDEP
0.23448	-0.20593	-0.17496	0.14689	0.07626	0.06238	0.01629	0.01111
0.0032	0.0009	0.0289	0.0673	0.3441	0.4392	0.8401	0.8905

INEX12 WE CAN WIPE OUT CORRUPTION

TOTIE	TOTDEP	TOTDEF	TOTAC	TOTCYN	TOTSD	TOTPAR	TOTINF
0.29473	-0.15136	0.08918	0.07676	0.06149	-0.04648	0.00805	0.03303
0.0002	0.0593	0.2682	0.3409	0.4457	0.5645	0.9206	0.9701

INEX15 BAD THINGS BALANCED BY GOOD ONES

TOTDEP	TOTINF	TOTIE	TOTAC	TOTCYN	TOTSD	TOTDEF	TOTPAR
-0.24417	-0.13391	0.09508	0.08239	-0.06379	-0.03313	0.02847	-0.02728
0.0021	0.0956	0.2377	0.3065	0.4288	0.6814	0.7242	0.7353

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX17 DON'T KNOW WHO OR WHAT TO BELIEVE

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTCYN	TOTDEF	TOTSD	TOTINF
0.48834	-0.47286	-0.33327	0.31437	-0.25266	0.14656	-0.14398	-0.01324
0.0001	0.0001	0.0001	0.0001	0.0011	0.0679	0.0729	0.8697

INEX18 THINGS JUST DON'T WORK OUT

TOTDEP	TOTIE	TOTPAR	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.55205	-0.45703	0.43465	0.39623	-0.23869	0.17262	-0.15920	0.15641
0.0001	0.0001	0.0001	0.0001	0.0027	0.0312	0.0471	0.0512

INEX22 PEOPLE FAIL WHO HAVE NOT TAKEN ADVANTAGE

TOTPAR	TOTCYN	TOTINF	TOTDEP	TOTSD	TOTAC	TOTDEF	TOTIE
0.26652	0.15234	0.11108	0.10657	0.09650	-0.06812	-0.02730	0.01532
0.0009	0.0576	0.1674	0.1855	0.2308	0.3981	0.7351	0.8494

INEX23 THINGS READERS TELL YOU TRUE

TOTIE	TOTPAR	TOTINF	TOTAC	TOTDEF	TOTCYN	TOTSD	TOTDEP
0.32810	-0.25389	-0.22050	0.16544	0.15311	-0.12084	-0.11954	-0.05539
0.0001	0.0014	0.0057	0.0390	0.0564	0.1329	0.1372	0.4922

INEX24 EXAM QUESTIONS UNRELATED TO COURSE

TOTIE	TOTPAR	TOTSD	TOTAC	TOTDEP	TOTDEF	TOTINF	TOTCYN
0.44449	-0.42843	-0.30754	0.23917	-0.22170	0.16501	-0.16431	-0.09433
0.0001	0.0001	0.0001	0.0026	0.0354	0.0395	0.0404	0.2415

INEX27 PEOPLE GET THE RESPECT THEY DESERVE

TOTIE	TOTDEF	TOTDEP	TOTPAR	TOTCYN	TOTSD	TOTINF	TOTAC
0.23281	0.16595	-0.15562	-0.14311	-0.13711	-0.09584	-0.06177	-0.00039
0.0003	0.0334	0.0524	0.0747	0.0879	0.2340	0.4436	0.9961

INEX28 OTHERS WON'T LIKE IF DIDN'T GET ALONG

TOTAC	TOTINF	TOTDEF	TOTPAR	TOTDEP	TOTSD	TOTIE	TOTCYN
-0.11229	-0.08830	0.07861	-0.07146	0.05949	0.02114	0.01590	0.01843
0.1628	0.2705	0.3293	0.3753	0.4607	0.7933	0.8148	0.8194

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX32 CAN CHANGE WHAT HAPPENS BY WHAT YOU DO

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTSD	TOTINF	TOTDEF	TOTCYN
0.26786	-0.11245	0.10900	-0.08928	-0.04480	-0.01830	0.01365	0.00581
0.0007	0.1622	0.1756	0.2677	0.5787	0.8207	0.8657	0.9426

INEX41 PEOPLE ARE LONELY BECAUSE THEY DON'T TRY

TOTIE	TOTCYN	TOTAC	TOTPAR	TOTDEF	TOTDEP	TOTSD	TOTINF
0.25239	0.09225	-0.08141	0.05833	0.05739	-0.05035	0.03126	0.00459
0.0035	0.2521	0.3123	0.4695	0.4767	0.5325	0.6925	0.9547

INEX42 IMPOSSIBLE TO BELIEVE THAT LUCK PLAYS A

TOTIE	TOTDEF	TOTAC	TOTDEP	TOTPAR	TOTSD	TOTINF	TOTCYN
0.41222	0.20439	0.16093	-0.13261	-0.11895	-0.07998	-0.02302	0.02155
0.0001	0.0105	0.0448	0.0989	0.1392	0.3210	0.7755	0.7894

INEX43 FEEL OTHER PEOPLE ARE USING ME

TOTPAR	TOTIE	TOTDEP	TOTSD	TOTDEF	TOTCYN	TOTAC	TOTINF
-0.45326	0.40483	-0.37360	-0.31803	0.26710	-0.22225	0.15344	-0.02751
0.0001	0.0001	0.0001	0.0001	0.0007	0.0053	0.0609	0.7331

INEX45 GRADES ARE INFLUENCED BY ACCIDENT

TOTPAR	TOTIE	TOTSD	TOTDEP	TOTINF	TOTDEF	TOTAC	TOTCYN
-0.27548	0.27027	-0.18685	-0.14698	-0.12180	0.11804	0.10962	0.01854
0.0005	0.0006	0.0195	0.0671	0.1293	0.1422	0.1731	0.8183

INEX46 FRIENDS DEPEND ON HOW NICE YOU ARE

TOTIE	TOTCYN	TOTDEP	TOTDEF	TOTSD	TOTPAR	TOTINF	TOTAC
0.20397	-0.13006	-0.12032	0.11830	-0.10031	-0.04896	-0.03832	-0.01261
0.0106	0.1056	0.1346	0.1413	0.2128	0.5439	0.6340	0.8759

INEX50 BELIEF IN FATE AVOID RESPONSIBILITY

TOTIE	TOTAC	TOTPAR	TOTDEF	TOTSD	TOTDEP	TOTCYN	TOTINF
0.47288	0.28437	-0.21204	0.20332	-0.19334	-0.16357	-0.11676	-0.06095
0.0001	0.0003	0.0079	0.0109	0.0156	0.0413	0.1466	0.4497

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX53 THERE WILL ALWAYS BE WARS

TOTIE	TOTDEF	TOTPAR	TOTCYN	TOTDEF	TOTSD	TOTAC	TOTINF
0.30676	-0.08135	0.06849	-0.05816	-0.03015	0.02351	0.02246	0.00408
0.0001	0.3127	0.3955	0.4708	0.7087	0.7708	0.7808	0.9597

INEX54 RARELY SUCH A THING AS AN UNFAIR TEST

TOTIE	TOTDEF	TOTDEF	TOTCYN	TOTPAR	TOTAC	TOTSD	TOTINF
0.37168	0.23554	-0.16330	-0.14995	-0.14339	0.09169	-0.03711	0.00325
0.0001	0.0031	0.0417	0.0417	0.0741	0.2550	0.6456	0.9679

INEX55 LIVES ARE CONTROLLED BY ACCIDENT

TOTIE	TOTPAR	TOTDEF	TOTSD	TOTINF	TOTDEF	TOTAC	TOTCYN
0.49507	-0.33930	-0.20996	-0.19862	-0.17319	0.16952	0.16629	-0.12401
0.0001	0.0001	0.0085	0.0129	0.0306	0.0344	0.0380	0.1230

INEX59 GREAT DEAL OF TRUTH IN ASTROLOGY

TOTPAR	TOTIE	TOTSD	TOTINF	TOTCYN	TOTDEF	TOTAC	TOTDEF
-0.18453	0.16373	-0.13722	-0.11220	-0.07720	-0.06605	0.06021	0.00336
0.0211	0.0411	0.0276	0.1632	0.3381	0.4127	0.4053	0.7722

INEX60 GETTING PEOPLE TO DO DEPENDS ON ABILITY

TOTIE	TOTPAR	TOTDEF	TOTAC	TOTCYN	TOTINF	TOTDEF	TOTSD
0.45541	-0.14851	0.13281	0.12203	0.04671	-0.04656	-0.12725	-0.00175
0.0001	0.0643	0.0984	0.1291	0.5626	0.5638	0.7356	0.9926

INEX63 BELIEF IN LUCK OR FATE IS PRIMITIVE

TOTIE	TOTDEF	TOTPAR	TOTCYN	TOTDEF	TOTINF	TOTSD	TOTAC
0.28982	-0.10879	-0.09588	-0.08573	0.06826	-0.05931	-0.05201	0.04720
0.0002	0.1764	0.2338	0.2873	0.3972	0.4621	0.5191	0.5584

INEX69 ONCE POLITICIAN ELECTED, LITTLE CONTROL

TOTIE	TOTDEF	TOTPAR	TOTCYN	TOTAC	TOTDEF	TOTSD	TOTINF
0.25544	0.18814	-0.16245	-0.14558	0.13918	-0.13670	-0.12198	0.05005
0.0013	0.0187	0.0454	0.0698	0.0831	0.0888	0.1293	0.4641

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > R UNDER H ₀ :RHO=0 / N = 156							
INEX70	WHAT I WANT HAS LITTLE TO DO WITH LUCK						
TOTIE	TOTAC	TOTDEF	TOTCYN	TOTSD	TOTPAR	TOTDEP	TOTINF
0.38804	0.15527	0.13470	0.12093	-0.09041	-0.07674	-0.07149	-0.02208
0.0001	0.0529	0.0936	0.1326	0.2617	0.3410	0.3752	0.7844
INEX76	MISFORTUNES RESULT OF LACK OF ABILITY						
TOTPAR	TOTAC	TOTINF	TOTCYN	TOTDEP	TOTIE	TOTDEF	TOTSD
0.21613	-0.20693	0.17214	0.15074	0.10034	0.04665	0.04286	-0.00483
0.0067	0.0095	0.0316	0.0603	0.2126	0.5631	0.5952	0.9522
INEX80	SOMEONE LIKES YOU LITTLE TO DO WITH YOU						
TOTAC	TOTINF	TOTDEP	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTDEF
0.27011	-0.22874	-0.22594	0.14457	-0.08467	-0.07048	-0.05265	0.00249
0.0006	0.0041	0.0046	0.0718	0.2933	0.3820	0.5139	0.9754
INEX81	MY LIFE IS DETERMINED BY MY ACTIONS						
TOTIE	TOTDEP	TOTPAR	TOTAC	TOTDEF	TOTSD	TOTINF	TOTCYN
0.39977	-0.32252	-0.21645	0.19462	0.18744	-0.16112	-0.11919	-0.04964
0.0001	0.0001	0.0066	0.0149	0.0191	0.0445	0.1384	0.5383
INEX85	UNHAPPY THINGS PARTLY DUE TO BAD LUCK						
TOTIE	TOTDEP	TOTDEF	TOTAC	TOTPAR	TOTSD	TOTINF	TOTCYN
0.40082	-0.25730	0.21633	0.14345	-0.14037	-0.12963	0.02569	-0.01168
0.0001	0.0012	0.0067	0.0740	0.0805	0.1068	0.7503	0.8829
INEX87	NO POINT IN TRYING CAUSE YOU CAN'T WIN						
TOTDEP	TOTAC	TOTIE	TOTPAR	TOTINF	TOTCYN	TOTSD	TOTDEF
-0.39572	0.33462	0.31769	-0.24268	-0.24075	-0.19472	-0.18674	0.05558
0.0001	0.0001	0.0001	0.0023	0.0025	0.0149	0.0201	0.2881
INEX88	WORTH OFTEN PASSES UNRECOGNIZED						
TOTIE	TOTSD	TOTDEP	TOTPAR	TOTAC	TOTCYN	TOTDEF	TOTINF
0.41368	-0.28459	-0.25939	-0.22961	0.12363	-0.08070	0.06929	-0.04742
0.0001	0.0003	0.0011	0.0039	0.1241	0.3166	0.3900	0.5401

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROP > |R| UNDER H0:RHO=0 / N = 156

INEX93 ANY CHILD CAN GROW UP TO BE ANYTHING

TOTIE	TOTDEP	TOTDEF	TOTPAR	TOTCYN	TOTSD	TOTAC	TOTINF
0.31566	-0.13355	0.12412	0.12249	0.06891	-0.03121	-0.02921	-0.00759
0.0001	0.0965	0.1226	0.1277	0.3927	0.6990	0.7173	0.9300

INEX94 SUCCESS IS A MATTER OF HARD WORK

TOTIE	TOTDEF	TOTSD	TOTAC	TOTDEP	TOTINF	TOTCYN	TOTPAR
0.40863	0.10639	-0.10004	-0.09673	-0.07149	-0.05923	0.04036	0.03330
0.0001	0.1852	0.2140	0.2296	0.3751	0.4623	0.6169	0.7065

INEX101 NO SUCH THING AS "LUCK"

TOTIE	TOTDEF	TOTINF	TOTDEP	TOTSD	TOTAC	TOTCYN	TOTPAR
0.31064	0.10586	0.09154	-0.02032	0.01632	0.01042	-0.00306	-0.00161
0.0001	0.1834	0.2557	0.8012	0.8398	0.8973	0.9698	0.9841

INEX102 NECESSARY TO PLEASE TO GET WHAT YOU WANT

TOTIE	TOTAC	TOTCYN	TOTSD	TOTINF	TOTDEF	TOTPAR	TOTDEP
0.26180	0.24056	-0.16756	-0.12557	0.10827	0.19687	-0.06472	-0.01134
0.0010	0.0025	0.0365	0.1183	0.1785	0.2290	0.4221	0.8883

INEX104 YOU CAN BE SURE OF NOTHING

TOTCYN	TOTIE	TOTINF	TOTDEF	TOTAC	TOTDEP	TOTPAR	TOTSD
-0.22129	0.21596	0.12064	0.07558	0.07085	-0.06346	-0.05056	0.01193
0.0055	0.0068	0.1336	0.3484	0.3849	0.4313	0.5308	0.8922

INEX106 CAN'T UNDERSTAND HOW TEACHERS GRADE

TOTIE	TOTPAR	TOTCYN	TOTSD	TOTDEF	TOTAC	TOTINF	TOTDEP
0.36478	-0.28038	-0.20908	-0.15506	0.14651	0.10317	-0.09123	-0.08914
0.0001	0.0034	0.0088	0.0532	0.0683	0.2000	0.2573	0.2685

INEX109 WHAT HAPPENS TO PEOPLE RESULT OF FATE

TOTIE	TOTCYN	TOTDEP	TOTSD	TOTAC	TOTPAR	TOTINF	TOTDEF
0.46595	-0.33237	-0.30062	-0.25994	0.21057	-0.20166	-0.12955	-0.01307
0.0001	0.0001	0.0001	0.0010	0.0083	0.0116	0.1095	0.3713

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX113 WE ARE SO MANY COGS IN LIFE

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTCYN	TOTSD	TOTDEF	TOTINF
-0.35061	0.32892	0.27697	-0.27429	-0.17039	-0.14554	0.05326	-0.01612
0.0001	0.0001	0.0005	0.0005	0.0335	0.0698	0.5090	0.8417

INEX115 USUALLY GET PEOPLE TO DO WHAT I WANT

TOTAC	TOTDEP	TOTINF	TOTSD	TOTIE	TOTCYN	TOTPAR	TOTDEF
0.28728	-0.17536	-0.15716	-0.06118	0.05461	0.03644	-0.03453	-0.00379
0.0003	0.0285	0.0501	0.4480	0.4984	0.6515	0.6687	0.9626

INEX118 YOU GET OUT OF LIFE WHAT YOU PUT INTO IT

TOTIE	TOTDEP	TOTSD	TOTPAR	TOTAC	TOTINF	TOTDEF	TOTCYN
0.30456	-0.26249	-0.08532	-0.03188	0.06328	-0.03798	0.01639	0.01477
0.0001	0.0009	0.2896	0.3096	0.4325	0.6379	0.8391	0.8548

INEX121 AVERAGE CITIZEN CAN INFLUENCE GOVERNMENT

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTCYN	TOTINF
0.41195	-0.23744	-0.22248	0.19482	-0.16532	0.15027	0.12764	-0.01390
0.0001	0.0028	0.0052	0.0148	0.0392	0.0611	0.1123	0.8632

INEX123 IT'S NOT WHAT YOU KNOW BUT WHO YOU KNOW

TOTIE	TOTSD	TOTAC	TOTCYN	TOTPAR	TOTDEP	TOTDEF	TOTINF
0.52110	-0.31052	0.27918	-0.23542	-0.22681	-0.18973	0.13551	-0.02226
0.0001	0.0001	0.0004	0.0031	0.0096	0.0177	0.0917	0.7827

INEX124 I HAVE LITTLE INFLUENCE OVER THINGS

TOTIE	TOTDEP	TOTPAR	TOTSD	TOTAC	TOTDEF	TOTCYN	TOTINF
0.62372	-0.55932	-0.42087	-0.36277	0.34585	0.17226	-0.14217	-0.12191
0.0001	0.0001	0.0001	0.0001	0.0001	0.0315	0.0767	0.1295

INEX127 MOST OF US ARE THE VICTIMS OF FORCES

TOTIE	TOTPAR	TOTDEP	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.40001	-0.24390	-0.20053	-0.18953	0.16382	-0.13962	0.12098	0.00758
0.0001	0.0022	0.0121	0.0178	0.0410	0.0822	0.1325	0.9252

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX130 GET WHAT I WANT BECAUSE I WORK HARD

TOTIE	TOTAC	TOTDEF	TOTDEP	TOTSD	TOTPAR	TOTCYN	TOTINF
0.29267	0.26754	0.22840	-0.21681	-0.11879	-0.08222	-0.03475	-0.02537
0.0002	0.0007	0.0041	0.0066	0.1397	0.3076	0.6667	0.7532

INEX132 LITTLE CONTROL WHETHER PEOPLE LIKE YOU

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTINF	TOTSD	TOTCYN	TOTDEF
0.36322	-0.32061	0.31996	-0.21486	-0.16391	-0.16247	-0.15962	0.14692
0.0001	0.0001	0.0001	0.0071	0.0409	0.0427	0.0474	0.5638

INEX134 PEOPLE'S MISFORTUNES FROM MISTAKES

TOTDEF	TOTIE	TOTINF	TOTCYN	TOTSD	TOTAC	TOTDEP	TOTPAR
0.17754	0.16837	0.13397	0.13122	-0.10776	-0.06329	-0.01051	-0.00152
0.0266	0.0356	0.0954	0.1025	0.1806	0.4325	0.8963	0.9850

INEX137 SOME PEOPLE ARE JUST BORN LUCKY

TOTIE	TOTAC	TOTSD	TOTPAR	TOTDEP	TOTDEF	TOTCYN	TOTINF
0.47916	0.20352	-0.19768	-0.19732	-0.18499	0.11733	-0.09349	-0.05660
0.0001	0.0108	0.0134	0.0135	0.0208	0.1447	0.2457	0.9348

INEX139 NOT MUCH USE TRYING TO PLEASE PEOPLE

TOTIE	TOTDEP	TOTCYN	TOTPAR	TOTSD	TOTAC	TOTDEF	TOTINF
0.42829	-0.42292	-0.27490	-0.27006	-0.25019	0.23569	0.19340	0.07001
0.0001	0.0001	0.0005	0.0007	0.0016	0.0031	0.0173	0.3852

INEX141 WITHOUT BREAKS CANNOT BE LEADER

TOTIE	TOTCYN	TOTPAR	TOTAC	TOTSD	TOTDEP	TOTDEF	TOTINF
0.39003	-0.27802	-0.24070	0.22082	-0.16442	-0.13436	0.12712	-0.05079
0.0001	0.0004	0.0025	0.0056	0.0403	0.0945	0.1130	0.7028

INEX144 DIFFICULT TO CONTROL POLITICIANS

TOTIE	TOTDEP	TOTSD	TOTCYN	TOTAC	TOTDEF	TOTPAR	TOTINF
0.37161	-0.27007	-0.24352	-0.15312	0.15007	0.10692	-0.06888	-0.02620
0.0001	0.0007	0.0022	0.0564	0.0615	0.1840	0.3929	0.7454

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX143 PEOPLE CAN CONTROL WORLD EVENTS

TOTIE	TOTSD	TOTDEP	TOTINF	TOTCYN	TOTDEF	TOTAC	TOTPAR
0.42444	-0.22673	-0.22290	0.14868	0.14643	0.12914	0.09710	-0.06112
0.0001	0.0044	0.0052	0.0640	0.0681	0.1081	0.2284	0.4485

INEX151 WHAT HAPPENS IS MY OWN DOING

TOTIE	TOTDEP	TOTAC	TOTPAR	TOTSD	TOTDEF	TOTINF	TOTCYN
0.55275	-0.34868	0.32293	-0.30243	-0.25359	0.20831	-0.11263	-0.03333
0.0001	0.0001	0.0001	0.0001	0.0014	0.0091	0.1615	0.6796

INEX153 WHAT IS GOING TO HAPPEN WILL HAPPEN

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTCYN	TOTSD	TOTDEF	TOTINF
0.61456	-0.42074	-0.36256	0.35957	-0.31965	-0.30619	0.17875	-0.16148
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0255	0.6445

INEX156 FEW THINGS CONTROL ME

TOTDEP	TOTIE	TOTSD	TOTDEF	TOTPAR	TOTINF	TOTAC	TOTCYN
-0.24976	0.24124	-0.21095	0.20272	-0.10826	0.09077	0.08798	-0.05882
0.0017	0.0024	0.0082	0.0111	0.1785	0.2598	0.2753	0.4658

INEX157 DIRECT CONNECTION BETWEEN STUDY AND GRAD

TOTPAR	TOTIE	TOTDEF	TOTAC	TOTINF	TOTSD	TOTDEP	TOTCYN
-0.29611	0.26055	0.23784	0.23526	-0.23705	-0.20566	-0.18994	0.17161
0.0002	0.0010	0.0028	0.0031	0.0095	0.0100	0.0176	0.0322

INEX158 THERE'S A SUCKER BORN EVERY MINUTE

TOTCYN	TOTIE	TOTDEF	TOTDEP	TOTPAR	TOTSD	TOTAC	TOTINF
0.36923	-0.28394	-0.21187	0.21047	0.19312	0.11197	-0.06939	0.03530
0.0001	0.0003	0.0079	0.0084	0.0157	0.1640	0.3894	0.5617

INEX159 TRUSTING TO FATE NEVER TURNED OUT WELL

TOTIE	TOTSD	TOTAC	TOTPAR	TOTDEP	TOTCYN	TOTINF	TOTDEF
0.42112	-0.25405	0.25275	-0.22473	-0.21454	-0.19883	-0.12710	0.12628
0.0001	0.0014	0.0015	0.0048	0.0072	0.0125	0.1141	0.1162

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX161 NOT ENOUGH CONTROL OVER MY LIFE

TOTIE	TOTDEP	TOTSD	TOTPAR	TOTAC	TOTDEF	TOTCYN	TOTINF
0.57811	-0.48659	-0.30216	-0.25984	0.23483	0.21546	-0.19346	-0.02415
0.0001	0.0001	0.0001	0.0011	0.0032	0.0069	0.0155	0.7647

INEX162 BAD THINGS HAPPEN BECAUSE DIDN'T FIGURE

TOTIE	TOTCYN	TOTDEF	TOTINF	TOTDEP	TOTPAR	TOTSD	TOTAC
0.21243	0.17971	0.17208	-0.06636	0.04993	0.03040	0.00585	-0.00254
0.0078	0.0248	0.0317	0.4105	0.5359	0.7064	0.9423	0.9749

INEX166 JOB DEPENDS ON RIGHT PLACE RIGHT TIME

TOTIE	TOTSD	TOTAC	TOTCYN	TOTPAR	TOTDEP	TOTINF	TOTDEF
0.42209	-0.26614	0.19774	-0.19450	-0.14141	-0.14038	-0.10727	0.03099
0.0001	0.0008	0.0133	0.0150	0.0783	0.0805	0.1826	0.7010

INEX170 MAKE PLANS CERTAIN TURN OUT RIGHT

TOTIE	TOTDEP	TOTSD	TOTAC	TOTCYN	TOTINF	TOTDEF	TOTPAR
0.34701	-0.22898	-0.18232	0.15279	0.14513	-0.12589	0.11223	-0.05144
0.0001	0.0040	0.0227	0.0569	0.0706	0.1174	0.1631	0.5237

INEX175 SO HARD TO PREDICT, MIGHT AS WELL FLIP C

TOTIE	TOTDEP	TOTAC	TOTSD	TOTPAR	TOTCYN	TOTDEF	TOTINF
0.56046	-0.43216	0.35027	-0.34600	-0.31031	-0.20288	0.16464	-0.05451
0.0001	0.0001	0.0001	0.0001	0.0001	0.0111	0.0400	0.4991

INEX179 BOSS WAS IN THE RIGHT PLACE FIRST

TOTIE	TOTSD	TOTPAR	TOTCYN	TOTDEP	TOTAC	TOTDEF	TOTINF
0.43135	-0.23757	-0.21413	-0.20290	-0.19202	0.16352	-0.02690	-0.01600
0.0001	0.0028	0.0073	0.0111	0.0163	0.0414	0.7359	0.8429

INEX184 WORLD IS RUN BY FEW PEOPLE IN POWER

TOTIE	TOTSD	TOTAC	TOTDEP	TOTPAR	TOTCYN	TOTINF	TOTDEF
0.33103	-0.29737	0.26154	-0.21158	-0.17931	-0.15472	-0.06845	0.03190
0.0001	0.0002	0.0010	0.0080	0.0259	0.0538	0.3945	0.6935

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 156

INEX188 PEOPLE ARE VICTIMS OF CIRCUMSTANCES

TOTIE	TOTDEP	TOTAC	TOTCYN	TOTPAR	TOTSD	TOTINF	TOTDEF
0.52219	-0.29379	0.27339	-0.27262	-0.25767	-0.20601	-0.06248	0.00431
0.0001	0.0002	0.0006	0.0006	0.0012	0.0099	0.4384	0.9574

INEX2 THERE'S NOT MUCH USE IN TRYING

TOTDEP	TOTSD	TOTPAR	TOTIE	TOTAC	TOTDEF	TOTCYN	TOTINF
0.52831	0.36001	0.35390	-0.34411	-0.28160	-0.24464	0.15132	0.05281
0.0001	0.0001	0.0001	0.0001	0.0004	0.0021	0.0593	0.5126

INEX3 LIFE IS VERY INTERESTING TO ME

TOTDEP	TOTAC	TOTPAR	TOTIE	TOTSD	TOTDEF	TOTCYN	TOTINF
0.50875	-0.42952	0.28562	-0.26174	0.25620	-0.21477	0.03348	0.03348
0.0001	0.0001	0.0003	0.0010	0.0012	0.0071	0.6782	0.9656

INEX13 THINGS JUST DON'T WORK OUT

TOTDEP	TOTIE	TOTPAR	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.55205	-0.45703	0.43465	0.39683	-0.23869	0.17262	-0.15920	0.15641
0.0001	0.0001	0.0001	0.0001	0.0027	0.0312	0.0471	0.0512

INEX19 USUALLY ENJOY STARTING NEW ACTIVITY

TOTDEP	TOTAC	TOTCYN	TOTIE	TOTPAR	TOTINF	TOTSD	TOTDEF
0.38544	-0.35462	0.19623	-0.19301	0.16677	0.12423	0.12385	-0.07630
0.0001	0.0001	0.0141	0.0158	0.0374	0.1222	0.1235	0.3438

INEX31 HAVE ENOUGH TIME TO ACCOMPLISH THINGS

TOTDEP	TOTIE	TOTPAR	TOTCYN	TOTDEF	TOTSD	TOTAC	TOTINF
0.21689	-0.18473	0.14377	0.14203	-0.10662	0.08959	0.02796	0.00913
0.0065	0.0210	0.0734	0.0769	0.1852	0.2661	0.7290	0.9099

INEX36 MY DAYS SEEM GLOOMY AND DULL

TOTDEP	TOTPAR	TOTIE	TOTSD	TOTAC	TOTDEF	TOTCYN	TOTINF
0.72082	0.50389	-0.39441	0.32175	-0.33707	-0.28481	0.19764	0.15524
0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0134	0.0530

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |P| UNDER $H_0: \rho = 0$ / N = 156

INEX37 EXPERIENCES HAVE PREPARED ME FOR FUTURE

TOTDEP	TOTAC	TOTPAR	TOTIE	TOTDEF	TOTSD	TOTINF	TOTCYN
0.40629	-0.37826	0.20789	-0.20744	-0.14868	0.06956	0.06614	-0.06495
0.0001	0.0001	0.0092	0.0094	0.0640	0.3882	0.4120	0.4205

INEX38 GIVE UP BECAUSE CAN'T MAKE THINGS BETTER

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTCYN	TOTDEF	TOTINF	TOTSD
0.62269	-0.42767	-0.31614	0.31094	0.22081	-0.19813	0.17133	0.13719
0.0001	0.0001	0.0001	0.0001	0.0056	0.0132	0.0325	0.0877

INEX49 EXPECT TO GET MORE GOOD THAN AVERAGE

TOTDEP	TOTIE	TOTAC	TOTPAR	TOTSD	TOTINF	TOTDEF	TOTCYN
0.38105	-0.18156	-0.17309	0.14902	0.12106	0.07855	-0.04038	0.01983
0.0001	0.0233	0.0307	0.0634	0.1322	0.3297	0.6167	0.8060

INEX52 EXPECT I WILL BE HAPPIER THAN I AM NOW

TOTSD	TOTDEF	TOTDEP	TOTAC	TOTPAR	TOTCYN	TOTIE	TOTINF
0.23452	-0.21342	0.17131	-0.14203	0.13578	0.09165	-0.05392	-0.03718
0.0032	0.0075	0.0325	0.0769	0.0910	0.2551	0.5038	0.6449

INEX57 UNLIKELY I WILL GET REAL SATISFACTION

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTINF	TOTDEF	TOTCYN
0.58956	-0.32829	-0.32302	0.26624	0.21782	0.16495	-0.12656	0.11181
0.0001	0.0001	0.0001	0.0008	0.0063	0.0396	0.1154	0.1646

INEX65 EACH DAY HOLDS MY INTEREST

TOTDEP	TOTAC	TOTPAR	TOTIE	TOTCYN	TOTSD	TOTDEF	TOTINF
0.56503	-0.30181	0.27459	-0.26051	0.21425	0.19435	-0.17582	0.05650
0.0001	0.0001	0.0005	0.0010	0.0072	0.0151	0.0281	0.4836

INEX67 HAVE GREAT FAITH IN THE FUTURE

TOTDEP	TOTIE	TOTCYN	TOTAC	TOTINF	TOTPAR	TOTSD	TOTDEF
0.44332	-0.28171	0.17495	-0.14745	0.08827	0.07181	0.06354	-0.00790
0.0001	0.0004	0.0289	0.0740	0.2732	0.3730	0.4307	0.9220

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX74 CAN'T IMAGINE WHAT MY LIFE WILL BE

TOTDEP	TOTSD	TOTIE	TOTPAR	TOTDEF	TOTAC	TOTINF	TOTCYN
0.49244	0.23542	-0.19617	0.13504	-0.08459	-0.08042	-0.07773	0.07241
0.0001	0.0031	0.0141	0.0928	0.2938	0.3183	0.3348	0.3690

INEX82 THINGS GOING BADLY CAN'T STAY THAT WAY

TOTDEP	TOTPAR	TOTIE	TOTAC	TOTSD	TOTDEF	TOTINF	TOTCYN
0.24770	0.13769	-0.11370	-0.09442	0.04780	-0.02904	0.02640	0.01975
0.0018	0.0865	0.1576	0.2410	0.5535	0.7189	0.7436	0.8067

INEX92 NEVER SEEM TO BE REALLY HAPPY

TOTDEP	TOTIE	TOTPAR	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.71745	-0.37742	0.33638	0.30052	-0.25792	0.19366	-0.12607	0.11174
0.0001	0.0001	0.0001	0.0001	0.0012	0.0154	0.1168	0.1649

INEX95 FUTURE LOOKS VAGUE AND UNCERTAIN

TOTDEP	TOTIE	TOTSD	TOTPAR	TOTAC	TOTCYN	TOTINF	TOTDEF
0.59683	-0.31452	0.27515	0.26368	-0.20052	0.14417	0.07260	-0.07239
0.0001	0.0001	0.0005	0.0009	0.0121	0.0726	0.3678	0.3691

INEX97 ENJOY ALMOST EVERYTHING I DO

TOTDEP	TOTAC	TOTDEF	TOTIE	TOTCYN	TOTPAR	TOTSD	TOTINF
0.54363	-0.22968	-0.21441	-0.19736	0.15602	0.13939	0.09973	-0.13155
0.0001	0.0039	0.0072	0.0135	0.0518	0.0827	0.2155	0.6958

INEX100 I AM DEPRESSED MOST OF THE TIME

TOTDEP	TOTPAR	TOTAC	TOTSD	TOTIE	TOTCYN	TOTINF	TOTDEF
0.72499	0.37424	-0.33805	0.32999	-0.28752	0.23999	0.23042	-0.12274
0.0001	0.0001	0.0001	0.0001	0.0003	0.0025	0.0038	0.1269

INEX108 HAVE LITTLE TO LOOK FORWARD TO

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTINF	TOTDEF
0.74268	-0.45844	-0.40189	0.34206	0.33969	0.20664	0.13125	-0.12621
0.0001	0.0001	0.0001	0.0001	0.0001	0.0096	0.1024	0.1164

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROP > |R| UNDER $H_0: \rho = 0$ / N = 156

INEX110 I AM AS HAPPY AS MY FRIENDS

TOTDEP	TOTIE	TOTPAR	TOTCYN	TOTAC	TOTSD	TOTDEF	TOTINF
0.38121	-0.27257	0.21218	0.16367	-0.14596	0.14550	-0.09864	0.03046
0.0001	0.0006	0.0078	0.0412	0.0690	0.0699	0.2205	0.7058

INEX117 DO NOT FEEL SAD AT THE PRESENT TIME

TOTDEP	TOTPAR	TOTSD	TOTIE	TOTAC	TOTCYN	TOTINF	TOTDEF
0.65543	0.41171	0.37917	-0.31381	-0.22848	0.17436	0.16985	-0.08224
0.0001	0.0001	0.0001	0.0001	0.0041	0.0293	0.0340	0.3074

INEX121 OTHERS ENJOY LIFE MORE THAN I DO

TOTDEP	TOTPAR	TOTSD	TOTIE	TOTAC	TOTCYN	TOTINF	TOTDEF
0.71280	0.38564	0.38474	-0.36059	-0.27709	0.17127	0.15660	-0.03213
0.0001	0.0001	0.0001	0.0001	0.0005	0.0325	0.0509	0.6905

INEX127 I HAVE A DULL LIFE

TOTDEP	TOTSD	TOTAC	TOTPAR	TOTDEF	TOTIE	TOTCYN	TOTINF
0.62305	0.32597	-0.28998	0.28934	-0.24788	-0.22196	0.09961	-0.02690
0.0001	0.0001	0.0002	0.0002	0.0018	0.0054	0.2160	0.7389

INEX131 SEE UNPLEASANTNESS AHEAD

TOTDEP	TOTPAR	TOTAC	TOTSD	TOTCYN	TOTIE	TOTINF	TOTDEF
0.62234	0.27347	-0.25700	0.24562	0.22554	-0.21426	0.08859	-0.06615
0.0001	0.0006	0.0012	0.0020	0.0046	0.0072	0.2715	0.2849

INEX135 DON'T EXPECT TO GET WHAT I WANT

TOTDEP	TOTIE	TOTPAR	TOTSD	TOTAC	TOTCYN	TOTDEF	TOTINF
0.64704	-0.37229	0.26524	0.25530	-0.22166	0.17353	-0.04726	0.01558
0.0001	0.0001	0.0008	0.0013	0.0054	0.0303	0.5580	0.8469

INEX138 SOMETIMES THINK OF KILLING MYSELF

TOTDEP	TOTIE	TOTSD	TOTPAR	TOTDEF	TOTAC	TOTCYN	TOTINF
0.51223	-0.38023	0.36848	0.27558	-0.26861	-0.22091	0.07243	-0.05701
0.0001	0.0001	0.0001	0.0005	0.0007	0.0056	0.3689	0.4796

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 156

INEX143 DON'T GET WHAT WANT SO FOOLISH TO WANT

TOTDEF	TOTAC	TOTIE	TOTPAR	TOTSD	TOTINF	TOTCYN	TOTDEF
0.40764	-0.35303	-0.34395	0.32609	0.32196	0.16986	0.16402	-0.08082
0.0001	0.0001	0.0001	0.0001	0.0001	0.0340	0.0408	0.3159

INEX147 JUST DON'T GET THE BREAKS

TOTDEF	TOTAC	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTINF	TOTDEF
0.54940	-0.46386	-0.42296	0.39636	0.37282	0.15933	0.14506	-0.11237
0.0001	0.0001	0.0001	0.0001	0.0001	0.0469	0.0718	0.1625

INEX164 EXPECT TO SUCCEED IN WHAT CONCERNS ME

TOTAC	TOTDEF	TOTIE	TOTSD	TOTDEF	TOTCYN	TOTPAR	TOTINF
-0.16415	0.13682	-0.11355	-0.08632	0.07954	0.17550	-0.06503	0.03827
0.0406	0.0835	0.1581	0.2839	0.3236	0.3489	0.4109	0.6353

INEX167 MY FUTURE IS BRIGHT

TOTDEF	TOTAC	TOTPAR	TOTSD	TOTIE	TOTCYN	TOTDEF	TOTINF
0.57667	-0.26338	0.21238	0.16732	-0.16614	0.15652	-0.13094	0.05674
0.0001	0.0009	0.0078	0.0368	0.0382	0.0510	0.1032	0.2816

INEX169 I AM HAPPY IN MY PRESENT LINE

TOTDEF	TOTPAR	TOTDEF	TOTIE	TOTCYN	TOTAC	TOTSD	TOTINF
0.23527	0.18157	-0.18105	-0.15913	0.09072	-0.06765	0.06535	0.05042
0.0031	0.0233	0.0237	0.0472	0.2601	0.4014	0.4176	0.5319

INEX177 PRESENT SITUATION SEEMS HOPELESS

TOTDEF	TOTIE	TOTSD	TOTPAR	TOTAC	TOTCYN	TOTINF	TOTDEF
0.60867	-0.30993	0.28969	0.27942	-0.26574	0.23991	0.18217	-0.03662
0.0001	0.0001	0.0002	0.0004	0.0003	0.0026	0.0228	0.6500

INEX181 LOOK FORWARD TO MORE GOOD TIMES THAN BAD

TOTDEF	TOTAC	TOTIE	TOTPAR	TOTSD	TOTDEF	TOTINF	TOTCYN
0.55575	-0.26743	-0.24205	0.23556	0.23324	-0.19750	0.09037	0.03770
0.0001	0.0007	0.0023	0.0031	0.0034	0.0172	0.2619	0.2763

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX185 LOOK FORWARD TO FUTURE WITH HOPE

TOTDEP	TOTAC	TOTIE	TOTPAR	TOTDEF	TOTSD	TOTCYN	TOTINF
0.63068	-0.36860	-0.34404	0.27284	-0.21553	0.21145	0.20550	0.06616
0.0001	0.0001	0.0001	0.0006	0.0069	0.0081	0.0101	0.4119

INEX189 MY FUTURE OFTEN SEEMS DARK TO ME

TOTDEP	TOTIE	TOTPAR	TOTSD	TOTCYN	TOTDEF	TOTAC	TOTINF
0.71733	-0.36820	0.35580	0.32315	0.19902	-0.19533	-0.18344	-0.03786
0.0001	0.0001	0.0001	0.0001	0.0127	0.0145	0.0219	0.6389

INEX47 PEOPLE ARE NOT ALWAYS OUT TO TRICK YOU

TOTPAR	TOTCYN	TOTAC	TOTDEP	TOTIE	TOTDEF	TOTINF	TOTSD
0.30935	0.26931	-0.22437	0.19023	-0.15778	-0.13789	0.05730	0.05691
0.0001	0.0007	0.0049	0.0174	0.0492	0.0860	0.4774	0.4804

INEX120 AVERAGE CITIZEN CAN INFLUENCE GOVERNMENT

TOTIE	TOTDEP	TOTPAR	TOTAC	TOTSD	TOTDEF	TOTCYN	TOTINF
0.41195	-0.23744	-0.22248	0.19482	-0.16532	0.15027	-0.12764	-0.01390
0.0001	0.0028	0.0052	0.0148	0.0392	0.0611	0.1123	0.8632

INEX148 PEOPLE CAN CONTROL WORLD EVENTS

TOTIE	TOTSD	TOTDEP	TOTINF	TOTCYN	TOTDEF	TOTAC	TOTPAR
0.42444	-0.22673	-0.22290	0.14868	0.14643	0.12914	0.09710	-0.06112
0.0001	0.0044	0.0052	0.0640	0.0681	0.1081	0.2284	0.4485

INEX149 MOST PEOPLE ARE DECENT AND TRUSTWORTHY

TOTCYN	TOTPAR	TOTIE	TOTAC	TOTSD	TOTDEP	TOTINF	TOTDEF
0.66219	0.26661	-0.25913	-0.21017	0.20596	0.19926	0.10941	-0.06564
0.0001	0.0008	0.0011	0.0085	0.0099	0.0126	0.1740	0.4156

INEX154 PEOPLE ARE BASICALLY GOOD

TOTCYN	TOTIE	TOTPAR	TOTDEP	TOTAC	TOTSD	TOTDEF	TOTINF
0.60540	-0.26266	0.24933	0.22295	-0.15858	0.11634	-0.06867	0.03052
0.0001	0.0009	0.0017	0.0051	0.0480	0.1481	0.3944	0.7153

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROP > |R| UNDER H0:RHO=0 / N = 156

INEX158 THERE'S A SUCKER BORN EVERY MINUTE

TOTCYN	TOTIE	TOTDEF	TOTDEP	TOTPAR	TOTSD	TOTAC	TOTINF
0.36923	-0.28394	-0.21187	0.21047	0.19312	0.11197	-0.06939	0.03530
0.0001	0.0003	0.0079	0.0084	0.0157	0.1640	0.3894	0.6617

INEX163 SOMEONE IS GETTING AWAY WITH SOMETHING

TOTCYN	TOTIE	TOTDEP	TOTPAR	TOTDEF	TOTINF	TOTAC	TOTSD
0.51116	-0.37754	0.25228	0.20539	-0.15599	-0.14195	-0.14197	0.12247
0.0001	0.0001	0.0015	0.0101	0.0519	0.0771	0.0773	0.1277

INEX171 I AM WILLING TO TRUST MOST PEOPLE

TOTCYN	TOTDEP	TOTIE	TOTAC	TOTPAR	TOTSD	TOTINF	TOTDEF
0.57057	0.37963	-0.36309	-0.21200	0.17244	0.11866	0.08646	-0.06631
0.0001	0.0001	0.0001	0.0079	0.0314	0.1431	0.2832	0.4108

INEX176 POLITICIANS ARE ALWAYS ROTTEN

TOTCYN	TOTIE	TOTAC	TOTPAR	TOTDEP	TOTDEF	TOTSD	TOTINF
0.38683	-0.31468	-0.28984	0.25618	0.23979	-0.19916	0.14497	-0.03532
0.0001	0.0001	0.0002	0.0012	0.0026	0.0127	0.0710	0.6616

INEX51 SOMEONE TRYING TO MAKE MY LIFE DIFFICULT

TOTPAR	TOTDEP	TOTSD	TOTIE	TOTCYN	TOTAC	TOTDEF	TOTINF
0.60499	0.54394	0.39966	-0.36030	0.31111	-0.30462	-0.14379	0.07197
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0733	0.3786

INEX62 OFTEN FEEL I AM IN GREAT DANGER

TOTPAR	TOTSD	TOTIE	TOTDEP	TOTAC	TOTINF	TOTCYN	TOTDEF
0.62852	0.35012	-0.26462	0.25663	-0.22080	0.21703	0.19356	-0.10131
0.0001	0.0001	0.0008	0.0012	0.0056	0.0065	0.0155	0.2128

INEX73 MORE SUCCESSFUL IF PEOPLE NOT AGAINST ME

TOTPAR	TOTDEP	TOTSD	TOTAC	TOTINF	TOTCYN	TOTIE	TOTDEF
0.68310	0.42391	0.38165	-0.37048	0.25515	0.24651	-0.24249	-0.17761
0.0001	0.0001	0.0001	0.0001	0.0013	0.0019	0.0023	0.0265

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX112 NO ONE HAS IT IN FOR ME

TOTPAR	TOTDEP	TOTIE	TOTDEF	TOTSD	TOTINF	TOTAC	TOTCYN
0.62527	0.22237	-0.21684	-0.18889	0.18683	0.11474	-0.26611	0.03155
0.0001	0.0053	0.0765	0.0182	0.0195	0.1538	0.4122	0.7050

INEX140 NEVER FEEL LIKE ROBOT SOMEONE DIRECTING

TOTPAR	TOTIE	TOTAC	TOTDEP	TOTSD	TOTDEF	TOTINF	TOTCYN
0.64925	-0.29955	-0.23349	0.22411	0.22360	-0.19550	0.11571	0.05396
0.0001	0.0001	0.0034	0.0049	0.0050	0.0145	0.1503	1.5034

INEX180 NO ONE IS MAKING THINGS GO WRONG

TOTPAR	TOTDEP	TOTDEF	TOTIE	TOTCYN	TOTAC	TOTSD	TOTINF
0.65124	0.27337	-0.26334	-0.25879	0.25421	-0.18925	0.16809	0.06829
0.0001	0.0006	0.0009	0.0011	0.0014	0.0176	0.0359	0.3969

INEX11 SOMETIMES I USE MY FRIENDS

TOTDEF	TOTSD	TOTPAR	TOTIE	TOTAC	TOTDEP	TOTINF	TOTCYN
0.55206	-0.19391	-0.15575	0.11865	0.08866	-0.04983	0.03733	-0.01316
0.0001	0.0153	0.0522	0.1401	0.2711	0.5367	0.6436	0.3705

INEX29 HAVE NEVER CHEATED

TOTDEF	TOTIF	TOTCYN	TOTAC	TOTINF	TOTDEP	TOTSD	TOTPAR
0.51375	0.20717	-0.19239	0.13137	0.08705	-0.03771	-0.03165	-0.01236
0.0001	0.0025	0.0161	0.1021	0.2799	0.6402	0.6949	1.8782

INEX48 ALWAYS LIVED UP TO MY RESPONSIBILITIES

TOTDEF	TOTDEP	TOTAC	TOTPAR	TOTIE	TOTINF	TOTSD	TOTCYN
0.39659	-0.35760	0.27537	-0.20522	0.19321	-0.17284	-0.13184	-0.07894
0.0001	0.0001	0.0005	0.0102	0.0157	0.0319	0.1009	0.3273

INEX68 SOMETIMES I GET MAD AT MY FRIENDS

TOTDEF	TOTINF	TOTIE	TOTPAR	TOTDEP	TOTCYN	TOTAC	TOTSD
0.56116	0.15626	0.08192	-0.05172	-0.05145	0.03215	0.03106	-0.02799
0.0001	0.0514	0.3093	0.5214	0.5235	0.6903	0.7013	0.7257

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

INEX86 ALWAYS ADMIT MY ERRORS

TOTDEF	TOTDEP	TOTIE	TOTAC	TOTPAR	TOTSD	TOTINF	TOTCYN
0.51538	-0.28033	0.24482	0.24111	-0.21367	-0.10775	-0.04955	-0.00526
0.0001	0.0034	0.0021	0.0024	0.0074	0.1836	0.5391	0.9481

INEX107 SOMETIMES I GET MAD AT MY FRIENDS

TOTDEF	TOTINF	TOTIE	TOTSD	TOTDEP	TOTAC	TOTCYN	TOTPAR
0.56679	0.17660	0.07828	-0.06723	-0.06137	0.03994	0.03793	-0.02470
0.0001	0.0274	0.3314	0.4044	0.4466	0.6206	0.6383	0.7408

INEX126 SOMETIMES I SAY BAD THINGS ABOUT FRIENDS

TOTDEF	TOTPAR	TOTIE	TOTSD	TOTINF	TOTDEP	TOTAC	TOTCYN
0.64895	-0.23630	0.20968	-0.17329	0.12199	-0.05389	0.02833	-0.01227
0.0001	0.0029	0.0086	0.0305	0.1292	0.5049	0.7255	0.8792

INEX146 PUT GOOD OF COUNTRY ABOVE MY INTERESTS

TOTPAR	TOTDEP	TOTINF	TOTSD	TOTDEF	TOTCYN	TOTAC	TOTIE
0.25354	0.16856	0.14130	0.11411	0.10620	0.08907	0.06472	0.04791
0.0014	0.0354	0.0785	0.1489	0.1870	0.2689	0.4222	0.5526

INEX165 GET ANGRY WHEN PEOPLE TEASE ME

TOTDEF	TOTPAR	TOTAC	TOTIE	TOTDEP	TOTSD	TOTCYN	TOTINF
0.50534	-0.29638	0.25745	0.22272	-0.21168	-0.17632	-0.11700	0.03234
0.0001	0.0002	0.0012	0.0052	0.0080	0.0280	0.1455	0.6886

INEX183 TRY TO GET OUT OF JOBS I DON'T ENJOY

TOTAC	TOTSD	TOTDEP	TOTIE	TOTPAR	TOTDEF	TOTCYN	TOTINF
0.31387	-0.25434	-0.22850	0.22126	-0.21038	0.18348	-0.15414	-0.06385
0.0001	0.0014	0.0041	0.0055	0.0084	0.0219	0.0547	0.4284

PRCLST5

TOTSD	TOTIE	TOTDEP	TOTPAR	TOTDEF	TOTAC	TOTINF	TOTCYN
0.42597	-0.30076	0.26445	0.17939	-0.16780	-0.16175	-0.06072	-0.04285
0.0001	0.0001	0.0008	0.0250	0.0363	0.0437	0.4515	0.5953

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H₀:RHO=0 / N = 156

PRCLST10

TOTSD	TOTPAR	TOTDEP	TOTAC	TOTIE	TOTDEF	TOTCYN	TOTINF
0.48021	0.31787	0.25924	-0.22774	-0.21799	-0.08747	0.06354	0.02677
0.0001	0.0001	0.0011	0.0042	0.0063	0.2776	0.4307	0.7401

PRCLST19

TOTSD	TOTPAR	TOTDEF	TOTIE	TOTINF	TOTCYN	TOTDEP	TOTAC
0.39926	0.14872	-0.11476	-0.08336	0.04998	-0.14656	0.03559	-0.03155
0.0001	0.0639	0.1537	0.3009	0.5355	0.5638	0.6592	0.6958

PRCLST22

TOTSD	TOTDEP	TOTIE	TOTPAR	TOTAC	TOTCYN	TOTDEF	TOTINF
0.56063	0.29250	-0.21211	0.19996	-0.13596	0.09947	-0.04288	-0.00052
0.0001	0.0002	0.0079	0.0123	0.0906	0.2166	0.5951	0.9949

POCLST5

TOTSD	TOTDEP	TOTAC	TOTIE	TOTPAR	TOTDEF	TOTINF	TOTCYN
0.53589	0.33247	-0.30550	-0.30845	0.24649	-0.19639	0.17241	0.07639
0.0001	0.0001	0.0001	0.0001	0.0019	0.0143	0.0314	0.3432

POCLST10

TOTSD	TOTDEP	TOTPAR	TOTIE	TOTDEF	TOTAC	TOTCYN	TOTINF
0.54350	0.29892	0.29457	-0.18406	-0.16608	-0.11532	0.10424	0.01657
0.0001	0.0002	0.0002	0.0214	0.0383	0.1499	0.1953	0.8373

POCLST18

TOTSD	TOTDEP	TOTIE	TOTPAR	TOTAC	TOTCYN	TOTINF	TOTDEF
0.46811	0.17411	-0.11696	0.11498	-0.06936	0.05086	0.04119	-0.02506
0.0001	0.0297	0.1459	0.1529	0.3896	0.5284	0.6096	0.7562

POCLST22

TOTSD	TOTPAR	TOTDEP	TOTDEF	TOTIE	TOTCYN	TOTAC	TOTINF
0.54398	0.22346	0.15837	-0.15104	-0.11666	0.04852	-0.04477	0.02262
0.0001	0.0050	0.0483	0.0616	0.1470	0.5469	0.5789	0.7792

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: R_{ij} = 0$ / N = 156

PRHOST5

TOTSD	TOTPAR	TOTIE	TOTDEP	TOTAC	TOTINF	TOTCYN	TOTDEF
0.47042	0.31442	-0.22487	0.22406	-0.21963	0.07822	0.05799	0.00884
0.0001	0.0001	0.0048	0.0049	0.0059	0.3317	0.4721	0.9128

PRHOST10

TOTSD	TOTDEP	TOTPAR	TOTIE	TOTDEF	TOTCYN	TOTINF	TOTAC
0.51497	0.26524	0.25472	-0.14173	-0.12260	0.05997	0.11995	0.00254
0.0001	0.0008	0.0013	0.0776	0.1273	0.4569	0.8048	0.9749

PRHOST18

TOTSD	TOTPAR	TOTIE	TOTDEP	TOTDEF	TOTAC	TOTINF	TOTCYN
0.41757	0.15022	-0.10850	0.08907	-0.07691	-0.03129	0.02037	-0.00950
0.0001	0.0612	0.1776	0.2689	0.3399	0.6922	0.8007	0.9063

PRHOST22

TOTSD	TOTDEP	TOTPAR	TOTIE	TOTDEF	TOTAC	TOTCYN	TOTINF
0.55548	0.25929	0.23721	-0.23100	-0.12980	-0.11991	0.06020	0.01791
0.0001	0.0011	0.0029	0.0037	0.1063	0.1360	0.4554	0.9219

POHOST5

TOTSD	TOTIE	TOTDEP	TOTPAR	TOTAC	TOTDEF	TOTCYN	TOTINF
0.43605	-0.38596	0.30886	0.23569	-0.13896	-0.11260	0.00542	0.00517
0.0001	0.0001	0.0001	0.0031	0.0836	0.1617	0.9465	0.9489

POHOST10

TOTSD	TOTPAR	TOTDEP	TOTIE	TOTINF	TOTAC	TOTCYN	TOTDEF
0.52962	0.19460	0.12786	-0.18576	-0.09903	-0.06543	0.05000	-0.13648
0.0001	0.0149	0.0189	0.0203	0.2187	0.4171	0.5354	0.6512

POHOST18

TOTSD	TOTIE	TOTPAR	TOTDEF	TOTDEP	TOTAC	TOTINF	TOTCYN
0.53235	-0.29318	0.24496	-0.20272	0.18419	-0.14318	-0.05143	-0.00473
0.0001	0.0002	0.0021	0.0111	0.0213	0.0746	0.5238	0.9532

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

POHOST22

TOTSD	TOTDEP	TOTIE	TOTPAR	TOTCYN	TOTAC	TOTDEF	TOTINF
0.52749	0.32098	-0.25215	0.15480	0.14856	-0.13955	-0.09408	-0.06239
0.0001	0.0001	0.0015	0.0537	0.0642	0.0823	0.2427	1.4391

PRCLST1

TOTINF	TOTCYN	TOTIE	TOTSD	TOTDEF	TOTDEP	TOTAC	TOTPAR
0.30897	0.13304	0.08359	-0.07335	0.06341	-0.05693	0.02859	-0.01530
0.0001	0.0978	0.2995	0.3628	0.4316	0.4798	0.7231	1.8497

PRCLST14

TOTINF	TOTSD	TOTAC	TOTCYN	TOTIE	TOTDEF	TOTDEP	TOTPAR
0.35363	-0.11007	-0.10591	0.10355	-0.07965	0.07787	-0.02198	0.00440
0.0001	0.1714	0.1882	0.1983	0.3229	0.3339	0.7854	0.9565

PRCLST27

TOTINF	TOTAC	TOTPAR	TOTIE	TOTDEF	TOTDEP	TOTCYN	TOTSD
0.47829	-0.23951	0.19152	-0.15390	-0.11140	0.10759	0.08211	0.05206
0.0001	0.0026	0.0172	0.0551	0.1662	0.1813	0.3082	0.5187

POCLST1

TOTINF	TOTDEP	TOTAC	TOTDEF	TOTIE	TOTSD	TOTPAR	TOTCYN
0.39350	0.16302	-0.08855	0.08803	-0.07008	0.06693	0.04233	0.03345
0.0001	0.0420	0.2717	0.2745	0.3847	0.4065	0.6000	0.6785

POCLST14

TOTINF	TOTSD	TOTAC	TOTPAR	TOTIE	TOTDEP	TOTCYN	TOTDEF
0.39318	0.25018	-0.20203	0.19957	-0.09670	0.06879	0.02512	0.01064
0.0001	0.0016	0.0114	0.0125	0.2298	0.3984	0.7556	0.8951

POCLST27

TOTINF	TOTPAR	TOTAC	TOTSD	TOTDEP	TOTIE	TOTDEF	TOTCYN
0.54703	0.22007	-0.17530	0.16940	0.16859	-0.10600	-0.05673	-0.02088
0.0001	0.0058	0.0286	0.0345	0.0354	0.1878	0.4819	0.7958

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 156

PRHOST1

TOTINF	TOTSD	TOTDEF	TOTAC	TOTIE	TOTDEP	TOTCYN	TOTPAR
0.28429	-0.13808	0.10963	-0.09784	0.06611	-0.03292	0.00663	0.0014
0.0003	0.0856	0.1731	0.2243	0.4122	0.6833	0.9346	0.9492

PRHOST14

TOTINF	TOTPAR	TOTCYN	TOTDEP	TOTSD	TOTDEF	TOTAC	TOTIE
0.35116	0.14191	0.08320	0.06933	0.05542	-0.04295	-0.03257	-0.01291
0.0001	0.0772	0.3018	0.3298	0.4920	0.5944	0.6865	0.8729

PRHOST27

TOTINF	TOTPAR	TOTAC	TOTCYN	TOTDEP	TOTDEF	TOTIE	TOTSD
0.47491	0.13768	-0.10250	-0.08619	0.03194	-0.02031	0.01783	0.00751
0.0001	0.0865	0.2029	0.2847	0.6922	0.8313	0.8251	0.9259

POHOST1

TOTINF	TOTDEF	TOTSD	TOTDEP	TOTIE	TOTPAR	TOTAC	TOTCYN
0.19198	0.14811	-0.11587	-0.06922	-0.04756	-0.02317	-0.02210	-0.01179
0.0164	0.0650	0.1497	0.3905	0.5555	0.7743	0.7842	0.9839

POHOST14

TOTINF	TOTDEF	TOTCYN	TOTIE	TOTPAR	TOTSD	TOTDEP	TOTAC
0.25762	0.25277	-0.14423	0.14699	-0.10559	-0.05316	-0.04658	0.02743
0.0012	0.0015	0.0724	0.0792	0.1896	0.5099	0.5634	0.7340

POHOST27

TOTINF	TOTPAR	TOTDEP	TOTIE	TOTSD	TOTDEF	TOTAC	TOTCYN
0.44640	0.17808	0.13513	-0.10942	0.08993	0.07221	-0.06020	-0.04374
0.0001	0.0261	0.0926	0.1739	0.2642	0.3754	0.4553	0.5877

INEX1 MY LIFE WAS SAVED BY A HEART OPERATION

TOTIE	TOTINF	TOTAC	TOTCYN	TOTPAR	TOTDEF	TOTSD	TOTDEP
-0.24589	0.20037	-0.14854	0.11320	0.10789	-0.08164	0.05235	0.03323
0.0020	0.0121	0.0642	0.1594	0.1800	0.3110	0.5163	0.6804

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / N = 156

INEX20 COULD TALK BEFORE I WENT TO SCHOOL

TOTINF	TOTAC	TOTDEP	TOTPAR	TOTIE	TOTDEF	TOTCYN	TOTSD
0.43568	-0.22029	0.17280	0.16305	-0.14808	-0.10879	0.09150	0.04925
0.0001	0.0057	0.0310	0.0420	0.0651	0.1764	0.2560	0.5415

INEX39 RUNNING TIRES ME MORE THAN WALKING

TOTINF	TOTDEF	TOTIE	TOTDEP	TOTAC	TOTCYN	TOTSD	TOTPAR
0.24827	0.07649	-0.06367	-0.03757	0.03307	-0.01789	0.01027	-0.00437
0.0018	0.3426	0.4297	0.6415	0.6819	0.8245	0.8988	0.9568

INEX53 SOME DAYS ARE WARMER THAN OTHERS

TOTINF	TOTCYN	TOTAC	TOTDEP	TOTDEF	TOTPAR	TOTIE	TOTSD
0.31261	-0.13054	-0.10467	0.09539	-0.07504	0.04765	-0.03146	0.00381
0.0001	0.1041	0.1935	0.2362	0.3518	0.5547	0.6966	0.9623

INEX77 TALK TO SOMEONE ALMOST EVERY DAY

TOTINF	TOTDEF	TOTDEP	TOTAC	TOTCYN	TOTIE	TOTSD	TOTPAR
0.29030	0.13443	0.09180	-0.07738	0.06435	0.02943	0.02632	-0.00115
0.0002	0.0943	0.2544	0.3370	0.4248	0.7153	0.7443	0.9886

INEX96 HAVE NO TROUBLE COUNTING TO TWENTY

TOTINF	TOTIE	TOTSD	TOTCYN	TOTPAR	TOTDEP	TOTDEF	TOTAC
0.20380	0.18517	-0.14549	-0.14473	-0.12785	-0.10886	0.09493	0.07621
0.0107	0.0207	0.0699	0.0714	0.1117	0.1761	0.2385	0.3443

INEX116 I AMKE ALL MY OWN CLOTHES AND SHOES

TOTINF	TOTCYN	TOTDEP	TOTIE	TOTSD	TOTPAR	TOTDEF	TOTAC
0.25957	0.10712	0.08011	0.03441	-0.02537	0.02365	-0.02098	-0.00169
0.0011	0.1832	0.3201	0.6698	0.7533	0.7694	0.7949	0.9833

INEX136 I HAVE ATTENDED SCHOOL BEFORE

TOTINF	TOTCYN	TOTAC	TOTDEP	TOTDEF	TOTPAR	TOTIE	TOTSD
0.03558	0.08343	0.07478	-0.07203	0.06792	-0.05353	-0.03380	0.01642
0.2681	0.3005	0.3535	0.3715	0.3995	0.5109	0.6753	0.8388

APPENDIX TABLE A-5

WHITE SUBSAMPLE MULTIPLE ITEM ANALYSIS

CORRELATION COEFFICIENTS / PROB > |R| UNDER $H_0: \rho = 0$ / N = 156

INEX155 RARELY USE FOOD OR DRINK

TOTAC	TOTPAR	TOTINF	TOTDEF	TOTDEP	TOTCYN	TOTIE	TOTSD
-0.15216	0.14232	0.10479	-0.09212	0.05739	0.04287	0.02113	-0.01275
0.0579	0.0763	0.1930	0.2527	0.4767	0.5952	0.7934	1.8745

INEX174 USUALLY WEAR CLOTHES AROUND OTHER PEOPLE

TOTINF	TOTPAR	TOTDEP	TOTDEF	TOTSD	TOTCYN	TOTAC	TOTIE
0.29300	0.16038	0.09533	0.09257	-0.02914	0.02328	-0.01566	0.01526
0.0002	0.0455	0.2365	0.2504	0.7180	0.7730	0.8462	1.8500

INEX190 I HAVE NEVER RIDDEN IN AN AUTOMOBILE

TOTINF	TOTDEP	TOTDEF	TOTPAR	TOTCYN	TOTIE	TOTSD	TOTAC
0.13971	0.09858	0.05352	0.04493	-0.02672	-0.02084	0.00812	-0.00714
0.0820	0.2204	0.5070	0.5776	0.7405	0.7962	0.9199	1.9296

NAME: _____ DATE: _____ 4-
 PROFESSOR: _____ 7- COLLEGE: _____ 5-
 TITLE OF COURSE: _____ 6-
 _____ 8-
 _____ 9-

SELF-EVALUATION QUESTIONNAIRE

You will please fill out this questionnaire before taking the intelligence tests.

Q.1a On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you feel right now, that is, at this moment. There are no right and wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you feel right now.

	Not At All	Slightly	Somewhat	Very Much	A Great Deal	10-1
1. I am able to breathe	1	2	3	4	5	(11)
2. I feel calm	1	2	3	4	5	(12)
3. I feel secure	1	2	3	4	5	(13)
4. I am tense	1	2	3	4	5	(14)
5. I find it difficult to concentrate	1	2	3	4	5	(15)
6. I am regretful	1	2	3	4	5	(16)
7. I feel at ease	1	2	3	4	5	(17)
8. I feel upset	1	2	3	4	5	(18)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(19)
10. I feel self-conscious	1	2	3	4	5	(20)
11. I feel rested	1	2	3	4	5	(21)
12. I feel anxious	1	2	3	4	5	(22)
13. I feel comfortable	1	2	3	4	5	(23)
14. I can see out of my right eye	1	2	3	4	5	(24)
15. I feel self-confident	1	2	3	4	5	(25)
16. I feel nervous	1	2	3	4	5	(26)
17. I am jittery	1	2	3	4	5	(27)
18. I feel embarrassed	1	2	3	4	5	(28)
19. I feel high strung	1	2	3	4	5	(29)
20. I am relaxed	1	2	3	4	5	(30)
21. I feel content	1	2	3	4	5	(31)
22. I am nervous from waiting	1	2	3	4	5	(32)
23. I am worried	1	2	3	4	5	(33)
24. I feel over-excited and "rattled"	1	2	3	4	5	(34)
25. I feel joyful	1	2	3	4	5	(35)
26. I feel pleasant	1	2	3	4	5	(36)
27. I have the sense of touch in my fingers	1	2	3	4	5	(37)

NAME: _____ DATE: _____ 4-
 PROFESSOR: _____ 7- COLLEGE: _____ 5-
 TITLE OF COURSE: _____ 6-
 _____ 8-
 _____ 9-

SELF-EVALUATION QUESTIONNAIRE

You will please fill out this questionnaire before taking the intelligence tests.

Q.1b On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you feel right now, that is, at this moment. There are no right and wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you feel right now.

10-2

	Not At All	Slightly	Somewhat	Very Much	A Great Deal	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(11)
2. I feel pleasant	1	2	3	4	5	(12)
3. I tire quickly	1	2	3	4	5	(13)
4. I feel like crying	1	2	3	4	5	(14)
5. My sleep is fitful and disturbed	1	2	3	4	5	(15)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(16)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(17)
8. I feel rested	1	2	3	4	5	(18)
9. I am "calm, cool, and collected"	1	2	3	4	5	(19)
10. I have a number of health problems	1	2	3	4	5	(20)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(21)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(22)
13. I am happy	1	2	3	4	5	(23)
14. I can see the difference between red and blue	1	2	3	4	5	(24)
15. I am inclined to take things hard	1	2	3	4	5	(25)
16. I lack self-confidence	1	2	3	4	5	(26)
17. I feel secure	1	2	3	4	5	(27)
18. I blush very often	1	2	3	4	5	(28)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(29)
20. I feel blue	1	2	3	4	5	(30)
21. I am content	1	2	3	4	5	(31)
22. I sweat very easily even on cool days	1	2	3	4	5	(32)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(33)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(34)
25. I am a steady person	1	2	3	4	5	(35)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(36)
27. I try to get at least some sleep every night	1	2	3	4	5	(37)

Q.2 On each line is one word in capital letters and, on the same line, five words in small letters. For each word in capitals, circle the one word in small letters that has the same meaning as the word in capital letters. In this example...

BEAST afraid word large animal bird

... you would circle the word "animal" because it is closer to "BEAST" than any of the other words. Do the same thing for the following 20 lines of words.

SPACE	school	noon	captain	room	board
LIFT	sort out	raise	value	trying	fancy
CONCERN	see	engage	furnish	disturb	have to do with
BROADEN	efface	make level	elapse	embroider	widen
BLUNT	dull	drowsy	deaf	doubtful	ugly
ACCUSTOM	way	customary	encounter	get used to	business
CHARITABLE	relentless	evil	sympathetic	poetic	keen
EDIBLE	jaw	eligible	fit to eat	tough	building
PACT	ready	demonstration	agreement	definite	trial
SOLICITOR	lawyer	chieftan	watchman	maggot	constable
ALLUSION	aria	illusion	eulogy	cream	reference
CAPRICE	value	star	grimace	whim	inducement
ANIMOSITY	hatrid	animation	crudeness	illness	spirit
EMANATE	populate	free	prominent	rival	come from
RUDIMENT	cargo	beginning	insult	remorse	stomach
CLOISTERED	minature	bunched	arched	malady	secluded
RUBRIC	kopeck	oaf	lace	heading	debris
PRISTINE	flashing	earlier	primeval	bound	green
TACTILITY	tangibility	grace	subtlety	rudeness	nerve
SEDULOUS	muddled	sluggish	stupid	assiduous	currupt

- Q.3 For each of these problems, a pair of words is given that are related to each other in some way. Look at the first two words and figure out how they are related to each other. Then, from the five words on the line below, choose the word that is related to the third word in the same way and circle it. In this example...

Chair—sit: bed—
lie bedroom night crib tired

... you would have circled "lie" because just as you sit in a chair, you lie in a bed. Do the same thing for the next five problems.

Obligation—duty: right—
ceremony responsibility privelege law custom

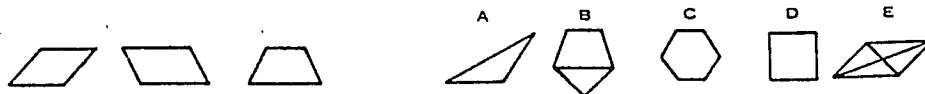
Liveliness—abandon: languor—
restraint vacillation freedom slumber stupor

Secret—conceal: information—
invent acknowledge transpire disclose concede

King—abdicate: president—
disdain retract resign veto coup d'etat

Vanish—fade: appear—
vision materialize incarnate flesh embody

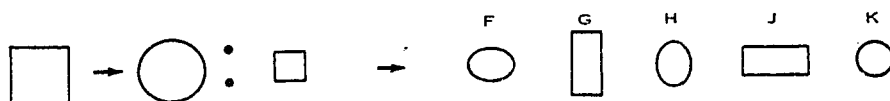
- Q.4 The first three drawings on the left are alike in a certain way. Find the drawing on the right that goes with the first three and circle that one. In this example...



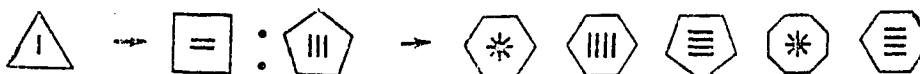
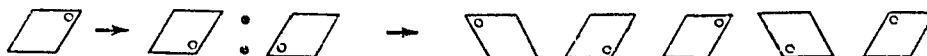
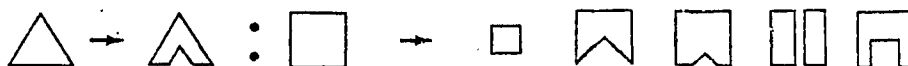
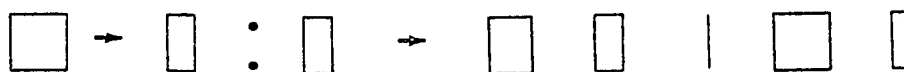
... the fourth would be circled because it has four sides and no lines inside it -- just like the first three. Do the same thing for the next five problems.



- Q.5 The first two drawings go together in a certain way. You are to figure out how the first two go together and then find the drawing on the right that goes with the third drawing in the same way that the second goes with the first, and circle that one. In this example...



... the little circle would be circled, because the little circle goes with the little square as the big circle goes with the big square. Do the same thing for the next five problems.



_____	(42)
_____	(43-44)

Q.6a On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you feel right now, that is, at this moment. There are no right and wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you feel right now.

45-1

	Not At All	Slightly	Somewhat	Very Much	A Great Deal	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(46)
2. I feel pleasant	1	2	3	4	5	(47)
3. I tire quickly	1	2	3	4	5	(48)
4. I feel like crying	1	2	3	4	5	(49)
5. My sleep is fitful and disturbed	1	2	3	4	5	(50)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(51)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(52)
8. I feel rested	1	2	3	4	5	(53)
9. I am "calm, cool, and collected"	1	2	3	4	5	(54)
10. I have a number of health problems	1	2	3	4	5	(55)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(56)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(57)
13. I am happy	1	2	3	4	5	(58)
14. I can see the difference between red and blue	1	2	3	4	5	(59)
15. I am inclined to take things hard	1	2	3	4	5	(60)
16. I lack self-confidence	1	2	3	4	5	(61)
17. I feel secure	1	2	3	4	5	(62)
18. I blush very often	1	2	3	4	5	(63)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(64)
20. I feel blue	1	2	3	4	5	(65)
21. I am content	1	2	3	4	5	(66)
22. I sweat very easily even on cool days	1	2	3	4	5	(67)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(68)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(69)
25. I am a steady person	1	2	3	4	5	(70)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(71)
27. I try to get at least some sleep every night	1	2	3	4	5	(72)

Q.6b On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you feel right now, that is, at this moment. There are no right and wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you feel right now.

45-2

	Not At All	Slightly	Somewhat	Very Much	A Great Deal	
1. I am able to breathe	1	2	3	4	5	(46)
2. I feel calm	1	2	3	4	5	(47)
3. I feel secure	1	2	3	4	5	(48)
4. I am tense	1	2	3	4	5	(49)
5. I find it difficult to concentrate	1	2	3	4	5	(50)
6. I am regretful	1	2	3	4	5	(51)
7. I feel at ease	1	2	3	4	5	(52)
8. I feel upset	1	2	3	4	5	(53)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(54)
10. I feel self-conscious	1	2	3	4	5	(55)
11. I feel rested	1	2	3	4	5	(56)
12. I feel anxious	1	2	3	4	5	(57)
13. I feel comfortable	1	2	3	4	5	(58)
14. I can see out of my right eye	1	2	3	4	5	(59)
15. I feel self-confident	1	2	3	4	5	(60)
16. I feel nervous	1	2	3	4	5	(61)
17. I am jittery	1	2	3	4	5	(62)
18. I feel embarrassed	1	2	3	4	5	(63)
19. I feel high strung	1	2	3	4	5	(64)
20. I am relaxed	1	2	3	4	5	(65)
21. I feel content	1	2	3	4	5	(66)
22. I am nervous from waiting	1	2	3	4	5	(67)
23. I am worried	1	2	3	4	5	(68)
24. I feel over-excited and "rattled"	1	2	3	4	5	(69)
25. I feel joyful	1	2	3	4	5	(70)
26. I feel pleasant	1	2	3	4	5	(71)
27. I have the sense of touch in my fingers	1	2	3	4	5	(72)

Q.7 Here are some statements regarding your reactions to taking intelligence tests. Read each statement and, next to it, circle the number under the phrase that best describes how much you agree or disagree with that statement as it applies to you. Do not spend too much time on any one statement.

	CARD #2					
	Disagree Completely	Disagree Somewhat	Neither Agree Nor Disagree	Agree Somewhat	Agree Completely	
Intelligence tests are good indicators of a persons ability	1	2	3	4	5	(4)
Intelligence tests should be used less to classify students	1	2	3	4	5	(5)
I would be willing to be dismissed from college if I did badly on an intelligence test	1	2	3	4	5	(6)
I feel very confident <u>before</u> taking an intelligence test	1	2	3	4	5	(7)
I feel very confident <u>after</u> taking an intelligence test	1	2	3	4	5	(8)
I get so nervous that I don't do as well as I know I could on intelligence tests	1	2	3	4	5	(9)
I usually feel uneasy <u>before</u> taking an intelligence test	1	2	3	4	5	(10)
I usually feel uneasy <u>while</u> taking an intelligence test	1	2	3	4	5	(11)
My heart beats faster just <u>before</u> taking an intelligence test	1	2	3	4	5	(12)
My heart beats faster <u>while</u> taking an intelligence test	1	2	3	4	5	(13)
I worry <u>before</u> taking an intelligence test	1	2	3	4	5	(14)
I worry <u>while</u> taking an intelligence test	1	2	3	4	5	(15)
I perspire <u>before</u> taking an intelligence test	1	2	3	4	5	(16)
I perspire <u>while</u> taking an intelligence test	1	2	3	4	5	(17)
I often think of ways to avoid taking intelligence tests	1	2	3	4	5	(18)
My performance on all kinds of tests is affected by my emotions	1	2	3	4	5	(19)

NAME: _____

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8a. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

20-1

	ALMOST NEVER	SELDOM	SOME- TIMES	OFTEN	ALMOST ALWAYS	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(21)
2. I feel pleasant	1	2	3	4	5	(22)
3. I tire quickly	1	2	3	4	5	(23)
4. I feel like crying	1	2	3	4	5	(24)
5. My sleep is fitful and disturbed	1	2	3	4	5	(25)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(26)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(27)
8. I feel rested	1	2	3	4	5	(28)
9. I am "calm, cool, and collected"	1	2	3	4	5	(29)
10. I have a number of health problems	1	2	3	4	5	(30)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(31)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(32)
13. I am happy	1	2	3	4	5	(33)
14. I can see the difference between red and blue	1	2	3	4	5	(34)
15. I am inclined to take things hard	1	2	3	4	5	(35)
16. I lack self-confidence	1	2	3	4	5	(36)
17. I feel secure	1	2	3	4	5	(37)
18. I blush very often	1	2	3	4	5	(38)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(39)
20. I feel blue	1	2	3	4	5	(40)
21. I am content	1	2	3	4	5	(41)
22. I sweat very easily even on cool days	1	2	3	4	5	(42)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(43)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(44)
25. I am a steady person	1	2	3	4	5	(45)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(46)
27. I try to get at least some sleep every night	1	2	3	4	5	(47)

NAME: _____

- 8b. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

20-2

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(21)
2. I feel pleasant	1	2	3	4	5	(22)
3. I tire quickly	1	2	3	4	5	(23)
4. I feel like crying	1	2	3	4	5	(24)
5. My sleep is fitful and disturbed	1	2	3	4	5	(25)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(26)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(27)
8. I feel rested	1	2	3	4	5	(28)
9. I am "calm, cool, and collected"	1	2	3	4	5	(29)
10. I have a number of health problems	1	2	3	4	5	(30)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(31)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(32)
13. I am happy	1	2	3	4	5	(33)
14. I can see the difference between between red and blue	1	2	3	4	5	(34)
15. I am inclined to take things hard	1	2	3	4	5	(35)
16. I lack self-confidence	1	2	3	4	5	(36)
17. I feel secure	1	2	3	4	5	(37)
18. I blush very often	1	2	3	4	5	(38)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(39)
20. I feel blue	1	2	3	4	5	(40)
21. I am content	1	2	3	4	5	(41)
22. I sweat very easily even on cool days	1	2	3	4	5	(42)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(43)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(44)
25. I am a steady person	1	2	3	4	5	(45)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(46)
27. I try to get at least some sleep every night	1	2	3	4	5	(47)

NAME: _____

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8c. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

20-3

	ALMOST NEVER	SELDOM	SOME- TIMES	OFTEN	ALMOST ALWAYS	
1. I am able to breathe	1	2	3	4	5	(21)
2. I feel calm	1	2	3	4	5	(22)
3. I feel secure	1	2	3	4	5	(23)
4. I am tense	1	2	3	4	5	(24)
5. I find it difficult to concentrate	1	2	3	4	5	(25)
6. I am regretful	1	2	3	4	5	(26)
7. I feel at ease	1	2	3	4	5	(27)
8. I feel upset	1	2	3	4	5	(28)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(29)
10. I feel self-conscious	1	2	3	4	5	(30)
11. I feel rested	1	2	3	4	5	(31)
12. I feel anxious	1	2	3	4	5	(32)
13. I feel comfortable	1	2	3	4	5	(33)
14. I can see out of my right eye	1	2	3	4	5	(34)
15. I feel self-confident	1	2	3	4	5	(35)
16. I feel nervous	1	2	3	4	5	(36)
17. I am jittery	1	2	3	4	5	(37)
18. I feel embarrassed	1	2	3	4	5	(38)
19. I feel high strung	1	2	3	4	5	(39)
20. I am relaxed	1	2	3	4	5	(40)
21. I feel content	1	2	3	4	5	(41)
22. I am nervous from waiting	1	2	3	4	5	(42)
23. I am worried	1	2	3	4	5	(43)
24. I feel over-excited and "rattled"	1	2	3	4	5	(44)
25. I feel joyful	1	2	3	4	5	(45)
26. I feel pleasant	1	2	3	4	5	(46)
27. I have the sense of touch in my fingers	1	2	3	4	5	(47)

NAME: _____

8d. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

20-4

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
1. I am able to breathe	1	2	3	4	5	(21)
2. I feel calm	1	2	3	4	5	(22)
3. I feel secure	1	2	3	4	5	(23)
4. I am tense	1	2	3	4	5	(24)
5. I find it difficult to concentrate	1	2	3	4	5	(25)
6. I am regretful	1	2	3	4	5	(26)
7. I feel at ease	1	2	3	4	5	(27)
8. I feel upset	1	2	3	4	5	(28)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(29)
10. I feel self-conscious	1	2	3	4	5	(30)
11. I feel rested	1	2	3	4	5	(31)
12. I feel anxious	1	2	3	4	5	(32)
13. I feel comfortable	1	2	3	4	5	(33)
14. I can see out of my right eye	1	2	3	4	5	(34)
15. I feel self-confident	1	2	3	4	5	(35)
16. I feel nervous	1	2	3	4	5	(36)
17. I am jittery	1	2	3	4	5	(37)
18. I feel embarrassed	1	2	3	4	5	(38)
19. I feel high strung	1	2	3	4	5	(39)
20. I am relaxed	1	2	3	4	5	(40)
21. I feel content	1	2	3	4	5	(41)
22. I am nervous from waiting	1	2	3	4	5	(42)
23. I am worried	1	2	3	4	5	(43)
24. I feel over-excited and "rattled"	1	2	3	4	5	(44)
25. I feel joyful	1	2	3	4	5	(45)
26. I feel pleasant	1	2	3	4	5	(46)
27. I have the sense of touch in my fingers	1	2	3	4	5	(47)

9. On the next few pages are some statements. Read each one and, next to it, circle the number under the phrase that best describes how much you agree or disagree with each statement as far as you are concerned. There are no right or wrong answers. Read each statement carefully but do not spend too much time on any one of them. Answer all of them.

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
1. My life was saved by a heart operation	1	2	3	4	5	(48)
2. There's not much use in really trying to get something I want because I probably won't get it	1	2	3	4	5	(49)
3. Life is very interesting to me	1	2	3	4	5	(50)
4. I don't mind working while other people are having fun	1	2	3	4	5	(51)
5. People who seem lucky are really those who are good at figuring out and taking advantage of situations	1	2	3	4	5	(52)
6. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow	1	2	3	4	5	(53)
7. In the long run, the people are responsible for bad government on a national as well as local level	1	2	3	4	5	(54)
8. If I am not good at something, I give it up rather quickly	1	2	3	4	5	(55)
9. I am a little more superstitious than many people	1	2	3	4	5	(56)
10. The idea that teachers are unfair to students is nonsense	1	2	3	4	5	(57)
11. Sometimes I use my friends to my own advantage	1	2	3	4	5	(58)
12. With enough effort, we can wipe out political corruption	1	2	3	4	5	(59)
13. When I do things, I usually do things quite well	1	2	3	4	5	(60)
14. I think more about the future than the present	1	2	3	4	5	(61)
15. In the long run, the bad things that happen to us are balanced by the good ones	1	2	3	4	5	(62)
16. When people are not going to see what I do, I often do less than my very best	1	2	3	4	5	(63)
17. You don't know who or what to believe anymore	1	2	3	4	5	(64)

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
18. Things just don't work out the way I want them to	1	2	3	4	5	(65)
19. I usually enjoy starting a new activity	1	2	3	4	5	(66)
20. I could talk before I went to school	1	2	3	4	5	(67)
21. I like to accomplish tasks that other people recognize as requiring skill and effort	1	2	3	4	5	(68)
22. Capable people who fail to become leaders have not taken advantage of their opportunities	1	2	3	4	5	(69)
23. Most of the things fortune tellers and readers/advisors tell you are true	1	2	3	4	5	(70)
24. I don't mind studying while other people are having fun	1	2	3	4	5	(71)
25. I am sure people think I don't have a great deal of drive	1	2	3	4	5	(72)
26. Many times exam questions tend to be so unrelated to course work that studying is really useless	1	2	3	4	5	(73)
27. In the long run, people get the respect they deserve	1	2	3	4	5	(74)
28. People who can't get others to like them don't understand how to get along with others	1	2	3	4	5	(75)
29. I have never cheated in any manner	1	2	3	4	5	(76)
30. I like to be able to say that I've done a difficult job well	1	2	3	4	5	(77)
31. I have enough time to accomplish the things I most want to do	1	2	3	4	5	(78)
32. You can change what happens tomorrow by what you do today	1	2	3	4	5	(79)
33. I hate losing more than I love winning	1	2	3	4	5	(4)
34. People with economic power will use you if they get the chance	1	2	3	4	5	(5)
35. I would like to write a great novel or play	1	2	3	4	5	(6)
36. My days seem gloomy and dull	1	2	3	4	5	(7)
37. My past experiences have prepared me well for my future	1	2	3	4	5	(8)
38. I may as well give up because I can't seem to make things better for myself	1	2	3	4	5	(9)

CARD #3

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
39. Running usually tires me more than walking	1	2	3	4	5	(10)
40. I enjoy work more than play	1	2	3	4	5	(11)
41. People are lonely because they don't try to be friendly	1	2	3	4	5	(12)
42. It is impossible for me to believe that chance or luck plays an important role in my life	1	2	3	4	5	(13)
43. Sometimes I feel that other people are just using me	1	2	3	4	5	(14)
44. I will never be suited for anything except the lowest and simplest sort of jobs	1	2	3	4	5	(15)
45. Most students don't realize the extent to which their grades are influenced by accidental happenings	1	2	3	4	5	(16)
46. How many friends you have depends on how nice a person you are	1	2	3	4	5	(17)
47. People are not always out to trick you	1	2	3	4	5	(18)
48. I have always lived up to my responsibilities	1	2	3	4	5	(19)
49. I expect to get more of the good things in life than the average person	1	2	3	4	5	(20)
50. A belief in fate or luck is just a way of avoiding responsibility for your actions	1	2	3	4	5	(21)
51. I often feel that someone is trying to make my life difficult and unpleasant	1	2	3	4	5	(22)
52. When I look ahead to the future, I expect I will be happier than I am now	1	2	3	4	5	(23)
53. There will always be wars, no matter how hard people try to prevent them	1	2	3	4	5	(24)
54. In the case of a well prepared student, there is rarely, if ever, such a thing as an unfair test	1	2	3	4	5	(25)
55. Most people don't realize the extent to which their lives are controlled by accidental happenings	1	2	3	4	5	(26)
56. Sometimes people say I neglect other important aspects of my life because I work so hard	1	2	3	4	5	(27)
57. It is unlikely that I will get any real satisfaction in the future	1	2	3	4	5	(28)

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
58. Some days are warmer than others	1	2	3	4	5	(29)
59. There is a great deal of truth in astrology	1	2	3	4	5	(30)
60. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it	1	2	3	4	5	(31)
61. I enjoy easy courses more than hard ones	1	2	3	4	5	(32)
62. I often feel I am in great danger from people who wish to harm me	1	2	3	4	5	(33)
63. A belief in luck or fate is a primitive way of thinking	1	2	3	4	5	(34)
64. I really don't enjoy hard work	1	2	3	4	5	(35)
65. Each day has some event that holds my interest	1	2	3	4	5	(36)
66. I would like to be a recognized authority in some job, profession, or field	1	2	3	4	5	(37)
67. I have great faith in the future	1	2	3	4	5	(38)
68. Sometimes I get mad at my friends	1	2	3	4	5	(39)
69. Once a politician gets elected, the people have little or no control over him	1	2	3	4	5	(40)
70. In my case, getting what I want has little or nothing to do with luck	1	2	3	4	5	(41)
71. I will keep working on a problem after others have given up	1	2	3	4	5	(42)
72. I usually make up my mind without the advice or opinions of others	1	2	3	4	5	(43)
73. I would be much more successful if other people were not against me	1	2	3	4	5	(44)
74. I can't imagine what my life will be like in ten years	1	2	3	4	5	(45)
75. I would like to accomplish something of great significance	1	2	3	4	5	(46)
76. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three	1	2	3	4	5	(47)
77. I talk to someone almost every day	1	2	3	4	5	(48)
78. I study because I have to, and for no other reason	1	2	3	4	5	(49)
79. I like to be successful in the things I undertake	1	2	3	4	5	(50)
80. Whether someone likes you or not has very little to do with you	1	2	3	4	5	(51)

	NEITHER					272
	DISAGREE	DISAGREE	AGREE NOR	AGREE	AGREE	
	<u>COMPLETELY</u>	<u>SOMEWHAT</u>	<u>DISAGREE</u>	<u>SOMEWHAT</u>	<u>COMPLETELY</u>	
81. My life is determined by my own actions	1	2	3	4	5	(52)
82. When things are going badly, I am helped by knowing they can't stay that way forever	1	2	3	4	5	(53)
83. I prefer to wait for something really great, rather than get something immediately that is just so-so	1	2	3	4	5	(54)
84. People have always said that I am a hard worker	1	2	3	4	5	(55)
85. Many of the unhappy things in people's lives are partly due to bad luck	1	2	3	4	5	(56)
86. I always admit my errors without trying to hide anything	1	2	3	4	5	(57)
87. There is usually no point in trying because you can't win anyway	1	2	3	4	5	(58)
88. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries	1	2	3	4	5	(59)
89. The end often justifies the means	1	2	3	4	5	(60)
90. I often set goals for myself which are very difficult to reach	1	2	3	4	5	(61)
91. I worry more about getting a good grade than learning anything	1	2	3	4	5	(62)
92. I never seem to be really happy	1	2	3	4	5	(63)
93. Almost any child in the country can grow up to be anything he/she wants to be	1	2	3	4	5	(64)
94. Becoming a success is a matter of hard work; luck has little or nothing to do with it	1	2	3	4	5	(65)
95. The future looks vague and uncertain to me	1	2	3	4	5	(66)
96. I have no trouble counting from one to twenty	1	2	3	4	5	(67)
97. I enjoy almost everything I do	1	2	3	4	5	(68)
98. I consider myself a religious person	1	2	3	4	5	(69)
99. It is unrealistic for me to insist upon becoming the best in my field	1	2	3	4	5	(70)
100. I am depressed most of the time	1	2	3	4	5	(71)
101. There really is no such thing as "luck"	1	2	3	4	5	(72)
102. It is necessary to please people in power to get what you want	1	2	3	4	5	(73)

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
103. I go to school only to improve my earning power	1	2	3	4	5	(74)
104. The only thing you can be sure of is that you can be sure of nothing	1	2	3	4	5	(75)
105. My goal is to do at least a little better than anyone has done before	1	2	3	4	5	(76)
106. Sometimes I can't understand how teachers arrive at the grades they give	1	2	3	4	5	(77)
107. Sometimes I get mad at my friends	1	2	3	4	5	(78)
108. I often think that I have very little to look forward to	1	2	3	4	5	(79)
						CARD #4
109. What happens to people is mainly a result of fate	1	2	3	4	5	(4)
110. I am as happy as my friends	1	2	3	4	5	(5)
111. I try to work just hard enough to get by	1	2	3	4	5	(6)
112. I am sure that no one has it in for me	1	2	3	4	5	(7)
113. We are just so many cogs in the machinery of life	1	2	3	4	5	(8)
114. I like to solve puzzles and problems that other people find difficult	1	2	3	4	5	(9)
115. I am usually able to get people to do what I want them to	1	2	3	4	5	(10)
116. I make all my own clothes and shoes	1	2	3	4	5	(11)
117. I do not feel very sad at the present time	1	2	3	4	5	(12)
118. What you get out of life is strictly a matter of what you put into it	1	2	3	4	5	(13)
119. I would rather do an easy job than one involving obstacles that must be overcome	1	2	3	4	5	(14)
120. The average citizen can have an influence on government decisions	1	2	3	4	5	(15)
121. Others always seem to enjoy life more than I do	1	2	3	4	5	(16)
122. I like to get better grades than other people	1	2	3	4	5	(17)
123. It's not what you know but who you know that counts	1	2	3	4	5	(18)
124. Many times I feel that I have little influence over the things that happen to me	1	2	3	4	5	(19)
125. I work because I have to and for that reason only	1	2	3	4	5	(20)

	NEITHER					
	DISAGREE <u>COMPLETELY</u>	DISAGREE <u>SOMEWHAT</u>	AGREE NOR <u>DISAGREE</u>	AGREE <u>SOMEWHAT</u>	AGREE <u>COMPLETELY</u>	
126. Sometimes I say bad things about my friends	1	2	3	4	5	(21)
127. I have a dull life	1	2	3	4	5	(22)
128. I like to do my very best in whatever I undertake	1	2	3	4	5	(23)
129. As far as world affairs are concerned, most of us are the victims of forces we can neither control nor understand	1	2	3	4	5	(24)
130. When I get what I want, it's because I worked hard for it	1	2	3	4	5	(25)
131. I see mostly unpleasantness ahead of me, not pleasantness	1	2	3	4	5	(26)
132. You have very little control over whether people like you or not	1	2	3	4	5	(27)
133. I like to do my very best in my courses	1	2	3	4	5	(28)
134. People's misfortunes result from the mistakes they make	1	2	3	4	5	(29)
135. I don't expect to get what I really want	1	2	3	4	5	(30)
136. I have attended school before	1	2	3	4	5	(31)
137. Some people are just born lucky	1	2	3	4	5	(32)
138. I sometimes become saddened and think of killing myself	1	2	3	4	5	(33)
139. There's not much use in trying too hard to please people; if they don't like you, they don't like you	1	2	3	4	5	(34)
140. I never feel like a robot that someone else is directing	1	2	3	4	5	(35)
141. Without the right breaks one cannot be an effective leader	1	2	3	4	5	(36)
142. I usually study just hard enough to pass and no more	1	2	3	4	5	(37)
143. I don't get what I want so it's foolish to want anything	1	2	3	4	5	(38)
144. It is difficult for people to have much control over the things politicians do in office	1	2	3	4	5	(39)
145. Sometimes planning ahead works out, sometimes it doesn't; it all depends on the particular situation	1	2	3	4	5	(40)
146. I put the good of my community and country above my own interests	1	2	3	4	5	(41)
147. I just don't get the breaks and there is no reason to believe that I will in the future	1	2	3	4	5	(42)

	DISAGREE COMPLETELY	DISAGREE SOMEWHAT	NEITHER AGREE NOR DISAGREE	AGREE SOMEWHAT	AGREE COMPLETELY	
148. By taking an active part in political and social affairs the people can control world events	1	2	3	4	5	(43)
149. Most people are decent and trustworthy	1	2	3	4	5	(44)
150. I like to be able to do things better than other people can	1	2	3	4	5	(45)
151. What happens to me is my own doing	1	2	3	4	5	(46)
152. One of the major reasons we have wars is because people don't take enough interest in politics	1	2	3	4	5	(47)
153. I have often found that what is going to happen will happen no matter what you do	1	2	3	4	5	(48)
154. People are basically good	1	2	3	4	5	(49)
155. I rarely use food or drink of any kind	1	2	3	4	5	(50)
156. Very few things in this world control me; I usually do what I want to do	1	2	3	4	5	(51)
157. There is a direct connection between how hard I study and the grades I get	1	2	3	4	5	(52)
158. There is good reason to believe there's a sucker born every minute	1	2	3	4	5	(53)
159. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action	1	2	3	4	5	(54)
160. It doesn't really matter to me whether I become one of the best in my field	1	2	3	4	5	(55)
161. Sometimes I don't feel I have enough control over the direction my life is taking	1	2	3	4	5	(56)
162. Most of the bad things that happen to us take place because we didn't figure out the situation correctly	1	2	3	4	5	(57)
163. Someone is always getting away with something	1	2	3	4	5	(58)
164. In the future, I expect to succeed in what concerns me most	1	2	3	4	5	(59)
165. I sometimes get angry when people tease me	1	2	3	4	5	(60)
166. Getting a good job depends mainly on being in the right place at the right time	1	2	3	4	5	(61)
167. My future is bright	1	2	3	4	5	(62)

	DISAGREE <u>COMPLETELY</u>	DISAGREE <u>SOMEWHAT</u>	NEITHER AGREE NOR <u>DISAGREE</u>	AGREE <u>SOMEWHAT</u>	AGREE <u>COMPLETELY</u>	
168. I rarely do extra studying to improve myself at work	1	2	3	4	5	(63)
169. I am happy in my present line of work	1	2	3	4	5	(64)
170. When I make plans ahead of time, I am almost certain that I can make them turn out right	1	2	3	4	5	(65)
171. I am willing to trust most people	1	2	3	4	5	(66)
172. Self-improvement means nothing to me unless it leads to immediate success	1	2	3	4	5	(67)
173. I enjoy easy courses more than hard ones	1	2	3	4	5	(68)
174. I usually wear clothes when I am around other people	1	2	3	4	5	(69)
175. It's so hard to predict how things turn out, you might as well flip a coin	1	2	3	4	5	(70)
176. Politicians are and always will be rotten	1	2	3	4	5	(71)
177. My present situation seems quite hopeless	1	2	3	4	5	(72)
178. I get disgusted with myself when I have not learned something properly	1	2	3	4	5	(73)
179. Who gets to be boss often depends on who was lucky enough to be in the right place first	1	2	3	4	5	(74)
180. No one is making things go wrong for me	1	2	3	4	5	(75)
181. I look forward to more good times than bad times	1	2	3	4	5	(76)
182. I enjoy things which challenge me	1	2	3	4	5	(77)
183. When I can, I try to get out of doing jobs that I don't enjoy	1	2	3	4	5	(78)
184. This world is run by the few people in power and there is not much the little guy can do about it	1	2	3	4	5	(79)
						CARD #5
185. I look forward to the future with hope and enthusiasm	1	2	3	4	5	(4)
186. I prefer taking courses that are challenging and difficult	1	2	3	4	5	(5)
187. I prefer to be paid for how much work I've done, not how many hours I've worked	1	2	3	4	5	(6)
188. Most people are victims of circumstances beyond their control	1	2	3	4	5	(7)
189. My future often seems dark to me	1	2	3	4	5	(8)
190. I have never ridden in an automobile	1	2	3	4	5	(9)

10. This inventory represents a way of studying people's reactions to and attitudes towards various types of situations. On the following pages are eleven situations which most people have experienced personally or by reading stories and imagining themselves in these situations. For each of these situations, some of the common types of reactions that people have to them are listed. Please indicate the degree that you yourself have these reactions by circling one of the numbers next to each of these reactions. Here is an example...

You are about to go on a roller coaster...

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL
Heart beats faster	1	2	3	4	5

If your heart beats faster "a great deal" in this situation, you would circle "5"; if your heart beats "very much faster", you would circle "4"; if your heart beats "somewhat faster", you would circle "3"; if your heart beats "slightly faster", you would circle "2"; if your heart does "not at all" beat faster, you would circle "1".

Please indicate your reactions to each of the eleven situations on the following pages by circling the number that best indicates how much you have these reactions when you are in these situations.

"You are just starting off on a long automobile trip"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(10)
Get an uneasy feeling	1	2	3	4	5	(11)
Emotions disrupt action	1	2	3	4	5	(12)
Feel exhilarated and thrilled	1	2	3	4	5	(13)
Want to avoid situation	1	2	3	4	5	(14)
Perspire	1	2	3	4	5	(15)
Need to urinate	1	2	3	4	5	(16)
Enjoy the challenge	1	2	3	4	5	(17)
Mouth gets dry	1	2	3	4	5	(18)
Become immobilized	1	2	3	4	5	(19)
Get tight feeling in stomach	1	2	3	4	5	(20)
Seek experiences like this	1	2	3	4	5	(21)
Have loose bowels	1	2	3	4	5	(22)
Get nauseous	1	2	3	4	5	(23)

"You are going to meet a new date"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(24)
Get an uneasy feeling	1	2	3	4	5	(25)
Emotions disrupt action	1	2	3	4	5	(26)
Feel exhilarated and thrilled	1	2	3	4	5	(27)
Want to avoid situation	1	2	3	4	5	(28)
Perspire	1	2	3	4	5	(29)
Need to urinate	1	2	3	4	5	(30)
Enjoy the challenge	1	2	3	4	5	(31)
Mouth gets dry	1	2	3	4	5	(32)
Become immobilized	1	2	3	4	5	(33)
Get tight feeling in stomach	1	2	3	4	5	(34)
Seek experiences like this	1	2	3	4	5	(35)
Have loose bowels	1	2	3	4	5	(36)
Get nauseous	1	2	3	4	5	(37)

"You are a subject for a psychological experiment"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(38)
Get an uneasy feeling	1	2	3	4	5	(39)
Emotions disrupt action	1	2	3	4	5	(40)
Feel exhilarated and thrilled	1	2	3	4	5	(41)
Want to avoid situation	1	2	3	4	5	(42)
Perspire	1	2	3	4	5	(43)
Need to urinate	1	2	3	4	5	(44)
Enjoy the challenge	1	2	3	4	5	(45)
Mouth gets dry	1	2	3	4	5	(46)
Become immobilized	1	2	3	4	5	(47)
Get tight feeling in stomach	1	2	3	4	5	(48)
Seek experiences like this	1	2	3	4	5	(49)
Have loose bowels	1	2	3	4	5	(50)
Get nauseous	1	2	3	4	5	(51)

"You are crawling along a ledge high on a mountain side"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(52)
Get an uneasy feeling	1	2	3	4	5	(53)
Emotions disrupt action	1	2	3	4	5	(54)
Feel exhilarated and thrilled	1	2	3	4	5	(55)
Want to avoid situation	1	2	3	4	5	(56)
Perspire	1	2	3	4	5	(57)
Need to urinate	1	2	3	4	5	(58)
Enjoy the challenge	1	2	3	4	5	(59)
Mouth gets dry	1	2	3	4	5	(60)
Become immobilized	1	2	3	4	5	(61)
Get tight feeling in stomach	1	2	3	4	5	(62)
Seek experiences like this	1	2	3	4	5	(63)
Have loose bowels	1	2	3	4	5	(64)
Get nauseous	1	2	3	4	5	(65)

"You are getting up to give a speech before a large group of people"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(66)
Get an uneasy feeling	1	2	3	4	5	(67)
Emotions disrupt action	1	2	3	4	5	(68)
Feel exhilarated and thrilled	1	2	3	4	5	(69)
Want to avoid situation	1	2	3	4	5	(70)
Perspire	1	2	3	4	5	(71)
Need to urinate	1	2	3	4	5	(72)
Enjoy the challenge	1	2	3	4	5	(73)
Mouth gets dry	1	2	3	4	5	(74)
Become immobilized	1	2	3	4	5	(75)
Get tight feeling in stomach	1	2	3	4	5	(76)
Seek experiences like this	1	2	3	4	5	(77)
Have loose bowels	1	2	3	4	5	(78)
Get nauseous	1	2	3	4	5	(79)

"You are going to a counselor to seek help in solving a personal problem"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

CARD #6

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(4)
Get an uneasy feeling	1	2	3	4	5	(5)
Emotions disrupt action	1	2	3	4	5	(6)
Feel exhilarated and thrilled	1	2	3	4	5	(7)
Want to avoid situation	1	2	3	4	5	(8)
Perspire	1	2	3	4	5	(9)
Need to urinate	1	2	3	4	5	(10)
Enjoy the challenge	1	2	3	4	5	(11)
Mouth gets dry	1	2	3	4	5	(12)
Become immobilized	1	2	3	4	5	(13)
Get tight feeling in stomach	1	2	3	4	5	(14)
Seek experiences like this	1	2	3	4	5	(15)
Have loose bowels	1	2	3	4	5	(16)
Get nauseous	1	2	3	4	5	(17)

"You are starting out on a sailboat onto a rough sea"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(18)
Get an uneasy feeling	1	2	3	4	5	(19)
Emotions disrupt action	1	2	3	4	5	(20)
Feel exhilarated and thrilled	1	2	3	4	5	(21)
Want to avoid situation	1	2	3	4	5	(22)
Perspire	1	2	3	4	5	(23)
Need to urinate	1	2	3	4	5	(24)
Enjoy the challenge	1	2	3	4	5	(25)
Mouth gets dry	1	2	3	4	5	(26)
Become immobilized	1	2	3	4	5	(27)
Get tight feeling in stomach	1	2	3	4	5	(28)
Seek experiences like this	1	2	3	4	5	(29)
Have loose bowels	1	2	3	4	5	(30)
Get nauseous	1	2	3	4	5	(31)

"You are entering a competitive contest with people watching you"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(32)
Get an uneasy feeling	1	2	3	4	5	(33)
Emotions disrupt action	1	2	3	4	5	(34)
Feel exhilarated and thrilled	1	2	3	4	5	(35)
Want to avoid situation	1	2	3	4	5	(36)
Perspire	1	2	3	4	5	(37)
Need to urinate	1	2	3	4	5	(38)
Enjoy the challenge	1	2	3	4	5	(39)
Mouth gets dry	1	2	3	4	5	(40)
Become immobilized	1	2	3	4	5	(41)
Get tight feeling in stomach	1	2	3	4	5	(42)
Seek experiences like this	1	2	3	4	5	(43)
Have loose bowels	1	2	3	4	5	(44)
Get nauseous	1	2	3	4	5	(45)

"You are alone in the woods at night"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(46)
Get an uneasy feeling	1	2	3	4	5	(47)
Emotions disrupt action	1	2	3	4	5	(48)
Feel exhilarated and thrilled	1	2	3	4	5	(49)
Want to avoid situation	1	2	3	4	5	(50)
Perspire	1	2	3	4	5	(51)
Need to urinate	1	2	3	4	5	(52)
Enjoy the challenge	1	2	3	4	5	(53)
Mouth gets dry	1	2	3	4	5	(54)
Become immobilized	1	2	3	4	5	(55)
Get tight feeling in stomach	1	2	3	4	5	(56)
Seek experiences like this	1	2	3	4	5	(57)
Have loose bowels	1	2	3	4	5	(58)
Get nauseous	1	2	3	4	5	(59)

"You are going into an interview for a very important job"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(60)
Get an uneasy feeling	1	2	3	4	5	(61)
Emotions disrupt action	1	2	3	4	5	(62)
Feel exhilarated and thrilled	1	2	3	4	5	(63)
Want to avoid situation	1	2	3	4	5	(64)
Perspire	1	2	3	4	5	(65)
Need to urinate	1	2	3	4	5	(66)
Enjoy the challenge	1	2	3	4	5	(67)
Mouth gets dry	1	2	3	4	5	(68)
Become immobilized	1	2	3	4	5	(69)
Get tight feeling in stomach	1	2	3	4	5	(70)
Seek experiences like this	1	2	3	4	5	(71)
Have loose bowels	1	2	3	4	5	(72)
Get nauseous	1	2	3	4	5	(73)

"You are entering a final examination in an important course"

(CIRCLE YOUR DEGREE OF REACTION FOR EACH OF THE FOLLOWING)

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
Heart beats faster	1	2	3	4	5	(74)
Get an uneasy feeling	1	2	3	4	5	(75)
Emotions disrupt action	1	2	3	4	5	(76)
Feel exhilarated and thrilled	1	2	3	4	5	(77)
Want to avoid situation	1	2	3	4	5	(78)
Perspire	1	2	3	4	5	(79)
						CARD #7
Need to urinate	1	2	3	4	5	(4)
Enjoy the challenge	1	2	3	4	5	(5)
Mouth gets dry	1	2	3	4	5	(6)
Become immobilized	1	2	3	4	5	(7)
Get tight feeling in stomach	1	2	3	4	5	(8)
Seek experiences like this	1	2	3	4	5	(9)
Have loose bowels	1	2	3	4	5	(10)
Get nauseous	1	2	3	4	5	(11)

- 11a. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

12-1

	ALMOST NEVER	SELDOM	SOME- TIMES	OFTEN	ALMOST ALWAYS	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(13)
2. I feel pleasant	1	2	3	4	5	(14)
3. I tire quickly	1	2	3	4	5	(15)
4. I feel like crying	1	2	3	4	5	(16)
5. My sleep is fitful and disturbed	1	2	3	4	5	(17)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(18)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(19)
8. I feel rested	1	2	3	4	5	(20)
9. I am "calm, cool, and collected"	1	2	3	4	5	(21)
10. I have a number of health problems	1	2	3	4	5	(22)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(23)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(24)
13. I am happy	1	2	3	4	5	(25)
14. I can see the difference between red and blue	1	2	3	4	5	(26)
15. I am inclined to take things hard	1	2	3	4	5	(27)
16. I lack self-confidence	1	2	3	4	5	(28)
17. I feel secure	1	2	3	4	5	(29)
18. I blush very often	1	2	3	4	5	(30)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(31)
20. I feel blue	1	2	3	4	5	(32)
21. I am content	1	2	3	4	5	(33)
22. I sweat very easily even on cool days	1	2	3	4	5	(34)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(35)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(36)
25. I am a steady person	1	2	3	4	5	(37)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(38)
27. I try to get at least some sleep every night	1	2	3	4	5	(39)

- 11b. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

12-2

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
1. Sometimes I feel thirsty or hungry	1	2	3	4	5	(13)
2. I feel pleasant	1	2	3	4	5	(14)
3. I tire quickly	1	2	3	4	5	(15)
4. I feel like crying	1	2	3	4	5	(16)
5. My sleep is fitful and disturbed	1	2	3	4	5	(17)
6. I wish I could be as happy as others seem to be	1	2	3	4	5	(18)
7. I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5	(19)
8. I feel rested	1	2	3	4	5	(20)
9. I am "calm, cool, and collected"	1	2	3	4	5	(21)
10. I have a number of health problems	1	2	3	4	5	(22)
11. I feel that difficulties are piling up so that I can never overcome them	1	2	3	4	5	(23)
12. I worry too much over something that really doesn't matter	1	2	3	4	5	(24)
13. I am happy	1	2	3	4	5	(25)
14. I can see the difference between between red and blue	1	2	3	4	5	(26)
15. I am inclined to take things hard	1	2	3	4	5	(27)
16. I lack self-confidence	1	2	3	4	5	(28)
17. I feel secure	1	2	3	4	5	(29)
18. I blush very often	1	2	3	4	5	(30)
19. I try to avoid facing a crisis or difficulty	1	2	3	4	5	(31)
20. I feel blue	1	2	3	4	5	(32)
21. I am content	1	2	3	4	5	(33)
22. I sweat very easily even on cool days	1	2	3	4	5	(34)
23. Some unimportant thought runs through my mind and bothers me	1	2	3	4	5	(35)
24. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4	5	(36)
25. I am a steady person	1	2	3	4	5	(37)
26. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5	(38)
27. I try to get at least some sleep every night	1	2	3	4	5	(39)

- 11c. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

12-3

	ALMOST NEVER	SELDOM	SOME- TIMES	OFTEN	ALMOST ALWAYS	
1. I am able to breathe	1	2	3	4	5	(13)
2. I feel calm	1	2	3	4	5	(14)
3. I feel secure	1	2	3	4	5	(15)
4. I am tense	1	2	3	4	5	(16)
5. I find it difficult to concentrate	1	2	3	4	5	(17)
6. I am regretful	1	2	3	4	5	(18)
7. I feel at ease	1	2	3	4	5	(19)
8. I feel upset	1	2	3	4	5	(20)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(21)
10. I feel self-conscious	1	2	3	4	5	(22)
11. I feel rested	1	2	3	4	5	(23)
12. I feel anxious	1	2	3	4	5	(24)
13. I feel comfortable	1	2	3	4	5	(25)
14. I can see out of my right eye	1	2	3	4	5	(26)
15. I feel self-confident	1	2	3	4	5	(27)
16. I feel nervous	1	2	3	4	5	(28)
17. I am jittery	1	2	3	4	5	(29)
18. I feel embarrassed	1	2	3	4	5	(30)
19. I feel high strung	1	2	3	4	5	(31)
20. I am relaxed	1	2	3	4	5	(32)
21. I feel content	1	2	3	4	5	(33)
22. I am nervous from waiting	1	2	3	4	5	(34)
23. I am worried	1	2	3	4	5	(35)
24. I feel over-excited and "rattled"	1	2	3	4	5	(36)
25. I feel joyful	1	2	3	4	5	(37)
26. I feel pleasant	1	2	3	4	5	(38)
27. I have the sense of touch in my fingers	1	2	3	4	5	(39)

- 11d. On the left of this page are some statements that people have used to describe themselves. Read each statement and, next to it, circle the number under the phrase that best describes how you generally feel, most of the time. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer that seems to describe how you generally feel.

12-4

	NOT AT ALL	SLIGHTLY	SOMEWHAT	VERY MUCH	A GREAT DEAL	
1. I am able to breathe	1	2	3	4	5	(13)
2. I feel calm	1	2	3	4	5	(14)
3. I feel secure	1	2	3	4	5	(15)
4. I am tense	1	2	3	4	5	(16)
5. I find it difficult to concentrate	1	2	3	4	5	(17)
6. I am regretful	1	2	3	4	5	(18)
7. I feel at ease	1	2	3	4	5	(19)
8. I feel upset	1	2	3	4	5	(20)
9. I am presently worrying about possible misfortunes	1	2	3	4	5	(21)
10. I feel self-conscious	1	2	3	4	5	(22)
11. I feel rested	1	2	3	4	5	(23)
12. I feel anxious	1	2	3	4	5	(24)
13. I feel comfortable	1	2	3	4	5	(25)
14. I can see out of my right eye	1	2	3	4	5	(26)
15. I feel self-confident	1	2	3	4	5	(27)
16. I feel nervous	1	2	3	4	5	(28)
17. I am jittery	1	2	3	4	5	(29)
18. I feel embarrassed	1	2	3	4	5	(30)
19. I feel high strung	1	2	3	4	5	(31)
20. I am relaxed	1	2	3	4	5	(32)
21. I feel content	1	2	3	4	5	(33)
22. I am nervous from waiting	1	2	3	4	5	(34)
23. I am worried	1	2	3	4	5	(35)
24. I feel over-excited and "rattled"	1	2	3	4	5	(36)
25. I feel joyful	1	2	3	4	5	(37)
26. I feel pleasant	1	2	3	4	5	(38)
27. I have the sense of touch in my fingers	1	2	3	4	5	(39)

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Lastly, just a few questions for purely statistical purposes. Please answer all of these questions, as we really need your answers to be able to analyze these data. The answers to these questions will be shown to no one.

12a. Please check your sex.

Male ()40-1

Female () -2

12b. Please check the group into which your age falls.

Under 20 ()41-1

25-29 () -3

35-44 () -5

20-24 () -2

30-34 () -4

45 and over () -6

12c. What is your racial or ethnic identification?

Black/Afro-American ()42-1

Hispanic () -3

Caucasian/White () -2

Oriental () -4

Other _____ -5

(PLEASE WRITE IN)

12d. What is your employment status?

Not employed ()43-1

Employed part-time () -2

Employed full-time () -3

12e. Do you live with your parents or guardians, or do you maintain your own home?

Live with parents or guardians ()44-1

Maintain own home () -2

12f. What is (or was) your father's occupation?

45-

46-

12g. What is the total annual income before income taxes that you yourself earn?

Under \$5,000 ()47-1

\$ 7,500-\$ 9,999 () -3

\$15,000-\$24,999 () -5

\$5,000-\$7,499 () -2

\$10,000-\$14,999 () -4

\$25,000 or more () -6

12h. What is the total annual income before income taxes of the entire household that you now live in?

Under \$5,000 ()48-1

\$ 7,500-\$ 9,999 () -3

\$15,000-\$24,999 () -5

\$5,000-\$7,499 () -2

\$10,000-\$14,999 () -4

\$25,000 or more () -6

12i. May we have your permission to determine your high school grade point average from school records, just to help us analyze the data in this study? (This information will of course be kept strictly confidential.)

Yes ()49-1

No () -2

12j. Just in case we have difficulty in finding it, what was your grade point average in high school, as best as you can remember it?

(WRITE IT IN) _____

50-

51-

52-

12k. What is your grade point average in college -- or, if this is your first semester, what do you expect it will be?

Thank you for your cooperation.

You've been a great help to us.

Please write in your student

I.D. number below.

(WRITE IT IN) _____

53-

54-

55-

FOR OFFICE USE ONLY

HSGPA _____ (56-58)

CGPA _____ (59-61)

ND _____ (62-64)

CG _____ (65-67)

68-

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