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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

READING COMPREHENSION GAIN AND FACTORS OF PERSONALITY
IN THE MALE JUVENILE FELON IN OKLAHOMA

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
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degree of
DOCTOR OF PHILOSOPHY

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1975

READING COMPREHENSION GAIN AND FACTORS OF PERSONALITY
IN THE MALE JUVENILE FELON IN OKLAHOMA

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READING COMPREHENSION GAIN AND FACTORS OF PERSONALITY
IN THE MALE JUVENILE FELON IN OKLAHOMA

CHAPTER I

THE PROBLEM

Introduction

Reports of clinical studies such as those of Robinson,¹ Gates,² Bird,³ Monroe,⁴ and Witty and Kopel⁵ indicated that the incidence of emotional problems among disabled readers was high. They identified personality handicaps that interfere with reading skills as introversion, shyness, lack of confidence, need for approval, nervous tensions, giving up easily, and others.⁶

¹H. M. Robinson, Why Pupils Fail in Reading (Chicago: University of Chicago Press, 1946).

²A. I. Gates, "Failure in Reading and Social Adjustment," Journal of the National Education Association, XXV (1936), 205-06.

³G. E. Bird, "Personality Factors in Learning," Personal Journal, VI (1927), 56-59.

⁴M. Monroe, Children Who Cannot Read (Chicago: University of Chicago Press, 1932).

⁵P. Witty and D. Kopel, Reading and the Educative Process (Boston: Ginn and Company, 1939).

⁶Guy L. Bond and Miles A. Tinker, Reading Difficulties: Their Diagnosis and Correction (2nd ed.; New York: Appleton-Century-Crofts, 1967), p. 127.

Smith and Dechant hypothesized that because reading was an essential developmental task in our culture, failure in reading prevented adequate adjustment in many individuals.⁷ But how an individual's identified personality traits influenced essential reading components remained to be explored. This seemed especially important in the area of comprehension. As Dallmann et al pointed out, reading without understanding cannot be called reading, for reading necessarily involves comprehending.⁸

Gradually, researchers became interested in the relationship among reading skills and personality factors. Joseph and McDonald concluded that high comprehension readers scored higher on such factors as need to achieve and need for affiliation while low comprehension readers possessed greater aggression, order, and abasement needs.⁹ Athey and Holmes, in a study of children of two generations, reported four personality variables consistently related to reading. They were Social Independence, Self Concept, School Dislikes, and Family Orientation and Anxieties.¹⁰

⁷Henry P. Smith and Emerald V. Dechant, Psychology in Teaching Reading (Englewood Cliffs, New Jersey: Prentice-Hall, 1961), p. 298.

⁸Martha Dallman et al, The Teaching of Reading (4th ed.; New York: Holt, Rinehart and Winston, 1974), p. 165.

⁹Michael P. Joseph and Arthur S. McDonald, "Psychological Needs and Reading Achievement," in Thirteenth Yearbook of the National Reading Conference, ed. by Eric L. Thurston and Lawrence E. Hafner (Marquette University: National Reading Conference, 1964), 150-57.

¹⁰Irene J. Athey and J. A. Holmes, "Reading Success and Personality Characteristics in Junior High School Students," University of California Publications in Education, XVIII (1969), 22-51.

Bazemore and Gwaltney sought measures of personality capable of discriminating between disabled and nondisabled readers.¹¹ Two differences were significant: the Expedient-Conscientious continuum and the Tough-minded-Tender-minded continuum. Described in further terms, the nondisabled readers were more conscientious, staid, and rule-bound than the disabled readers. Moreover, the nondisabled readers were more tender-minded, dependent, and sensitive than disabled readers.

Bazemore and Gwaltney's study fulfilled the need for using personality as a reading predictor. As predictive sophistication has grown, students can be placed with instructors that can facilitate their personal growth and programs that can answer need dispositions and personality set.

Statement of the Problem

The problem was to determine whether statistically significant differences existed between high and low reading comprehension gain groups and each of sixteen personality factors. Specifically, did statistically significant differences in mean personality scores exist between high and low reading comprehension gain groups when considering each of sixteen factors of personality?

¹¹Judith S. Bazemore and Wayne K. Gwaltney, "Personality and Reading Achievement: The Use of Certain Personality Factors as Discriminatory," The California Journal of Educational Research, XXIV (May, 1973), 114-19.

Purpose of the Study

Traditionally, Oklahoma and some other states have placed inmates into institutions solely on the basis of security classification. As a more rehabilitative approach to corrections has emerged nationally, however, it has become apparent that inmates having the same security classification may vary immensely in intelligence, behavior pattern, appearance, race, and family background. It has become necessary to effect programs with singular goals across institutional boundaries to serve those inmates having certain ability and need dispositions. Needs assessments conducted often have effectively assessed cognitive skills, but omitted or superficially investigated affective areas. The purpose of this study, then, was to further develop the relationship between personality and basic skill achievement as it relates to the correctional setting.

Hypothesis

Investigation of the problem led to the formation of a general hypothesis:

There were no statistically significant differences between mean scores of individuals scoring high on measures of reading comprehension gain and those scoring low on each of sixteen personality factors.

Operational Definitions

1. High reading comprehension gain was defined as a gain of one year or more in a span of six months instructional time. Reading gain was determined by examining parallel forms one and two of the

Gates-MacGinitie Reading Survey, comprehension subtest, Level E.¹²

2. Low reading comprehension gain was defined as a gain of less than one year in six months instructional time as measured on parallel forms one and two of the Gates-MacGinitie Reading Survey, comprehension subtest, Level E.¹³

3. Personality factors considered were the primaries of the Sixteen Personality Factor Questionnaire. They are Reserved versus Outgoing, Less Intelligent versus More Intelligent, Affected by Feelings versus Emotionally Stable, Humble versus Assertive, Sober versus Happy-go-lucky, Expedient versus Conscientious, Shy versus Venturesome, Tough-minded versus Tender-minded, Trusting versus Suspicious, Practical versus Imaginative, Forthright versus Shrewd, Placid versus Apprehensive, Conservative versus Experimenting, Group-dependent versus Self-sufficient, Undisciplined Self-conflict versus Controlled, Relaxed versus Tense.¹⁴

Assumptions

1. Inmate students in this study were unilingual, English being their language.

2. Test administration procedures were uniform which resulted in reliability of testing.

¹²Arthur I. Gates and Walter H. MacGinitie, Gates-MacGinitie Reading Tests (Teachers College, Columbia University, New York: Teachers College Press, 1965).

¹³Ibid.

¹⁴Manual for the 16PF (Champaign, Illinois: Institute for Personality and Ability Testing, 1972), pp. 17-22.

Procedures

Students for the study were selected from the Oklahoma Department of Corrections Title One program. Selections from this population provided continuity of method and materials as well as an adequate sized population over a limited age span.

The Gates-MacGinitie Reading Survey and the Sixteen Personality Factor Questionnaire were administered to all students under twenty-one years of age upon program entry during August, 1974. All testing was effected at the Oklahoma State Reformatory.

Instruction followed within fifteen days of the initial testing period. Some students were transferred to the Oklahoma State Penitentiary for disciplinary reasons. At both locations, the major instructional thrust was an eclectic approach with heavy emphasis on the diagnostic-prescriptive approach to meet each student's needs.

Posttesting was administered after six months time elapse or teacher-student contact time of fifty hours, whichever came first. Those students not receiving fifty hours of instruction were dropped from the population considered.

There were 203 students in the initial population. Dropped from the population were those students with an auditory threshold of thirty decibels in frequencies 250-4000 as measured on any standard audiometer. Also eliminated were students with visual acuity problems scoring unsatisfactory on any one category of the Keystone Visual Survey Tests.¹⁵ This resulted in a pool of 159 students. Of these

¹⁵"School Survey Cumulative Record Form No. 5A," Keystone Visual Survey Tests (Meadville, Pa.: Keystone View Co., 1961).

students, 70 had comprehension gains of less than one year, 89 more than one year. Forty students were randomly selected from each classification group for use as subjects.

To establish if significant differences occur between high and low comprehension gain groups on any of sixteen personality factors, sixteen t-tests were computed. This operation established whether the mean personality scores of the high and low group differed significantly.

CHAPTER II

REVIEW OF THE SELECTED LITERATURE

Personality and Personality Assessment

A review of the literature on factors which influence adjustment, the ways in which adjustment has been conceptualized, and the patterns of adjustment which are considered pathological were reviewed and found pertinent to understanding and interpreting the problem. As usual, when causal factors in behavior are raised, the question of relative importance of heredity and environmental variables was considered. A review of literature found these variables so complex and interdependent that the two contributing factors could not be meaningfully separated. Current representative literature, however, indicated the dominance of environmental influence.

Leighton and Hughes mustered evidence in support of a number of basic propositions about the relationship between culture and personality. Of particular interest to personality traits investigated in this study was a discussion of how cultural sanctions affect personality. The problems of conformity and nonconformity or how the subject handles right or wrong in a social situation long has been considered important. But Leighton and Hughes separated personality traits and behavior as being outer or shame-oriented and other behavior as being inner or guilt-directed. They further noted that

individuals become either group-oriented or self-sufficient partially as a result of sanction.

One can theorize that where the group as a whole is the court to which account must be made, there would be a tendency for psychiatric disorder to take the form of antisocial behavior, aggression of the sociopathic type. Where individual super-ego is stressed, there might be an inclination to self-directed punishment and depression. In short, and in overly simple terms, one type of culture can be thought to encourage symptoms which are disturbing to the group, while the other encourages symptoms which are disturbing to the individual who has them.¹

While Leighton and Hughes in general explored cultural imposition on personality, Dollard and Miller limited their study to critical training situations in childhood. The feeding situation, cleanliness training, and early sex training were found to affect apathy, apprehensiveness, sociability, fear, isolation, confidence, anger, defiance, conformity, guilt, and anxiety.² All three early childhood activities were found to be related to later development. As a result of feeding, humans became either cool and reserved or warm and easy-going. Feeding also influenced whether persons developed self-assured or apprehensive personality factors. Cleanliness training influenced whether an individual developed personality profiles being expedient or conscientious and trusting or suspicious. Early sex training correlated with a subject's tendency to be not assertive or dominant, shy or venturesome, and conservative or experimenting.

¹Alexander H. Leighton and Jane H. Hughes, "Cultures as Causative of Mental Disorder," in Causes of Mental Disorders: A Review of Epidemiological Knowledge (New York: Milbank Memorial Fund, 1961), p. 61.

²John Dollard and Neal E. Miller, Personality and Psychotherapy (New York: McGraw-Hill Book Company, Inc., 1950), pp. 132-54.

Nonproductive character orientations were of great interest to Fromm. Of particular interest to this study were his review of the receptive orientations, the exploitative orientation, the hoarding orientation, and the marketing orientation.³

Overall, the outlook of people of the receptive orientation was optimistic and friendly. He found these people had a confidence in life and its gifts, but they became anxious and distraught when their outside supply of affection, love, knowledge or pleasure was discontinued. They often had a genuine warmth and a wish to help others, but doing things for others also assumed the function of securing their favor.

Fromm described the exploitative character as a mixture of hostility and manipulation. He found, instead of confidence and optimism, suspicion and cynicism, envy and jealousy. Satisfied only with things they could take away from others, they overrated what others had and underrated what was theirs.

Hoarders, Fromm indicated, believed they possessed only a fixed quantity of strength, energy, and mental capacity. The self-replenishing function of all living substances was a miracle they heard, but did not believe. Intimacy was a threat; either remoteness or possession of a person meant security. The hoarder, too, was more suspicious than trusting, more shrewd than forthright.

The marketing orientation was found, Fromm indicated, to separate man's view of himself from what factors in his personality

³Erich Fromm, Man for Himself (New York: Rinehart and Company, 1947), pp. 62-73.

he believed others would like. His feeling of identity and self-esteem became shaky, and he became what others desired him to be. He tended to be group-oriented rather than self-sufficient, expedient rather than conscientious, tense and driven rather than relaxed.

In 1955, Tindal noted that measurement of personality has become possible only through study of definitions of adjustment and location of areas of agreement among professionals. While mechanisms such as withdrawal, projection, introjection, and sublimation were well recognized, there was disagreement as to the mechanism's classification along the adjustment continuum. Despite the inherent difficulties of measurement, techniques purported to measure adjustment were developed and implemented; these included questionnaires and inventories, ratings by adult judges, ratings by peers using sociometric techniques, adjustment indices secured by means of projective techniques, and systematized direct observations. Tindal cautioned that correlations among these various measures on a single population were related, but that a global concept of adjustment, based on current tests was limited in usefulness.⁴

To combat this lack of usefulness, Cattell applied a unique factorial method to the construction of personality inventories. In an effort to arrive at a comprehensive description of personality, Cattell began by assembling all personality trait names occurring both in the dictionary and in psychiatric or psychological literature.

⁴Ralph H. Tindall, "Relationships Among Indices of Adjustment Status," Educational and Psychological Measurement, XV (1955), pp. 152-62.

This list was reduced to 171 trait names by removing synonyms. The 171-trait list then was employed in obtaining associates' ratings of a heterogeneous group of 100 adults. Intercorrelations and factor analyses from these ratings were followed by further ratings of 208 subjects on a shortened list. Factorial analyses of the latter ratings led to the identification of Cattell's primary source traits of personality.

Anastasi cautioned that the correlation of ratings may reflect in part the influence of social stereotypes rather than subjects' trait organization. However, she admitted that factor analysis provided a technique for grouping personality inventory items into homogeneous and independent clusters and that such a grouping would be valuable in facilitating investigation of validity against empirical criteria.⁵ Anastasi also indicated construction of the instrument permitted a more effective combination of scores for prediction of specific criteria.

Personality, Reading, and Reading Comprehension

Understandably, much research completed in the area of personality and reading has concerned the problem reader in an effort to understand and remediate this student's academic and personal needs. Students with long histories of reading failure have been found to think less well of themselves than those having reading success. In a

⁵Anne Anastasi, Psychological Testing (3rd ed.; London: Collier-MacMillan Limited, 1968), p. 451.

review of literature, Schwyhart found evidence linking self-concept and reading progress.⁶

Karlin noted that students with low self-esteem did not believe they could succeed at difficult tasks. Poor achievement in reading, he deduced, may lead to low-self-esteem, while low self-esteem may lead to poor achievement. Each seemed to feed on the other.

Karlin elaborated:

Some writers have gathered evidence to support the view that emotional upsets are perhaps caused by reading failure. Failure of any kind affects the way each of us regards himself, and it would be unreasonable to assume that reading failure would have no effect on a student. Support for his view may be found in studies in which disturbed children responded to reading instruction. Melvin Roman found that disturbed children who received remedial reading help showed greater gains in emotional adjustment than did children who were treated for personality adjustments.⁷

Smith and Dechant indicated that there were many behavioral symptoms including laziness, antagonism, tenseness, self-consciousness, nervousness, and shyness which accompanied poor reading.⁸

Spache identified five major personality patterns among retarded readers: these were an aggressive or hostile group in conflict with authority figures, an adjustive group which sought only to be inoffensive, a defensive group that was sensitive and resentful, a solution-seeking or peace-making type, and the autistic group characterized

⁶F. K. Schwyhart, "Exploration of the Self-Concept of Retarded Readers in Relation to Reading Achievement" (Unpublished Doctoral Dissertation, University of Arizona, 1967).

⁷Robert Karlin, Teaching Reading in High School (2nd ed.; Indianapolis: The Bobbs-Merrill Company, 1972), p. 40.

⁸Smith and Dechant, Psychology in Teaching Reading, p. 301.

by blocking or withdrawal.⁹

Although not all emotionally disturbed children were poor readers, Challman also warned that not all poor readers had personality problems.¹⁰ He indicated that one-fourth of all poor readers adjusted successfully to their reading failure and encountered no negative or otherwise skewed personality problems.

Several researchers, including Gates,¹¹ Bond and Tinker,¹² and Holmes¹³ stressed a strong relationship between personality adjustment and reading skill. In fact, Holmes, elaborating on an earlier Gates discussion on the relationship of reading to emotion, summarized several ideas pertinent to the thrust of this study:

1. Personality difficulties are frequently but not universally associated with reading difficulties.
2. In cases where they occur together, personality difficulties may be causes, concomitants, or results of reading difficulties.
3. Emotional difficulties usually appear as part of a constellation of difficulties causing reading retardation.
4. There is no single personality pattern characteristic of reading failure and there is no proved one-to-one relationship between type of adjustment difficulties and type of reading disabilities. . . .

⁹George D. Spache, "Personality Patterns of Retarded Readers," Journal of Educational Research, L (February, 1957), p. 468.

¹⁰Robert Challman, "Personality Maladjustments and Remedial Reading," Journal of Exceptional Children, VI (October, 1939), pp. 7-11.

¹¹Arthur I. Gates, "The Role of Personality Maladjustment in Reading Disability," Journal of Genetic Psychology, LIX (September, 1941), pp. 77-83.

¹²Guy L. Bond and Miles A. Tinker, Reading Difficulties: Their Diagnosis and Correction (New York: Appleton-Century-Crofts, Inc., 1957), pp. 110-11.

¹³J. A. Holmes, "Emotional Factors and Reading Disabilities," The Reading Teacher, IX (October, 1955), p. 14.

5. Symptoms associated with reading difficulties are commonly aggressive reactions, withdrawing tendencies or general insecurity and apprehension.¹⁴

The studies already cited supported the relationship among self-concept, adjustment, and reading. They helped the remedial teacher, the researcher, and the student by these important links. As the factorial, clustering approach to personality developed, the relationship of reading, and especially comprehension, to personality was clarified.

Farley and Truog examined the relationship of reading comprehension among college students with extraversion-introversion, neuroticism, and achievement motivation.¹⁵ They used both resultant achievement motivation and academic achievement motivation. The Eysenck Personality Inventory was used to rate extraversion-introversion and neuroticism. Resultant achievement motivation was obtained by subtracting normalized scores on the Test Anxiety Scale from scores on the Farley Drive Scale. Academic achievement motivation was measured by Buxton's, Scale 2. Reading comprehension was the score obtained on the Davis Reading Test, given last. Subjects were divided on the basis of scores on each of the measures used and compared with reading comprehension. Analysis of variance showed no significant contribution of the variables described above with regard to reading comprehension.

¹⁴Ibid.

¹⁵Frank H. Farley and Anthony L. Truog, "Individual Differences in Reading Comprehension," Journal of Reading Behavior, III, No. 1 (Winter, 1970-71), pp. 29-35.

Seven groups of students, selected from 1,475 university freshmen by Joseph and McDonald, were compared on all subtests of the Edwards Personal Preference Schedule using the z-test and the t-test of significance. Of the first four groups, two groups were high and two were low in comprehension, with two of the groups being randomly selected subsamples of the other two. Tentatively, the investigators concluded that good readers scored higher on such factors as the need to achieve and the need for affiliation; those low in comprehension and rate appeared to possess greater aggression, order, and abasement scores or needs.¹⁶

Athey and Holmes reported a then-and-now study of children of two generations to identify personality variables which persistently related to reading.¹⁷ The criterion variable was the "Paragraph Meaning" subtest of the Stanford Achievement Test. The personality measure was the University of California Inventory. Of the original 328 items, those that discriminated between the top and bottom 27 percent of the reading distribution for the 1,935 sample were identified. A total of 70 items was used, along with above- or below-mean reading ratings, in a tetrachoric correlation analysis. A factor analysis of a reduced 60 x 60 matrix was cross-validated with subjects from grades seven and eight, yielding a four-factor inventory. The first factor, called Social Independence, was largely descriptive of poor readers,

¹⁶Joseph and McDonald, Thirteenth Yearbook of the National Reading Conference, pp. 150-57.

¹⁷Athey and Holmes, University of California Publications in Education, pp. 22-51.

but the reading score loaded only a correlation of .137 at the ninth grade. The second factor, called Self-Concept, described the attitudes and feelings of poor readers. On this factor the reading test loaded .480, the highest of all. Factor three, School Dislikes, was bipolar, including dislikes of poor and good readers alike. Reading loaded insignificantly on this factor. The fourth factor, called Family Orientation and Anxieties, included both good and poor readers' responses and a loading of .445 for reading. The four factors accounted for 45 percent of the variance on the reading item. A step-wise multiple correlation revealed no significant differences in the relationship of the then-and-now groups in reading achievement. The average correlation for the entire group of subjects was .36 which accounts for about 13 percent of the variance in reading achievement. Socioeconomic factors did not influence the relationships found. The four factors were shown to be stable over time.

Bazemore and Gwaltney sought measure of personality capable of discriminating between facile and nonfacile readers.¹⁸ Pupils were given the California Short-Form Test of Mental Maturity, the California Reading Achievement Test, and the Children's Personality Questionnaire. Wilson's criteria for degree of tolerable differences were used to separate the two groups into 30 disabled and 38 non-disabled readers. When differences in means for the 14 subtests on the Children's Personality Questionnaire were subjected to the t-test, two differences were significant: the Expedient-Conscientious continuum and the Tough-minded-Tender-minded continuum.

¹⁸Bazemore and Gwaltney, The California Journal of Educational Research, pp. 104-119.

Personality, Reading, and Corrections

Prison populations differed normatively from other populations in a review of literature on personality and reading. One study by Megargee and Rosenquist illustrated this difference when comparing fifty adjudicated male delinquents and fifty nondelinquent males from three major lower class ethnic groups: Mexican Nationals, Mexican-Americans, and Anglo-Americans.¹⁹ The delinquents were found to be more antagonistic toward authorities and had a more negative world view. Although there were broad areas of agreement between delinquent and nondelinquent groups, differences were found in the area of achievement. In addition, families of delinquents were perceived as less cohesive, more hostile, more rejecting, and overly strict.

At the Lorton Youth Center of the District of Columbia Department of Corrections, experiments were run to discern causal factors in delinquency, dropouts, and incarcerates. Data collected by Burke and Simons in these experiments identified elements comprising the anti-social syndromes mentioned as being social alienation, poor school adjustment, essentially normal intelligence, poor reading skills, and language deficiency.²⁰

¹⁹Edwin I. Megargee and Carl M. Rosenquist, "A Comparison of Delinquent and Non-delinquent Anglo-Americans, Mexican-Americans, and Mexican Nationals," speech presented at the American Psychological Association Convention, San Francisco, 1 September, 1968.

²⁰Nelson S. Burke and Alfred F. Simons, The Probable Syndrome in Terms of Educational Experiences which Precipitates Dropouts, Delinquency, and Eventual Incarceration (Bethesda, Md.: ERIC Document Reproduction Service, ED 001729, 1964).

To determine if links existed between academic progress and the correctional process, a study by Whipple at the Oklahoma State Reformatory found that bibliotherapy through the study of biology positively affected the Minnesota Multiphasic Personality Inventory social scales.²¹ Those inmates scoring higher in socialization on the instrument were favored to parole earlier.

The Kvaraceus Delinquency Proneness Scale was developed as an instrument designed to aid in prediction of future delinquents. The purpose of research by Benning et al was to evaluate the predictive validity of the scale over a five year period. Indices of delinquency adjustment and academic achievement served as the validation criteria. The main effect, Benning divulged, was for reading; delinquency prone youngsters scored lower than nondelinquency prone youth.²²

Results of research relating to the link between reading and personality were often tentative or nonconclusive when applied to delinquent or incarcerated populations. While findings in a study by Farmer and Garfield were limited, the authors ably investigated the intensity and appropriateness of emotional expression and what emotions meant to lower-class subjects, both retarded and not retarded

²¹Charles M. Whipple, Remedial Attitudinal Therapy in the Reformatory Classroom (Bethesda, Md.: ERIC Document Reproduction Service, ED 025794, 1968).

²²James J. Benning et al, "Prediction of Delinquency, Adjustment, and Academic Achievement Over a Five Year Period with the Kvaraceus Delinquency Proneness Scale," paper presented at annual meeting of the National Council of Measurement in Education, Minneapolis, 5 March, 1970.

in reading.²³ Fear, as measured on the Michigan Picture Test, was significant among those students disabled in reading. The study, which compared results from several measures of emotional meaning and expression with the reading ability of students and found little significance, utilized a population of 56 boys from a residential treatment center for emotionally disturbed boys.

Glavin and Annesley explored the academic achievement and cognitive abilities of 130 boys referred by teachers as having extreme conduct or withdrawal problems.²⁴ Teachers in three schools were asked to complete the Behavior Problem Checklist for any student requiring special referral. All of these students had intelligence quotients of at least 70. A majority had hyperactive-aggressive behavior. Intelligence was determined by the Lorge-Thorndike Intelligence Tests or the Slosson Intelligence Test. The California Achievement Test was given to all students to yield reading and arithmetic scores. Bond and Tinker's formula was used to estimate expected levels of achievement. Discrepancy between expected and achieved levels were classified as mild, moderate, and extreme. Three behavioral types were found: conduct problems, withdrawn, and inadequate-immature. The data revealed that 81.5 percent of the pupils were underachieving in reading and 72.3 percent in arithmetic. Finally, a

²³Cornelia Reynolds Farmer and Sol L. Garfield, "The Relationship between Ability to Read and the Meaning and Expression of Emotion," Journal of Learning Disabilities, IV (December, 1971), pp. 558-62.

²⁴John P. Glavin and Frederick R. Annesley, "Reading and Arithmetic Correlates of Conduct-Problem and Withdrawn Children," The Journal of Special Education, V (Fall, 1971), pp. 213-19.

comparison was made on the California Achievement Test between male youth with conduct problems and those who were withdrawn. Neither reading or arithmetic scores distinguished the two groups.

The preceding review of selected research gave impetus to the following investigation concerning the relationship of reading comprehension and personality of male juvenile felons in Oklahoma.

CHAPTER III

METHODOLOGY

Subject Selection

Of the four state penal institutions having at least ten male juvenile felons, the following two locations were chosen for instruction within the Oklahoma Department of Corrections system: the Oklahoma State Reformatory at Granite and the Oklahoma State Penitentiary at McAlester. The rationale for choosing male juvenile felons at these two institutions was as follows:

1. Although some basic education instruction was provided at all locations, the only reading specialists in the system were at Granite and McAlester.

2. The three reading specialists in the two locations utilized standardized materials and a uniform eclectic approach with heavy emphasis on diagnostic-prescriptive tenets supplied under the Department's Title One program.

3. The Granite and McAlester locations had more male juvenile felons than the other two institutions.

4. Juvenile felons were in higher attendance in basic education programs than were adult inmates. This provided the largest available pool of students within a limited age span (17.0--20.11) in the system.

Procedure of Subject Selection
and Data Collection

Initial testing was administered to 203 students in the Oklahoma Department of Corrections Title One program. Two instruments were administered to all 203 students during August, 1974. These were the Gates-MacGinitie Reading Tests, E Level, Form 1 comprehension subtest and the Sixteen Personality Factor Questionnaire, Form A. Although all testing considered was effected at the Oklahoma State Reformatory, some 17-20 year-old subjects received actual instruction at the Oklahoma State Penitentiary, having been transported there for disciplinary reasons.

After six months' time lapse, all students remaining in the program or receiving fifty teacher-student contact hours were administered the Gates-MacGinitie Reading Tests, E Level, Form 2 comprehension subtest. From this group, another eleven were eliminated by auditory or visual screening. Six were scored as unsatisfactory on one or more categories of the Keystone Visual Survey Tests, while five had an auditory threshold of thirty decibels as measured on an audiometer. A reading specialist trained in the operation of the Keystone Telebinocular Model 6106 and the Tracor Model RA-214 manual audiometer made the auditory and visual screenings. After exclusions were made for natural program attrition through transfer or parole, visual and auditory screening, and age, 159 subjects remained. Of the remaining 159 students, 89 or 56 percent had reading comprehension gains of one year or more. Seventy or 44 percent had reading comprehension gains of less than one year. Forty students were randomly selected from each gain group for utilization in this study.

Scores on the Sixteen Personality Factor Questionnaire were computer scored by the Institute for Personality and Testing to assure uniformity and accuracy. Two reading specialists verified scoring and grade level conversion for each pupil's reading comprehension scores.

Description of Instruments

The Sixteen Personality Factor Questionnaire is an objective test devised by basic research in psychology to give the most complete coverage of sixteen functionally independent and psychologically meaningful dimensions isolated and replicated in more than thirty years of factor-analytic research on normal and clinical groups. Reliability coefficients on the sixteen source traits ranged from .67 on Factor N, Forthright/Shrewd, to .86 on Factor H, Shy, Timid/Venturesome, were obtained on 150 American subjects from ages 18-22 years. These reliability coefficients were obtained on 150 American subjects from ages 18-22 years on a test-retest interval of 2-to-7 days.¹ Construct or concept validities of the instrument were assessed by correlating the scale score with the pure factor it was designed to measure. Concept validities on Form A on the various source traits ranged from .35 on factor B, Dull/Bright, to .92 on factor H, Shy-Timid/Venturesome, on the 958 individuals measured.² Indirect concept validities of the full Sixteen Personality Factor Questionnaire vary from .83 on factor Q₁,

¹Manual for the 16 PF, p. 10.

²Ibid., p. 12.

Conservative/Experimenting, to .96 on factors A, Cool, Reserved/Warm, Easy-going, F, Sober-Serious/Happy-go-lucky, and I, Tough-minded/Tender-minded.³

The Gates-MacGinitie Reading Tests, Survey E, comprehension subtests measure the ability to read complete prose passages with understanding. The tests contain 21 passages in which a total of 52 blank spaces have been introduced. The student must decide which one of the five completions best conforms to the meaning of the entire passage. The reliability coefficients for Survey E, comprehension subtest were .81 alternate form reliability, .94 split-half reliability (grade 7), .81 alternate form reliability, .93 split-half reliability (grade 8), .80 alternate form reliability, .89 split-half reliability (grade 9).⁴ Validity was achieved by establishing norms by administration of tests to a nationwide sample of approximately 40,000 pupils in 38 communities.⁵

Treatment of Data

Two-sample t-tests were used to determine if statistically significant differences occurred between high and low comprehension gain groups on any of the sixteen personality factors measured. The alpha level was set at .05 level of significance for testing the hypothesis.

³Ibid.

⁴Arthur I. Gates and Walter H. MacGinitie, Technical Manual, Gates-MacGinitie Reading Tests (Teachers College, Columbia University, New York: Teachers College Press, 1965), p. 8.

⁵Ibid., p. 1.

CHAPTER IV

ANALYSIS OF DATA

Necessary to accurate and clear analysis of the data was knowledge of each of the sixteen personality factors considered. Each trait was represented as an independent continuum (Table 1).

TABLE 1
PERSONALITY TRAITS MEASURED BY THE SIXTEEN
PERSONALITY FACTOR QUESTIONNAIRE

Trait	Low Meaning	High Meaning
A	Cool, Reserved	Warm, Easygoing
B	Dull	Bright
C	Easily Upset	Calm, Stable
E	Not Assertive	Dominant
F	Sober, Serious	Happy-go-Lucky
G	Expedient	Conscientious
H	Shy, Timid	Venturesome
I	Tough-Minded	Tender-Minded
L	Trusting	Suspicious
M	Practical	Imaginative
N	Forthright	Shrewd
O	Self-Assured	Apprehensive
Q ₁	Conservative	Experimenting
Q ₂	Group-Oriented	Self-sufficient
Q ₃	Undisciplined	Self-disciplined
Q ₄	Relaxed	Tense, Driven

Mean raw scores and standard deviations were calculated for the high comprehension and low comprehension gain groups on each of the sixteen personality factors utilized (Table 2). Differences in

means on raw personality scores for the high and low gain group and obtained t-values were determined (Table 2).

TABLE 2

MEAN PERSONALITY RAW SCORES, STANDARD DEVIATIONS, MEAN DIFFERENCES AND OBTAINED T-VALUES AND HIGH GAIN READING COMPREHENSION GROUPS ON PERSONALITY FACTORS AS MEASURED ON THE SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE

Factor	Reading Comprehension Groups				\bar{x} difference	t-value
	Low Gain		High Gain			
	\bar{x}	SD	\bar{x}	SD		
A	9.10	3.28	8.37	2.60	.73	1.09
B	5.85	1.86	6.42	2.03	.57	1.31
C	13.45	3.91	14.17	3.60	.72	.86
E	10.97	3.63	13.50	3.95	2.53	2.97
F	13.47	4.03	14.35	3.66	.37	1.01
G	11.22	3.71	10.42	3.60	.11	.97
H	11.95	5.59	11.95	5.88	0.00	0.00
I	9.87	2.73	10.17	3.76	.30	.40
L	9.10	3.16	9.52	3.76	.42	.54
M	10.70	3.09	11.17	3.56	.47	.63
N	10.85	2.48	8.97	2.72	1.88	3.21*
O	13.27	3.62	11.62	4.20	1.65	1.88
Q ₁	9.50	3.32	10.90	3.31	1.40	1.88
Q ₂	11.67	3.54	11.77	2.98	.56	.14
Q ₃	12.55	2.93	12.57	3.15	.02	.04
Q ₄	13.50	3.74	14.12	5.01	.62	.63

*Statistically significant at the .05 alpha level

The general hypothesis stated no statistically significant differences existed between high and low reading comprehension gain groups on each of sixteen personality factors. To measure these differences, sixteen t-tests were computed.

The results did not confirm the general hypothesis on all sixteen measures. With 1.994 necessary for statistical significance at the .05 alpha level, personality traits E, Not Assertive/Dominant, and N, Forthright/Shrewd, proved statistically significant (Table 2).

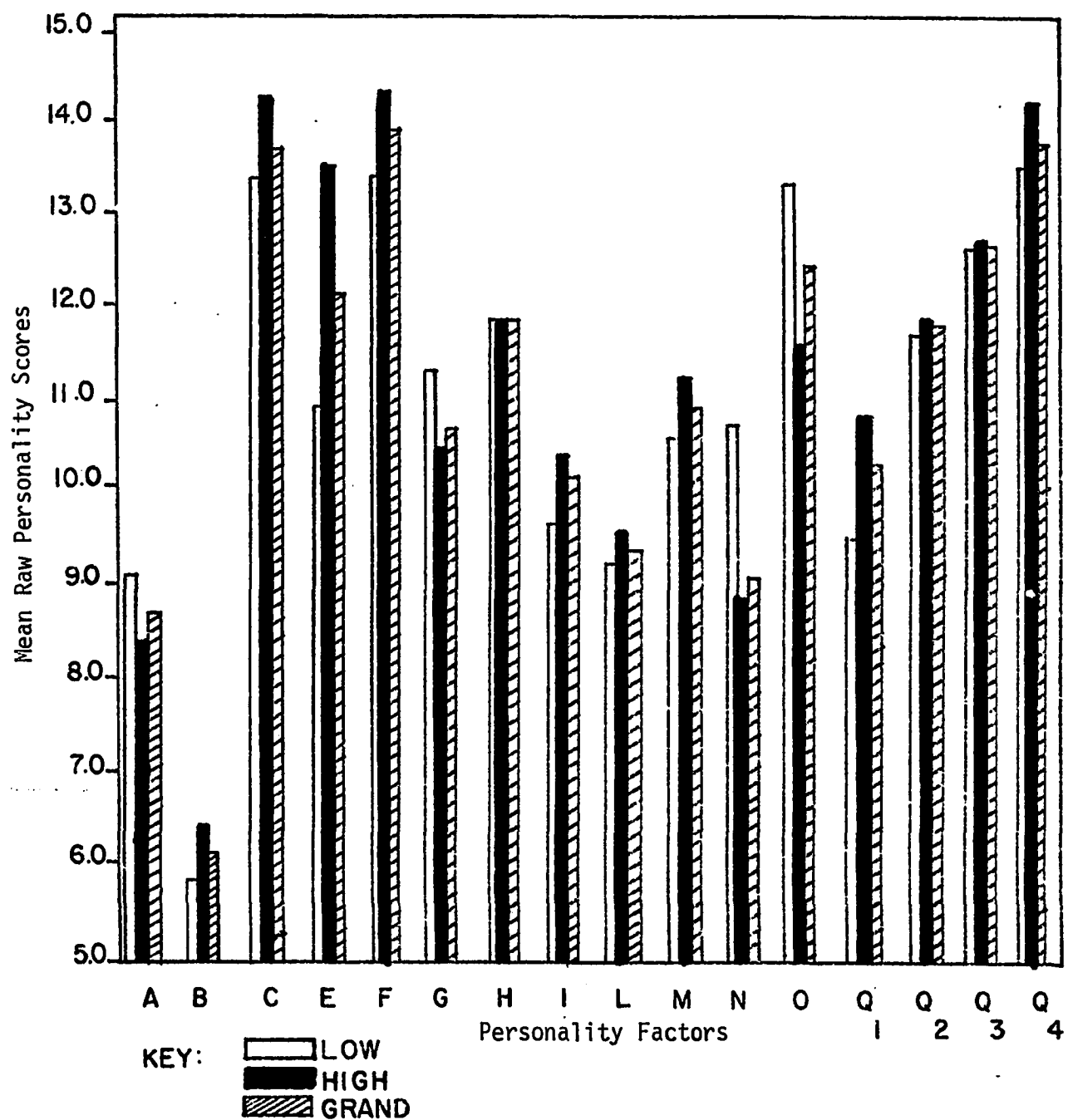


Figure 1. High and Low Reading Comprehension Gain Group Means and Grand Means on Personality Traits as Measured on the Sixteen Personality Factor Questionnaire.

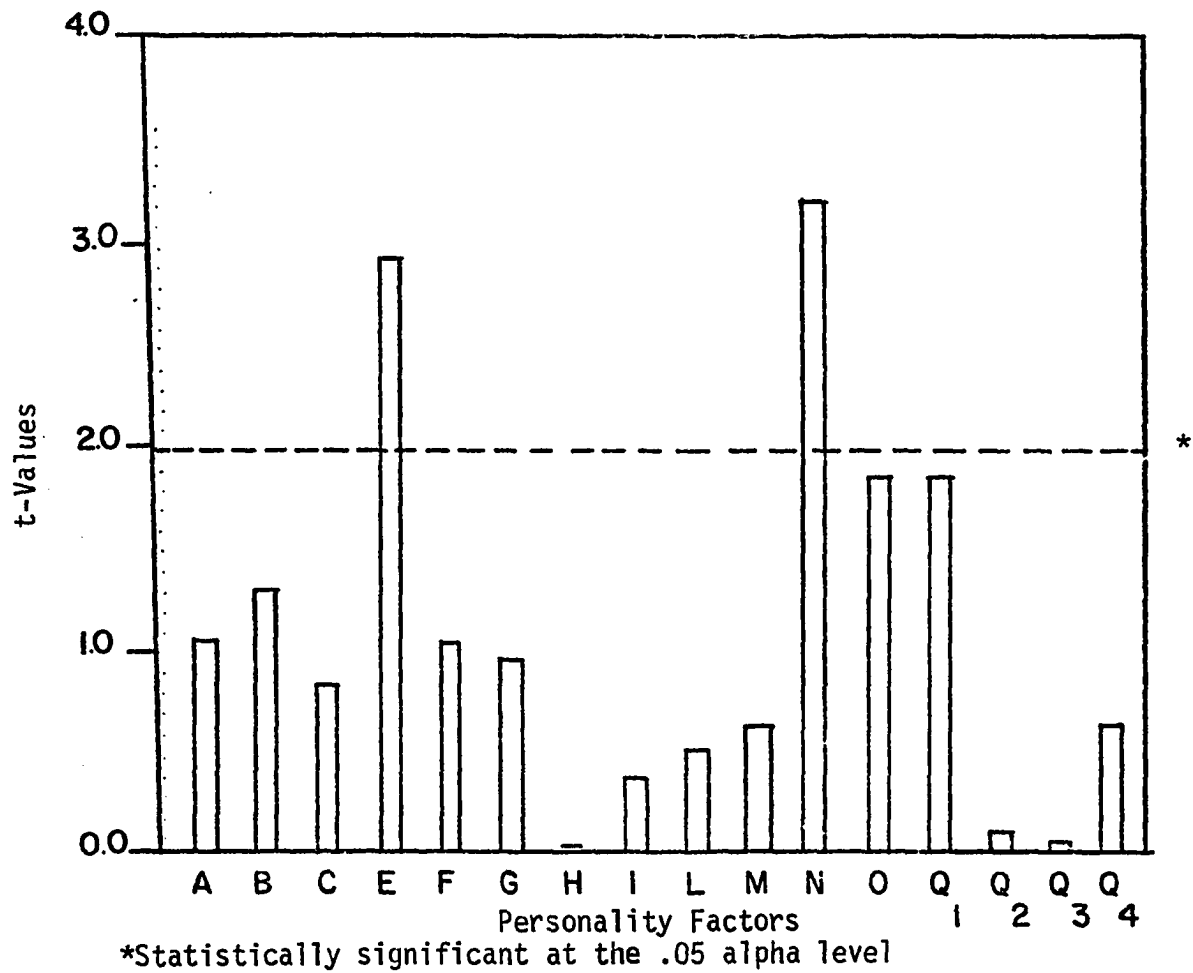


Figure 2. Differences in Means on Sixteen Personality Factors Between High and Low Reading Comprehension Gain Groups.

Thus, the null hypothesis was accepted on all personality variables considered except on factors E, Not Assertive/Dominant, and N, Forthright/Shrewd, where the null hypothesis was rejected. The two traits found to be statistically different between the low and high reading comprehension gain groups led to an expanded discussion of the finding in the next chapter.

The affective instrument employed in this study indicated male juvenile felons in Oklahoma were normatively cool and reserved, dull, calm and stable, dominant, happy-go-lucky, conscientious, venturesome, tender-minded, trusting, imaginative, forthright, apprehensive, experimenting, self-sufficient, self-disciplined, and tense and driven.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was designed to investigate the differences between high and low reading comprehension groups on sixteen measures of personality among male juvenile felons in the State of Oklahoma. The study was conducted in the Oklahoma Department of Corrections Title One program, where concentration of male juvenile felons was high.

Two institutions provided 203 inmate students from which eighty students were ultimately randomly selected. Initial testing incorporated Level E, Form 1 of the Gates-MacGinitie Reading Tests, from which the comprehension subtest scores were noted. In addition to the reading survey mentioned, the Sixteen Personality Factor Questionnaire was administered.

After six months' time lapse or fifty teacher-student contact hours were accumulated, students were administered the Gates-MacGinitie Reading Tests, Level E, Form 2. From the group remaining in the programs, eleven inmates were eliminated by visual and auditory screening. Natural program attrition, visual and auditory screening, and age factors left 159 subjects remaining. After separating students who gained more than one year from those who gained less, forty students were randomly selected from each group for utilization in this study.

The general hypothesis stated no significant differences existed in each of sixteen personality factors between individuals scoring high on measure of reading comprehension gain and those scoring low. The null hypothesis was established to determine whether differences existed on any of the sixteen personality continuums under consideration. Statistically significant differences were tested through the use of sixteen independent t-tests.

Findings

Treatment of the data yielded the following results:

1. There were no statistically significant differences between high and low gain reading comprehension groups in measures of fourteen personality variables (Table 2).
2. There were two personality factors that yielded statistically significant differences between high and low reading comprehension groups. These were factor E, Not Assertive/Dominant, and factor N, Forthright/Shrewd, (Figure 2). The high gain group was significantly more dominant than the less assertive low gain group. The low gain group on factor N, Forthright/Shrewd, was significantly more shrewd than the more forthright high gain group.
3. The highest personality scores were on factors C, Easily Upset/Calm, Stable, F, Sober, Serious/Happy-go-Lucky, and Q₄, Relaxed/Tense, Driven, yielding grand means indicating overall tendency among both gain groups to be calm and stable, happy-go-lucky, and tense and driven (Figure 1).
4. Factors A, Cool, Reserved/Warm, Easygoing, B, Dull/Bright, and L, Trusting/Suspicious, yielding low overall personality mean

scores, showed both groups to be more cool and reserved than warm and easygoing, more dull than bright, and more trusting than suspicious (Figure 1).

5. Factor H, Shy, Timid/Venturesome, showed the greatest standard deviation in both the high and low gain groups.

6. Factor O, Self-Assured/Apprehensive, and factor Q₁, Conservative/Experimenting, indicated difference though not statistically significant. Low reading comprehension gain students were more apprehensive than the more self-assured high gain students on factor O. High reading comprehension gain students were found to be more experimenting than the more conservative low gain group (Figure 2).

Conclusions

Investigation of differences in this study led to the following conclusions:

Subjects in the high reading comprehension gain group differed from those in the low gain group on two personality traits. They were more dominant than their nonassertive low gain counterparts. They also were more forthright than their more shrewd low gain counterparts.

Conclusions provided in this study were compatible with literature surveying other delinquent and incarcerated populations. The current finding that lower reading comprehension gain students in a penal setting were nonassertive was supportive to Glavin and Annesley¹ who identified one large group with negative behavior traits in a

¹Glavin and Annesley, The Journal of Special Education, pp. 213-19.

school setting as those pupils who were withdrawn. The current investigation also concurred with Megargee and Rosenquist's² study among three delinquent ethnic groups. While the immediate study termed lower comprehension gain readers as shrewd, Megargee and Rosenquist found similar groups to be scrutinizing and hostile.

Conclusions ran counter, however, to research surveying the relationship between personality and reading in children and non-delinquents. The most noticeable breach in the two populations concerned dominance or aggression, which related to high reading gain in delinquents and incarcerates, but low reading gain in more socially-conforming populations.

Recommendations

The following recommendations were made for further research:

1. Statistically significant differences and relationships should be explored with regard to reading comprehension gain and factors of age, sex, personality, length of incarceration, nature of offense, and intelligence.

2. A descriptive study exploring statistically significant differences and relationships among age, sex, personality, length of incarceration, nature of offense, and intelligence and factors of reading to include ability in word analysis skills, vocabulary, and comprehension should be designed.

²Megargee and Rosenquist, "A Comparison of Delinquent and Non-delinquent Anglo-Americans, Mexicans, Mexican-Americans, and Mexican Nationals."

3. The descriptive studies mentioned should be replicated across grade and socio-economic levels in both penal and nonpenal settings.

4. Experimental studies should be conducted to see if length of incarceration and nature of offense affect learning to read.

5. A longitudinal study should be conducted following the experimental studies to see if results are maintained.

6. A predictive study on any or each of the reading factors (word analysis skills, vocabulary, and comprehension) and penal factors (length of incarceration and nature of offense) should be devised to see if any of the demographic factors would predict reading skill group membership.

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APPENDIX A

**READING COMPREHENSION GRADE EQUIVALENT GAIN SCORES
AS MEASURED ON FORMS 1 AND 2 OF THE
GATES-MACGINITIE READING TESTS,
LEVEL E**

READING COMPREHENSION GRADE EQUIVALENT GAIN SCORES AS MEASURED
ON FORMS 1 AND 2 OF THE GATES-MACGINITIE READING TESTS, LEVEL E

Subject Number	Reading Comprehension Grade Equivalent Gain Scores	Subject Number	Reading Comprehension Grade Equivalent Gain Scores
01	-1.1	41	2.0
02	0.7	42	1.0
03	-0.5	43	2.1
04	-0.8	44	1.7
05	-0.6	45	1.3
06	0.1	46	2.2
07	0.7	47	1.8
08	0.3	48	2.0
09	0.3	49	3.5
10	0.6	50	1.7
11	0.0	51	1.8
12	0.3	52	1.6
13	-2.6	53	1.0
14	-0.8	54	6.4
15	-0.2	55	4.7
16	-0.5	56	2.0
17	-0.6	57	3.0
18	0.7	58	1.8
19	-1.0	59	2.1
20	0.0	60	1.0
21	0.4	61	2.7
22	-0.3	62	3.2
23	0.8	63	4.8
24	0.7	64	5.0
25	0.2	65	1.2
26	-0.4	66	4.0
27	0.1	67	1.1
28	-0.1	68	1.5
29	-3.0	69	1.7
30	0.9	70	1.3
31	-1.6	71	1.6
32	0.0	72	1.3
33	0.0	73	1.1
34	0.2	74	1.1
35	0.9	75	1.0
36	-0.3	76	1.0
37	-1.0	77	2.2
38	-4.9	78	1.5
39	0.5	79	1.3
40	0.0	80	1.1

APPENDIX B

RAW DATA OF PERSONALITY SCORES AS MEASURED ON THE SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE

**RAW DATA OF PERSONALITY SCORES AS MEASURED ON THE
SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE**

Subject Number	Personality Traits and Corresponding Raw Scores															
	A	B	C	E	F	G	H	I	L	M	N	O	Q1	Q2	Q3	Q4
01	05	08	20	12	09	02	02	03	02	12	11	13	08	14	12	12
02	06	05	07	12	09	12	04	08	11	08	10	23	07	17	10	22
03	12	06	16	12	14	05	10	14	09	12	13	13	06	07	11	11
04	11	04	11	10	14	11	16	11	07	10	12	15	07	14	09	16
05	11	05	05	12	17	08	08	10	15	07	10	18	06	12	10	18
06	11	09	15	09	19	10	11	13	12	07	14	11	03	15	14	14
07	06	07	11	07	11	11	06	05	07	08	13	12	10	12	10	16
08	11	04	13	06	14	10	14	09	10	10	12	09	07	09	11	13
09	14	04	09	05	20	08	14	12	17	12	11	16	14	13	12	17
10	06	08	07	13	10	11	09	11	14	07	12	16	11	13	11	17
11	04	07	18	13	12	12	13	09	06	10	09	14	12	14	13	11
12	11	03	15	12	14	13	11	08	15	12	12	09	14	13	12	12
13	06	08	18	12	16	16	09	12	12	13	11	17	12	04	18	15
14	13	06	15	08	16	11	16	09	05	07	08	07	12	11	16	06
15	08	08	14	10	12	06	13	09	09	16	11	08	12	07	11	13
16	11	07	15	12	16	17	20	13	09	09	10	15	05	09	17	10
17	12	07	14	06	15	13	11	08	09	13	11	17	07	11	17	17
18	03	04	17	14	18	06	13	09	08	16	03	10	10	13	08	16
19	10	04	15	17	15	11	20	08	10	08	09	13	13	14	12	12
20	07	05	14	09	16	09	15	10	09	14	10	12	08	12	16	15
21	10	06	06	12	17	14	19	08	09	12	09	13	10	14	13	13
22	12	06	14	11	13	11	18	14	12	14	11	12	16	11	16	15
23	11	05	14	19	05	09	14	06	05	13	18	13	08	10	11	09
24	10	07	17	09	18	16	13	12	08	06	12	08	13	06	15	11
25	10	06	16	15	10	14	14	11	10	17	07	14	06	14	06	18
26	14	08	12	11	19	13	21	13	07	11	13	12	11	06	14	11
27	12	01	20	08	09	08	08	10	06	13	12	12	08	08	14	06
28	08	04	15	09	10	13	10	11	05	15	07	21	06	10	15	15
29	13	05	12	06	15	13	15	10	07	10	12	08	12	11	17	13
30	03	05	09	07	08	17	05	11	07	10	12	16	05	12	13	06
31	12	04	13	13	10	18	10	09	07	05	13	15	05	11	08	07
32	08	09	14	10	08	04	01	08	08	11	10	14	09	20	10	17
33	13	07	09	07	12	14	05	12	06	06	14	13	10	07	14	11
34	02	06	10	08	08	10	04	12	09	10	12	16	14	17	08	20
35	06	09	07	10	08	13	07	04	15	08	10	18	15	16	12	18
36	08	05	18	11	10	10	12	06	10	15	12	09	09	16	15	15
37	08	06	19	20	20	08	26	08	10	08	08	07	15	09	14	15
38	06	08	17	06	20	17	10	12	08	08	12	14	05	17	16	13
39	07	03	16	16	18	15	21	15	11	13	07	15	09	08	12	13
40	13	05	11	16	14	10	10	12	08	12	11	13	10	10	09	11

Appendix B--Continued

Subject Number	Personality Traits and Corresponding Raw Scores															
	A	B	C	E	F	G	H	I	L	M	N	O	Q1	Q2	Q3	Q4
41	04	07	16	22	17	10	15	07	13	04	16	16	12	13	15	15
42	06	07	20	16	15	13	07	12	14	10	08	16	11	14	12	18
43	07	06	13	18	22	06	20	04	13	07	08	13	12	13	11	17
44	11	09	12	18	15	13	15	12	08	07	14	12	14	12	15	21
45	11	08	09	20	13	06	17	02	15	09	06	09	16	11	04	18
46	12	05	06	18	14	10	16	12	12	06	14	20	12	06	08	16
47	08	03	12	12	08	11	12	14	09	15	12	16	12	12	11	13
48	12	03	15	09	13	11	16	10	08	13	08	15	09	06	13	20
49	06	05	15	12	14	08	13	08	10	13	10	15	12	10	11	14
50	09	05	13	17	18	05	16	12	09	12	10	13	14	12	11	12
51	11	06	20	08	10	14	12	16	04	14	11	05	11	10	17	08
52	05	05	12	12	09	05	07	09	06	12	04	12	16	16	04	21
53	06	07	08	14	13	06	07	14	17	18	08	17	16	15	12	17
54	08	08	10	12	15	07	09	15	11	15	10	16	14	11	10	19
55	10	08	17	08	22	16	23	15	04	19	09	08	07	13	16	07
56	08	08	17	18	15	12	08	10	12	10	07	15	11	10	12	21
57	08	08	13	12	15	04	03	16	12	10	07	16	14	17	12	15
58	10	03	10	12	08	17	21	13	04	15	12	14	12	12	20	16
59	12	06	16	12	15	17	17	16	07	10	11	11	03	09	13	15
60	09	01	16	14	13	10	11	10	08	10	12	09	07	11	13	08
61	07	08	14	12	18	11	10	07	09	12	09	20	07	09	12	15
62	08	06	16	07	18	13	10	10	06	16	14	10	08	09	15	07
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66	09	07	16	06	09	07	02	08	09	15	15	10	14	14	12	14
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71	10	08	23	14	16	18	08	08	06	10	08	09	10	15	14	11
72	06	07	08	16	15	08	00	06	12	08	08	20	12	09	10	26
73	10	09	11	15	19	13	21	12	07	13	05	15	04	07	15	23
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76	05	05	16	17	15	16	16	04	17	16	07	06	13	14	16	09
77	12	06	12	16	10	11	16	11	07	16	13	07	11	11	13	13
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79	05	10	17	09	14	08	06	06	04	08	08	06	09	17	12	05
80	04	09	14	18	08	11	12	03	17	08	09	07	13	17	16	11