THE DEGREE OF ACTIVENESS OF CERTAIN
PERSONALITY NEED-STATES IN WOMEN
AND THEIR RELATIONSHIP TO UNIVERSITY
GRADE POINT AVERAGE

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
Carolyn Sue Green
1966

THESIS

MAGIC 2

ABSTRACT

THE DEGREE OF ACTIVENESS OF CERTAIN PERSONALITY
NEED-STATES IN WOMEN AND THEIR RELATIONSHIP
TO UNIVERSITY GRADE POINT AVERAGE

by Carolyn Sue Green

The adult personality has been conceptualized by
several authors as being the result of the individual's
perceptions of experiences with animate and inanimate ob-
jects. It has been proposed that the perceptions of expe-
riences are based on the individual's need-states. There-
fore, the degree of fulfillment of a particular need-state
is seen as a directive force in the individual's perception
of the situation, and his consequent reaction to the situ-
ation.

The purpose of this study was to investigate "the
adult end product" (upper division students at Michigan
State University) in terms of certain personality needs
as delineated in the H. A. Murray theory of personality
and measured by the Group Personality Projective Test, and
to investigate how these needs relate to the student's level
of achievement.

The total sample included 73 Caucasian, female,
upper division Home Economics students at Michigan State
University. The Group Personality Projective Test, devel-
oped by Cassel and Kahn in 1958, was used to assess the

need-state activeness present at the time of testing. The Michigan State University grade point average for each student in the sample was used as a measure of the student's achievement.

Based on a regression analysis (performed by the Michigan State University 3600 computer) to ascertain the relationships between the activeness of the need-states as measured by the Group Personality Projective Test to one another and to grade point average, it can be stated that this study supports the notion that the activeness of personality needs has little, if any, effect on academic achievement in a university setting. This conclusion, however, has been drawn from a statistical analysis in which the standard errors of the regression coefficients and beta weights have been relatively high. To state the conclusion in terms of a practical application, the magnitude of the standard errors is large enough that by using the results of this study as the norm, no accurate prediction of the activeness of any of the need states as measured by the Group Personality Projective Test, or of grade point average, could be attempted for another sample.

Instead of identifying significant relationships between certain need-states and between these need-states and grade point average, the research has served as a validation study of the Group Personality Projective Test.

THE DEGREE OF ACTIVENESS OF CERTAIN PERSONALITY

NEED-STATES IN WOMEN AND THEIR RELATIONSHIP

TO UNIVERSITY GRADE POINT AVERAGE

By

Carolyn Sue Green

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Home Management and Child Development

1966

ACKNOWLEDGMENTS

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF GRAPHS

CHAPTER 1

INTRODUCTION.

"The development of any individual," wrote McCandless,

"depends upon how he sees and reacts to the socializing

forces of the culture of which he is a member. But what

are the forces and the perceptions within him, as an indi-

vidual, that cause him to respond in one way or another to

these forces on the outside?"[1]

McCandless has identified two broad theoretical

orientations to the socialization processes. Freudian and

social learning theory, together comprising one group, have

suggested that the organism is shaped by its experiences.

The second broad strand of socialization theory has proposed

that "the forces of growth and development within the or-

ganism are creative. . . ."[2] Although the first group, in

general, indicated that learning results from an individ-

ual's "insight," a reaction to experience, and the second,

that it arises from internal, creative forces of growth and

development, both theories proceeded from a common premise.

Both theories agree that, "The adult end-product is a direct

---

[1]Boyd R. McCandless, Children and Adolescents (New
York: Holt, Rinehart and Winston, Inc., 1962), p. 322.

[2]Ibid., p. 322.

1

function of the teaching forces of the family and the en-vironment as a child perceives them and as they affect them."[3]

Purpose of the Study

The purpose of this study was to investigate the "adult-end-product" (upper division students at Michigan State University) in terms of the activeness of certain personality needs as measured by the Group Personality Projective Test and how these needs relate to the students' level of achievement.

Definitions of Terms

The definitions of terms as operationalized in this study were:

1. The general functions of personality--"are to exercise its processes, to express itself, to learn to generate and reduce insistent need-tensions, to lessen or resolve conflicts by forming schedules which more nearly permit the frictionless appeasement of its major needs."[4]

2. Need--"A need is a construct (a convenient fiction or hypothetical concept) which stands for a force . . . in the brain region, a force which organizes perception, apperception, intellection, conation, and action in such a way as to transform in a certain direction an existing, unsatisfying situation. A need is sometimes provoked directly by internal processes of a certain kind . . . but, more frequently (when in a state of readiness) by the occurrence of one of a few commonly effective press (environmental forces). . . . Thus it manifests itself

---

[3]Ibid., p. 322.

[4]Calvin S. Hall and Gardner Lindzey, Theories of Personality (New York: John Wiley and Sons, Inc., 1957), p. 165.

by leading the organism to search for or to
avoid encountering or, when encountered, to
attend and respond to certain kinds of press. . . .
Each need is characteristically accompanied by
a particular feeling or emotion and tends to use
certain modes . . . to further its trend. It
may be weak or intense, momentary or enduring.
But usually it persists and gives rise to a
certain course of overt behavior, which . . .
changes the initiating circumstance in such a
way as to bring about an end situation which
stills (appeases or satisfies) the organism.[5]

3. The Group Personality Projective Test--The Group
Personality Projective Test was developed by
R. N. Cassel and T. C. Kahn and published by
The Psychological Test Specialists in 1960.
The test measured the amount of tension pro-
jected at the time of the test, the degree of
activeness of five needs as identified by H. A.
Murray, and total score.

4. Need State Activeness--Need State Activeness
is the intensity of a projected need as meas-
ured by the Group Personality Projective Test.
Each of the five area scores of the Group Per-
sonality Test which include Nurturance, With-
drawal, Neuroticism, Affiliation-Psychosexual
Needs and Succorance, represents a separate
need state area. In general, where the stand-
ardized T-score[6] is above 60, an acute and
chronic need state activeness is indicated;
when the standardized T-score is below 40, one
of two conditions is presumed to be present:
(1) adequate satisfaction with need-state dor-
mant, or (2) regression or immaturity in the
respective need area.[7]

---

[5]Ibid., p. 172.

[6]T-score--a weighted score calculated for unselected
normal students to which each sub-score on the Group Per-
sonality Projective Test can be converted for the purpose
of comparison.

[7]R. N. Cassel and T. C. Kahn, "The Group Personal-
ity Projective Test (GPPT)," Psychological Reports, 8 (1961),
p. 39 (Monograph Supplement 1-V8, 1961).

5. Achievement--Achievement was the attained level
of proficiency of a student as evidenced by his
grade point average as assessed by Michigan
State University.

Assumptions

1. The Group Personality Projective Test was a valid and
reliable instrument.

2. The University grade point average was an accurate and
reliable measure of student achievement.

3. The Michigan State University 3600 Computer performed
an accurate statistical analysis of the data.

Hypotheses

1. The mean grade point average for students scoring above
57 or below 37 on the Total Score as measured by the
Group Personality Projective Test is the same as the
mean grade point average for students scoring between
37 and 57.

2. For upper division, female, Caucasian, Michigan State
University, Home Economics students:

   A. No significant relationship exists between the
   Tension Reduction Quotient and (1) Nurturance,
   (2) Withdrawal, (3) Neuroticism, (4) Affiliation-
   Psychosexual Needs, (5) Succorance, and (6) Total
   Score as measured by the Group Personality Pro-
   jective Test.

   B. No significant relationship exists between Nur-
   turance and (1) Withdrawal, (2) Neuroticism,

(3) Affiliation-Psychosexual Needs, (4) Succorance, and (5) Total Score as measured by the Group Personality Projective Test.

C. No significant relationship exists between Withdrawal and (1) Neuroticism, (2) Affiliation-Psychosexual Needs, (3) Succorance and (4) Total Score as measured by the Group Personality Projective Test.

D. No significant relationship exists between Neuroticism and (1) Affiliation-Psychosexual Needs, (2) Succorance, and (3) Total Score as measured by the Group Personality Projective Test.

E. No significant relationship exists between Affiliation-Psychosexual Needs and (1) Succorance, and (2) Total Score as measured by the Group Personality Projective Test.

F. No significant relationship exists between Succorance and Total Score as measured by the Group Personality Projective Test.

G. No significant relationship exists between grade point average as assessed by Michigan State University and (1) the Tension Reduction Quotient, (2) Nurturance, (3) Withdrawal, (4) Neuroticism, (5) Affiliation-Psychosexual Needs, (6) Succorance, and (7) Total Score as measured by the Group Personality Projective Test.

CHAPTER 2

REVIEW OF THE LITERATURE

A review of the literature revealed a dearth of
research findings which focused on the integration and sub-
sequent adjustment or level of activeness of adult person-
ality needs as delineated by the H. A. Murray theory of
personology. Likewise, few studies were located which in-
vestigated the relationship between degree of activeness
of personality needs and level of academic achievement.
The findings of Lange, from "A Comparative Analysis of
Achieving and Underachieving Twelfth Grade Students of
Phoenix Central High School on the Non-Intellectual Factors
of the Group Personality Projective Test and the Test of
Social Insight," indicated that the non-intellectual fac-
tors of personality needs are related to a student's level
of achievement. In the Lange study, established groups
of high school achievers and underachievers were tested
on the Group Personality Projective Test and on the Test
of Social Insight to determine whether either one or both
of the instruments would differentiate between the two groups.
It was concluded that both the Group Personality Projective
Test and the Test of Social Insight differentiated between
the established groups of achievers and underachievers.

Knowledge based on inference from statements of

observation and from research findings indicates the plaus-
ibility of the interrelationships of certain personality
need states and their relationship to academic achievement.
Although the concept of need is widely used in psychology,
Murray's analysis is reported by Hall and Lindzey " . . . to
be the most carefully conducted and the most complete tax-
onomy of needs of any theorist."[1] "Murray stated that the
existence of a need can be inferred on the basis of: (1)
the effect or end result of the behavior, (2) the particu-
lar pattern or mode of behavior involved, (3) the selective
attention and response to a particular class of stimulus
objects, (4) the expression of an emotion of affect, and
(5) the expression of satisfaction when a particular effect
is achieved or disappointment when the effect is not achieved."[2]
"It is evident," wrote Hall and Lindzey in their review of
the Murray theory of personology, "that needs do not oper-
ate in complete isolation from each other and the nature
of this interaction or mutual influence is of crucial the-
oretical importance."[3] Inherent in Murray's framework is
the assumption that the individual's perception and inter-
pretation of environmental objects, whether or not they
exist in reality, is reflected in the activeness of certain

---

[1]Hall and Lindzey, op. cit., p. 172.

[2]Ibid., p. 172.

[3]Ibid., p. 177.

need states as he has delineated them.

In chapter one it was noted that McCandless has de-
lineated two broad theoretical orientations to the sociali-
zation processes. "Each of these subscribes to the idea
that the adult end product is a direct function of the teach-
ing forces of the family and the environment as the child
perceives them and as they affect him."[4] Marmor reported
that "the dynamics of the American Culture have brought
about many changes in our patterns of family living and
have fundamentally affected (the interpersonal relations
of family life)."[5] A survey of the areas of human develop-
ment on which family relationships leave their mark has
been presented by Hurlock. The widespread influence of
family relationships on the development of the child include:

1. Family Influence on the Child's Personality

"As Teagarden[6] pointed out, 'All manner of behavior
deviations can be, and often are, accounted for by the sub-
tleties of home relationships.'"[7] Hurlock quoted studies

---

[4]McCandless, op. cit., p. 322.

[5]J. Marmor, "Psychological Trends in American Fam-
ily Relationships," Journal of Marriage and Family Living
(1951), 13:145-147.

[6]F. M. Teagarden, Child Psychology for Professional
Workers, rev. ed. (Englewood Cliffs, N.J.: Prentice-Hall,
1946).

[7]Elizabeth B. Hurlock, Child Development (New York:
McGraw-Hill, 1964), p. 652.

by Koppitz,[8] Rexford and Van Amerognen,[9] and Serot and

Teevan[10] which reported findings that give support to the

observable influence of family relationships on the develop-

ing personality. "Favorable family relations," wrote Hur-

lock, " . . . lead to a healthy self concept and good per-

sonal and social adjustments. (Also), it has been found

that children's motivations are similar to those of their

parents. . . ."[11] The importance of family relationships

to the child's developing personality is not overshadowed

by the dominance, with the increasing age of the child,

of the peer group influence.[12]

2. Family Influence on Adjustments Outside the Home

"The child learns through family relationships, es-

pecially relationships with the parents, to conform to group

standards, mores, and traditions, and to cooperate with

others."[13] Hurlock reported that studies by Freeman and

---

[8]E. M. Koppitz, "Relationships Between Some Back-
ground Factors and Children's Interpersonal Attitudes,"
Journal of Genet. Psychology (1957), 91:119-129.

[9]E. N. Rexford and S. T. Van Amerogen, "The Influ-
ence of Unsolved Maternal Oral Conflicts upon Impulsive
Acting Out in Young Children," American Journal of Ortho-
psychiatry (1957), 27:75-87.

[10]N. M. Serot and R. C. Teevan, "Perception of the
Parent-child Relationship and its Relation to Child Develop-
ment," Child Development (1961), 32:373-378.

[11]Hurlock, op. cit., p. 653.

[12]Ibid., p. 653.

[13]Ibid., p. 653.

Showell,[14] Livson and Mussen,[15] and Mummery[16] support the following generalizations: (a) the child develops patterns of social behavior similar to those of his parents, (b) the aggressiveness of the child depends largely on how he is treated in the home, and (c) home environments marked by discord, severe punishment, and autocratic rule promote socially unacceptable modes of aggression.

3. Family Influence on School Success

"Although authorities generally agree that a person's academic success is not guaranteed by his apparently adequate capabilities, there does seem to be some agreement that academic success is dependent upon certain non-intellectual factors. . . ."[17] In the case of the developing child, Hurlock wrote, " . . . the child's performance in school is adversely affected by poor relationships between him and his parents and other family members."[18] Studies

---

[14]H. E. Freeman and M. Showell, "The Role of the Family in the Socialization Process," *Journal of Social Psychology* (1953), 37:97-101.

[15]N. Livson and P. H. Mussen, "The Relation of Ego Control to Overt Aggression and Dependency," *Journal of Abnormal Social Psychology* (1957), 55:66-71.

[16]D. V. Mummery, "Family Backgrounds of Assertive and Non-assertive Children," *Child Development* (1954), 25: 63-80.

[17]Merle LeRoy Lange, "A Comparative Analysis of Achieving and Underachieving Twelfth Grade Students of Phoenix Central High School on the Non-Intellectual Factors of the Group Personality Projective Test and the Test of Social Insight," An unpublished doctoral thesis, Colorado State College, 1962, p. 26.

[18]Hurlock, *op. cit.*, p. 653.

by Medinnus,[19] Hoffman, Rosen and Lippitt,[20] Wallach, Ulrich and Grunebaum,[21] as quoted by Hurlock, point out the deleterious effects of parental overprotection, parental rejection, marital discord, and low parental regard for education or the child's progress in school.

4. Family Influence on the Child's Success in Adult Life

The position of the child in the family and his relationship with the members of his family, wrote Hurlock in a review of Allen,[22] "have a great deal to do with his success in later life."

Sullenger, in Social Determinants of Juvenile Delinquency, gave further support to the McCandless generalization that " . . . the adult end product is a result of the teaching forces of the family and the environment as the child perceives them and as they affect them."[23]

---

[19]G. R. Medennus, "The Relation Between Several Parent Measures and the Child's Early Adjustment to School," Journal of Educational Psychology (1961), 52:153-156.

[20]L. W. Hoffman, S. Rosen, and R. Lippitt, "Parental Coerciveness, Child Autonomy, and Child's Role at School," Sociometry (1960), 23:15-22.

[21]M. A. Wallach, D. N. Ulrich, and M. B. Grunebaum, "Relationship of Family Disturbance to Cognitive Difficulties in a Learning-Problem Child," Journal of Consultant Psychology (1960), 24:355-360.

[22]P. J. Allen, "Childhood Backgrounds of Success in a Profession," American Sociological Review (1955), 26: 186-190.

[23]McCandless, op. cit., p. 322.

Sullenger has suggested that the process of human develop-
ment is influenced by the total environment. "The human
machine," as Sullenger conceptualized it, "moves in response
to (its perception of) outside stimulants regardless of what
they are."[24]

Research findings and inferences from related studies
and observations indicated the need for research to ascer-
tain the relationships between specific personality need-
states, as described by H. A. Murray, and between the de-
lineated personality needs and academic achievement.

---

[24]T. Earl Sullenger, Social Determinants in Juvenile
Delinquency (New York: John Wiley and Sons, Inc., 1936),
p. 3.

CHAPTER 3

METHODOLOGY

Chapters 1 and 2 are concerned with the statement
of the research problem and the review of the literature.
Chapter 3 is concerned with the selection of the sample,
the selection of the instrument, and the collection of the
data.

The Sample

The sample consisted of a subgroup of the upper
division students in the College of Home Economics at Mich-
igan State University, namely, the students enrolled in
Home Economics 401, Fall Term, 1965. Each of the 75 stu-
dents had accumulated a minimum of 85 credits and was con-
sidered by University standards to have attained at least
junior standing. Of the 75 students, 14 were juniors (85-
129 credits earned inclusive); and 61 of the students were
seniors (130-up credits earned). The students represented
all but two of the undergraduate majors in Home Economics
at Michigan State University (Table 1).

The selection of this sample was based on the as-
sumption that the grade point averages of upper division
students tend to be more stable than those of lower divis-
ion students due to: (a) grade point average being computed

from an accumulation of at least 85 credits, (b) the increasing specialization in the major area by the students, and (c) the initial adjustment in the role of university student being accomplished.

Due to the occurrence of only one male student in the sample and only one student from non-Caucasian racial stock, the study population was limited to 73 Caucasian, female, upper division Home Economics students.

Table 1

Delineation of the Sample

Majors	Number	Percent of class, fall term, 1965	Percent of class, academic year 1964-1965
Home Economics Teaching	27	32	33
Interior Design	24	28	8
Retailing	16	19	19
Child Development and Teaching	4	5	16
General Home Economics	3	4	4
Home Economics and Communication Arts	3	4	.05
Home Economics Extension	3	4	1
General Clothing and Textiles	3	4	2
Foods	1	1	2
Research in Foods and Nutrition	1	1	.05
Dietetics	0	0	10
Institutional Administration	0	0	1

The Instrument

The Group Personality Projective Test (hereafter referred to as the GPPT; see Appendix for test form) was utilized for the collection of the data. The GPPT, developed by R. N. Cassel and T. C. Kahn, "is concerned with assessing the amount of anxiety-producing tension, and the degree of activeness of certain psychological needs that are present in the individual at the time the test is taken."[1]

The human personality was assumed by Cassel and Kahn to be defined as consisting of three layers: "(a) the outer layer--the mask one wears in relation to others, (b) the middle layer--the mask one wears in relation to self, and (c) the deeper layer--symbolic content."[2] This definition, as stated by Cassel and Kahn, was taken from H. A. Murray's personology, a theory of personality.

The GPPT, designed to measure the middle layer of human personality, consisted of seven scales. The test objective, to assess the amount of anxiety-producing tension projected at the time of testing, was represented in the first scale, the Tension Reduction Quotient. The Tension Reduction Quotient was determined through the evaluation of two sub-scales, Happiness and Dejection. The degree of activeness of certain psychological needs that are

---

[1]Cassel and Kahn, op. cit., pp. 23-41.

[2]Ibid., p. 38.

present at the time of testing was assessed through five scales, Nurturance, Withdrawal, Affiliation-Psychosexual, Neuroticism, and Succorance. The names given to each of the seven scales, the two sub-scales, and a brief statement of the intent of each follow.

1. Tension Reduction Quotient (TRQ)

   "Score serves as an index of the amount of anxiety-producing tension present in the individual at the time of testing. It represents the proportion that negative feelings projected by the subject are of total negative plus positive feelings."[3]

2. Nurturance (NURT)

   "Score is indicative of a need to play a father role, including volunteering and giving aid to others."[4]

3. Withdrawal (WITH)

   "Score serves as an indicator of the subject's needs to avoid or escape activity in the group, and to avoid personal and social responsibility."[5]

4. Neuroticism (NEU)

   "Score represents the degree to which the subject is able to arrive at sound and timely decisions, or needs to remain indecisive."[6]

5. Affiliation and Psychosexual Needs (AFF)

   "Two separate but related types of need are included in this score: (a) affiliation need or need to belong, and (b) psychosexual, or need for boy-girl relationships."[7]

---

[3] *Ibid.*, p. 39.

[4] *Ibid.*, p. 39.

[5] *Ibid.*, p. 39.

[6] *Ibid.*, p. 40.

[7] *Ibid.*, p. 40.

6. Succorance (SUCC)

"Scale indicates both (a) a need to seek aid and play an infant role, and (b) general distrust of others."[8]

7. Total Score (TOTAL)

"Serves as an index of general level of emotional disturbance. It can indicate degree of anxiety-producing tension present and general level of need activeness at the time of the test."[9]

Sub-Scales

1. Happiness (HAP)

"Scale indicates the total number of positive feelings."[10]

2. Dejection (DEJ)

"Scale indicates the total number of negative feelings."[11]

The selection of the GPPT was based on the test's ability to meet three criteria: (a) reliability, (b) validity, and (c) fakability. As reported by Cassel and Kahn, in Table 2, the reliability coefficients based on a test-retest system for a variety of groups are above .500, with medians of .625 for high school students, .678 for cadets, .604 for WAF's, .596 for neuropsychiatric patients, and .567 for youths in correctional institutions. An odd-even assessment of reliability indicated coefficients in the .400's. For the total score, all reliabilities were above .600.

---

[8]Ibid., p. 40.

[9]Ibid., p. 40.

[10]Ibid., p. 38.

[11]Ibid., p. 38.

Table 2

Reliability of Group Personality Projective Test

Groups	N	Scales						
		Ten-sion	Nurtur-ance	With-drawal	Neurot-icism	Affili-ation	Succor-ance	Total
Unselected Normal High School Students (both sexes)								
Odd-even Items*	300	.658	.250	.532	.602	.623	.721	.813
Test-retest**	300	.782	.659	.558	.553	.592	.752	.850
USAF Pre-flight Cadets (Males)								
Odd-even Items	200	.579	.314	.425	.632	.594	.704	.634
Test-retest	200	.735	.711	.517	.645	.600	.714	.799
USAF Women Basics (WAF)								
Odd-even Items	100	.810	.433	.450	.543	.361	.411	.835
Test-retest	100	.673	.400	.610	.598	.577	.780	.753
Neuro-psychiatric Patients (both sexes)								
Odd-even Items	200	.471	.319	.489	.539	.489	.639	.588
Test-retest	200	.511	.444	.592	.712	.613	.600	.665
Correctional Institution Youth (both sexes)								
Odd-even Items	300	.513	.399	.610	.582	.399	.732	.618
Test-retest	300	.489	.411	.645	.666	.413	.665	.659

*Pearson rs with Spearman-Brown correction.

**Pearson rs.

The validity coefficients and beta weights for dis-
criminating between unselected normal high school students
and youth currently committed to a correctional institution,
as reported by Cassel and Kahn, appear in Table 3. Since
the Pearson product moment coefficients between the two
sets of Total Scores for the population was .918, the authors
suggested that, "the beta weights for discrimination between
unselected normal subjects and neuropsychiatric patients
are probably equally valid and significant for discriminat-
ing between unselected normal and delinquent youth; also,
the converse is true."[12] Cassel and Braucle, in "An Assess-
ment of the Fakability Scores on the Group Personality Pro-
jective Test," stated that the GPPT is empirically vali-
dated.[13] It was also noted that, "It is relatively diffi-
cult to make choices to obtain desirable personality pro-
files."[14]

Consideration of the GPPT as an instrument for this
study also included study of projective techniques--their
advantages and disadvantages. Fred J. Goldstein has listed
some assumptions which are basic to projective techniques.
They included:

1. We assume that the person taking the test is

---

[12]Ibid., p. 32.

[13]Ibid., p. 38.

[14]Ibid., p. 38.

Table 3

Validity Coefficients and Beta Weights for Discriminating Between Unselected Normal High School Students and Youth Currently Committed to a Correctional Institution (N = 400; 200 "Normals"; 200 Delinquents)

GPPT Variables	Variables*						Regression Values	Beta Wt./σ	Beta Wt.
	X_2	X_3	X_4	X_5	X_6	X_7			
X_2 Tension (TRQ)	1000						-266	-0015	11
X_3 Nurturance	188	1000					-367	-1037	1
X_4 Withdrawal	-090	083	1000				169	0625	17
X_5 Neuroticism	122	056	-293	1000			178	0380	15
X_6 Affiliation	-181	-354	-398	035	1000		050	0000	00
X_7 Succorance	-025	-389	-223	-314	268	1000	-062	0242	9

*rs of .128 and larger are significant at .01 level; .098 at .05 level.

revealing his own strivings, dispositions, and conflicts.

2. Recurrent themes or perseverative trends are particularly apt to mirror the impulses and affects of the storyteller or person being tested.

3. Greater unstructuredness elicits more unconscious and dynamic material.

4. Tests seem to be responsive to both situational and enduring aspects of personality.

5. Projective material gets at unconscious material that cannot be obtained through other more direct methods such as the questionnaire, direct interview, etc.[15]

"One of the greatest advantages to the projective technique," suggested Campbell, "is one of freedom, rather than of disguise."[16] "Projective techniques are relatively immune to attempts to conceal or modify personality facets under scrutiny."[17] They also are "a means of appraising the individual personality as a unitary configuration."[18]

It has been noted by several writers, however, that there are many difficulties associated with the increased use of projective techniques. "The variety and richness

---

[15]Fred J. Goldstein, "Custom-Made or Store Bought Projective Techniques? What Do They Represent?" _Journal of Projective Techniques_ (1961), 25:11-20.

[16]D. T. Campbell, "The Indirect Assessment of Social Attitudes," _Psychological Bulletin_ (1959), 56:160.

[17]Robert I. Watson, _The Clinical Method in Psychology_ (New York: John Wiley and Sons, Inc., 1963), p. 394.

[18]_Ibid._, p. 404.

of material which the projective methods provide," wrote
Sargent, "is at once the delight of the clinician and the
despair of the experimentalist. The research worker who
attempts to use any of these methods is immediately impressed
with the infinite possibilities for interpretation and in-
sight, and seemingly insurmountable difficulties in the way
of scientific treatment of the data."[19]

The GPPT appeared to utilize the positive aspects
of projective techniques while at the same time to eliminate
some of the negative qualities. More explicitly, the GPPT
was designed to measure the middle layer of personality--
the mask one wears in relation to self. Apparent immunity
to a subject's concealment or modification of personality
facets under scrutiny was noted as an advantage of the GPPT.
A system of scientific treatment of the data was inherent
in the GPPT. The GPPT was a forced choice test. Each sub-
ject was required to choose the one answer among five that
accompanied a line drawing in each of ninety questions.
Scoring schemas and weighting codes prepared by Cassel and
Kahn eliminated the need for extensive interpretation by
the experimenter.

The major disadvantage, however, of the GPPT was
believed to be the forced choice answers. In the pure sense,

---

[19]Helen Sargent, "Projective Methods: Their Ori-
gins, Theory, and Application in Personality Research,"
Psychological Bulletin (1945), 42:269.

the GPPT was not a projective test in that the subject did
not have the opportunity to interpret the line drawings
without limitations. Being required to decide which of
the five possible answers was the closest to the subject's
own feelings somewhat limited the extent of the projection.

Collection of the Data

The data were collected by administering the GPPT
in a regularly scheduled Home Economics 401 class on Novem-
ber 2, 1965. The preparation of the raw data for analysis
included scoring the answers, computing the Total Scores
and the Tension Reduction Quotients, and plotting the scores
on the answer sheet graph.

CHAPTER 4

ANALYSIS OF THE DATA

The descriptive analysis of the data included a
rank ordering of the total scores calculated for each stu-
dent in the sample. The rank ordering of the total scores
(Table 5) indicated the spread of the scores. It also in-
dicated the relative position of the total scores to the
norms established by Cassel and Kahn as a numerical index
of the general level of emotional disturbance of the testee.
As described by Cassel and Kahn, the total score "can indi-
cate degree of anxiety-producing tension present and gen-
eral level of need activeness at the time of the test.
A total score that is excessively high (total score above
57) suggests poor mental health, while an excessively low
score (total score below 37) indicates general emotional
immaturity."[1]

Scatter diagrams which plotted selected variables
to effect a pictorial tabulation of the data were also pre-
pared. As a descriptive technique, the scattergrams gave
a preliminary analysis to the statistical computations of
the relationships between variables. The variables that

---

[1]Cassel and Kahn, op. cit., p. 40.

24

were selected to diagram were: (1) Nurturance, (2) Affilia-
tion-Psychosexual, and (3) Total Score, each versus GPA; and
Affiliation-Psychosexual versus Nurturance (Graphs 3-6).

A third descriptive technique applied to the data
for each student was the tabulation of the scores which were
either above or below the scores indicative of a normal per-
sonality (above or below the standardized T score range of
40-60), as described by Cassel and Kahn. The 73 students
in the sample were then rank ordered according to grade
point average from low to high as defined by the University
standards which follow. Grade point average at Michigan
State University is calculated on the following scale:
A equals 4.00, B equals 3.00, C equals 2.00, D equals 1.00
and F equals zero. Average grade point is determined by
dividing the total points earned by the total credits car-
ried. The grade point averages utilized in this tabulation
were those between 1.95 and 2.17, and between 2.67 and 3.81.
The grade point averages from 1.95-2.17 comprised the bot-
tom 25 percent of the distribution of grade point averages
(Table 4) and were assigned the value of low. The top 25
percent of the distribution of the grade point averages
which ranged from 2.67 to 3.81 was assigned the value of
high. The tabulation of Graph 7 was conducted in such a
way as to outline and compare individual scores on the di-
mensions of the GPPT to a low (1.95-2.17) or high (2.67-
3.81) level of academic achievement. The mean number of

Table 4

Distribution of Grade Point Average

Grade Point Average	Number of Students
1.95	1
2.00	2
2.01	1
2.02	2
2.03	3
2.04	3
2.05	1
2.08	1
2.09	1
2.11	1
2.13	1
2.16	1
2.17	1
25% of class	
2.18	2
2.20	2
2.21	2
2.22	2
2.28	3
2.31	1
2.34	2
2.36	3
2.37	1
50% of class (median)	
2.37	1
2.39	1
2.42	1
2.43	1
2.44	1
2.47	2
2.48	1
2.49	1
2.54	2
2.59	2
2.62	2
2.63	1
2.65	1
75% of class	
2.67	2
2.69	1
2.74	2
2.81	1
2.85	1
2.93	1
2.99	2

Table 4 (continued)

Grade Point Average	Number of Students
3.03	1
3.19	2
3.33	1
3.51	1
3.52	1
3.59	1
3.61	1
3.81	1

non-normal scores received were calculated from Graph 7 in each of the following instances:

1. Where a high score on any of the need states was accompanied by a low grade point average, as described above.

2. Where a low score on any of the need states was accompanied by a low grade point average, as described above.

3. Where a high score on any of the need states was accompanied by a high grade point average, as described above.

4. Where a low score on any, some or all of the need states was accompanied by a high grade point average, as described above.

The purpose of each of the three descriptive techniques was to provide a pictorial analysis of the data in an effort to identify possible patterning of the scores.

Mean grade point averages were determined for the

students whose total GPPT scores were above 57, for those between 37 and 57, and for those below 37. The means are reported in Table 6.

A statistical analysis of the data was conducted to ascertain the relationship of each of the variables measured by the GPPT to one another and to grade point average. The Michigan State 3600 Computer was utilized for the computations. The computations performed by the computer as programmed into a problem of the sum of the least squares were simple correlations, regression coefficients, beta weights, and standard errors of coefficients and beta weights of the variables.

The degree of mutual relation of each of the variables to one another and to grade point average was provided by the simple correlations. According to Travers, "The multiple regression technique was performed to ascertain the regression coefficients, beta weights and standard errors of coefficients and beta weights. The multiple regression technique involves the determination of the best method of combining two or more measures in order to predict a criterion."[2] Also, "The best combination for a particular sample," wrote Travers, "takes advantage of any peculiarities that make one set of weights more effective than another."[3]

---

[2]Robert M. W. Travers, An Introduction to Educational Research (New York: Macmillan, 1964), p. 378.

[3]Ibid., p. 378.

The data were submitted to the computer twice. The program of the sum of the least squares was utilized in both instances. A manipulation of the data deck which contained the raw data for each student in the sample constituted the variance between the two analyses. In the first running of the data through the 3600 computer, the data for each student, which consisted of the seven variables measured by the GPPT and grade point average, were presented in actual scores as recorded on each student's answer sheet (Graph 1).

Manipulation of the data for the second analysis consisted of a weighting of each score measured by the GPPT for each student in an effort to produce a profile of the sample. The weighting followed the following schema:

1. If a student scored above the standardized T score of 60 on any, some or all of the seven variables, each score in this range was given the value of three.

2. If a student scored between the standardized T score of 40-60 on any, some or all of the seven variables, each score in this range was given the value of two.

3. If a student scored below the standardized T score of 40 on any, some or all of the seven variables, each score in this range was given the value of one (Graph 2).

Graph 1

Example of Student's Answer Sheet Including the Notation
of the Actual (unaltered) Scores as Submitted
to the M.S.U. 3600 Computer

T Score	TRQ	NURT	WITH	NEU	AFF	SUCC	TOTAL	T Score
80	57	17	20	30	33	21	79	80
75	52	16	19	28	32	19	71	75
70	48	15	18	27	29	17	69	70
65	43	13	17	(25)	28	15	65	65
60	34	12	15	23	27	13	57	60
55	29	(11)	(13)	20	25	10	51	55
50	23	10	11	18	23	8	(46)	50
45	(17)	8	10	15	(20)	7	41	45
40	9	7	9	13	18	5	37	40
35	5	6	7	12	16	(3)	29	35
30	3	5	6	10	14	2	24	30
25	2	4	5	8	12	1	20	25
20	1	2	4	6	10	0	15	20
	17	11	13	25	20	3	46	

Scores as submitted to the computer

Graph 2

Example of Student's Answer Sheet Including the Altered
Scores as Submitted to the M.S.U. 3600 Computer

T Score	TRQ	NURT	WITH	NEU	AFF	SUCC	TOTAL	T Score	
80	57	17	20	30	33	21	79	80	
75	52	16	19	28	32	19	71	75	Value of 3
70	48	15	18	27	29	17	69	70	
65	43	13	17	(25)	28	15	65	65	
60	34	12	15	23	27	13	57	60	
55	29	(11)	(13)	20	25	10	51	55	Value of 2
50	23	10	11	18	23	8	(46)	50	
45	(17)	8	10	15	(20)	7	41	45	
40	9	7	9	13	18	5	37	40	
35	5	6	7	12	16	(3)	29	35	
30	3	5	6	10	14	2	24	30	Value of 1
25	2	4	5	8	12	1	20	25	
20	1	2	4	6	10	0	15	20	
	2	2	2	3	2	1	2		

Scores as submitted to computer

CHAPTER 5

THE RESULTS OF THE STUDY

Results of the Descriptive Analyses of the Data

A rank ordering of the Total Score of each student in the sample as measured by the GPPT appears in Table 5.

Table 5

A Rank Ordering of the Total Scores

Range of Total Scores	Number of Students
22-26	1
27-31	4
32-36	5
*37-41	5
42-46	18
47-52	15
53-57**	9
58-62	5
63-67	6
68-72	3
73-77	2

*Total Score below 37 indicates general emotional immaturity.

**Total Score above 57 suggests poor mental health.

Of the 73 female, Caucasian, upper division, Home Economics students, 16 students or 21.8 percent of the sample had Total Scores of 57 or above. As described by Cassel and

Kahn, the Total Score represents a combination of all seven scores on the GPPT "in such a manner and with such weights as to discriminate between mentally ill and normal individuals."[1] A Total Score above 57 indicates poor mental health. Between the Total Scores of 37 and 57, a range "suggesting a normal personality pattern with good mental health,"[2] 47 students or 64.3 percent of the sample were distributed. Scoring below Total Score 37 were 10 students or 13.7 percent of the sample. A Total Score below 37 indicates general emotional immaturity.

The second form of descriptive analysis applied to the data was to plot the scores of each student on selected variables to ascertain the pictorial relationship of the factors to one another.

In the first instance, as recorded in Graph 3, Total Score was plotted on the x axis and grade point average was plotted on the y axis. A clustering of scores occurred in the range of 37 to 57 Total Score which were also between the grade point averages of 2.0 and 2.5. The scatter diagram, however, revealed no distinctive patterning.

From the scatter diagram it appeared that no significant relationship existed between Total Score and grade point average.

---

[1]Cassel and Kahn, op. cit., p. 40.

[2]Ibid., p. 40.

Nurturance, the need to play the father role, was also plotted against grade point average. Of particular interest was the possibility of an apparent relationship of the need for a female adult to play the father role and the activeness of this need as related to the student's achievement (Graph 4). A clustering of the scores in the normal range (between the standardized T scores of 40 and 60), which also lay between the grade point averages of 2.0 to 2.5, was apparent. Again, no distinctive patterning that would appear to demonstrate a significant relationship of Nurturance to grade point average was evidenced in the scatter diagram.

The need state, Affiliation-Psychosexual, as measured by the GPPT, which involved the students' projection of their needs as they relate to members of the opposite sex, was the focus of the third scatter diagram. The question in point was: What if any significant relationship exists between the needs of adult females to be with males and their level of academic achievement (Graph 5). As plotted, the Affiliation-Psychosexual scores are between the scores of 15 and 20. The range delineated by Cassel and Kahn to indicate normal adjustment for the Affiliation-Psychosexual Score was from 18 to 27. "Where the score is low (Affiliation-Psychosexual Score below)," wrote Cassel and Kahn, a general self-sufficiency or general psychosexual immaturity

Graph 3

The Relationship of Total Score to Grade Point Average
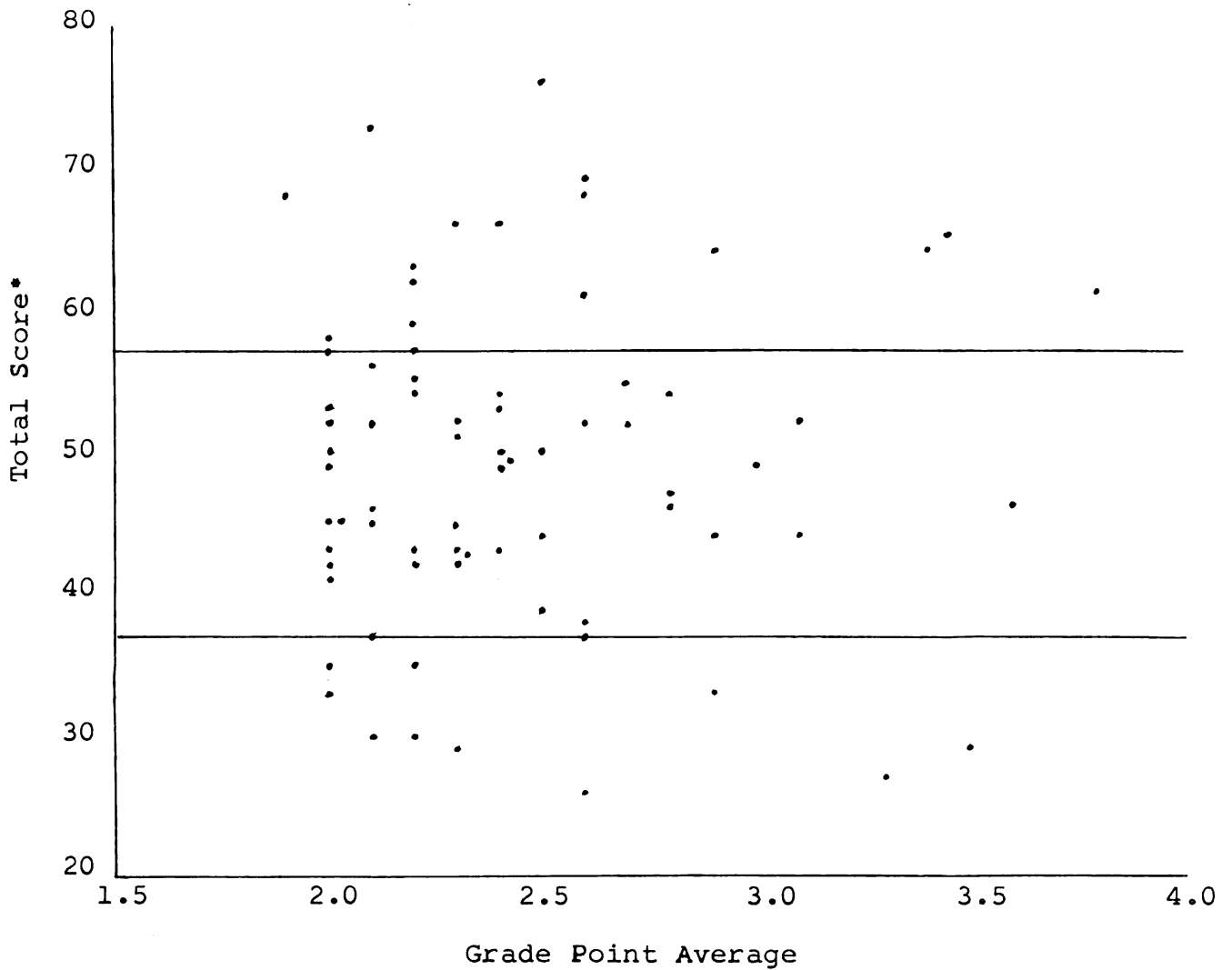
Grade Point Average

*Total Score below 37 indicates general emotional immaturity; Total Score above 57 suggests poor mental health; Total Score between 37 and 57 suggests normal personality adjustment.

Graph 4

The Relationship of Nurturance Scores
to Grade Point Average
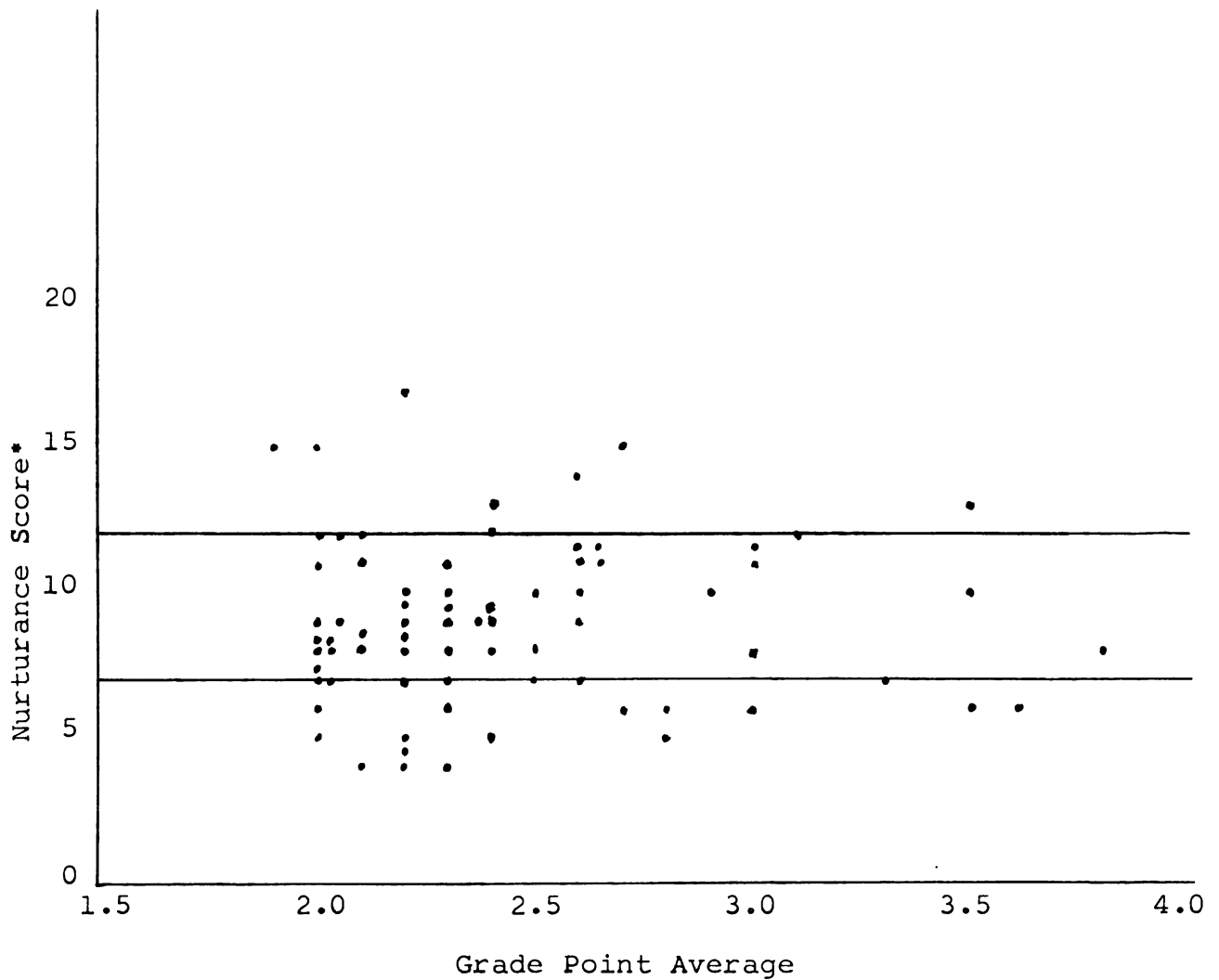
*The range delineated by Cassel and Kahn to indicate normal
adjustment for the Nurturance Score was from 7 to 12.

Graph 5

The Relationship of Affiliation-Psychosexual Scores
to Grade Point Average
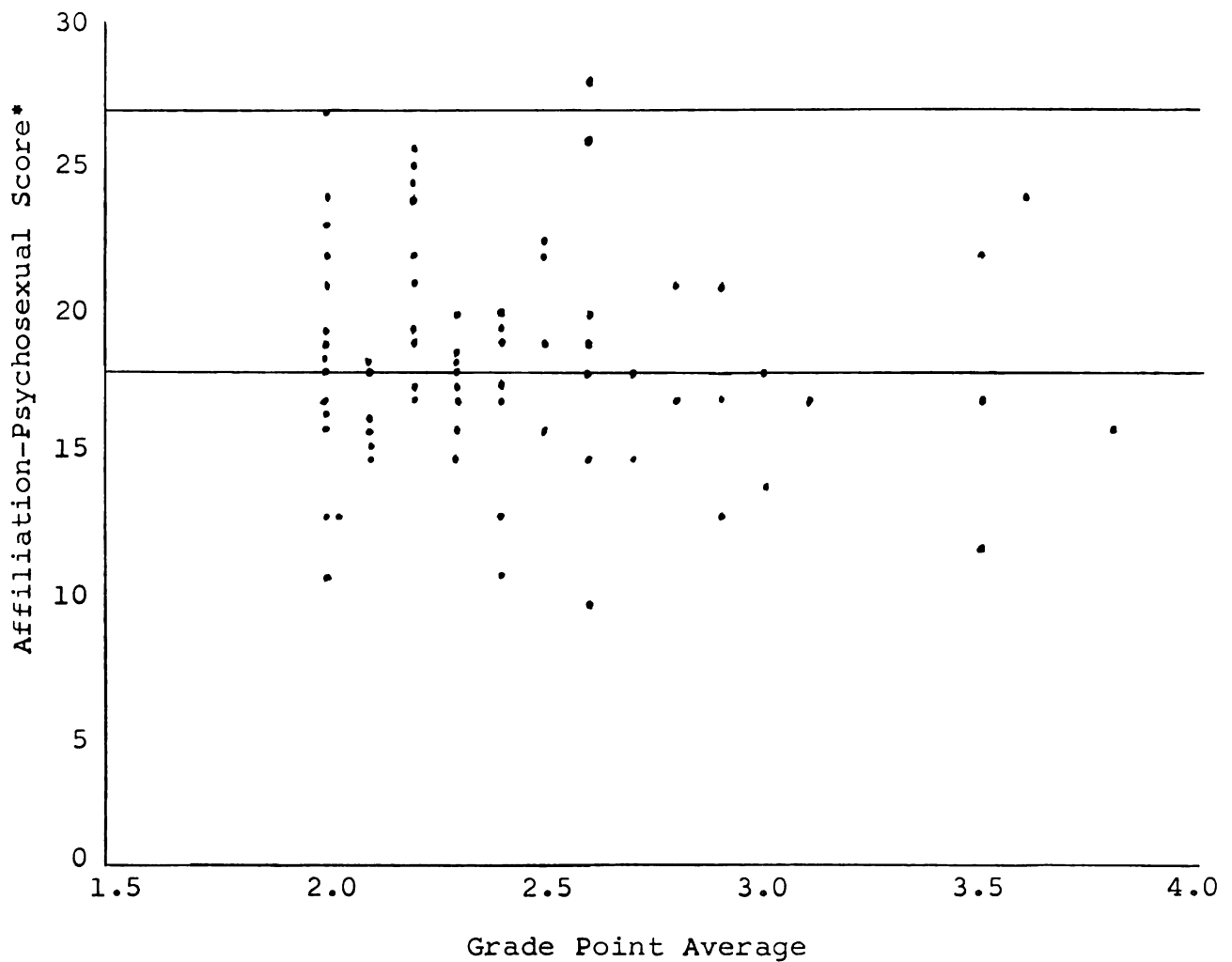
*The range delineated by Cassel and Kahn to indicate normal
adjustment for the Affiliation-Psychosexual Score was from
18 to 27.

of the individual is indicated."[3] "Data from the individual case histories must be utilized in determining which of these two conditions is present."[4] An analysis of the case histories of each student was not undertaken so that the clustering which occurred around the numerical index of average, i.e., normal scores, and low scores cannot be identified as representing a determined percentage of the self-sufficiency syndrome or the psychosexual immaturity one. As viewed from the y axis, the clustering once again falls between the 2.0 and 2.5 grade point average level. From a visual analysis of the position of the scores, no distinctive patterning that would seem to indicate a significant relationship of grade point average to Affiliation-Psychosexual Needs was evidenced.

The fourth analysis Affiliation-Psychosexual scores were plotted against Nurturance scores. These two scores were pictorially analyzed in an effort to ascertain the relationship of the need of adult females to play the father role and their need to relate to members of the opposite sex. The scores were randomly spread around a centralized cluster between Nurturance score 7 and 12 and Affiliation-Psychosexual score of 15-20. It appeared as though Nurturance scores had a slight tendency to relate negatively to

---

[3]Ibid., p. 40.

[4]Ibid., p. 40.

Affiliation-Psychosexual scores. In terms of the needs measured, a student in this sample who had a normal or high need-state-activeness to play the father role tended also to have a normal or low need-state-activeness to relate to members of the opposite sex (Graph 6).

A tabular analysis of the data as recorded in Graph 7 (Appendix) was the final descriptive analysis employed. Upon inspection, no distinctive patterning of need state activeness appeared to be related to the student's level of achievement. Of the 19 students who had low grade point averages as defined in this study (1.95 to 2.17), the mean number of scores received which was representative of a high need activeness was .63 per student. The mean number of low need state scores received among the 19 students with low grade point averages was .89 per student. Considering the 19 high achieving students in the sample, those with grade point averages between 2.67 and 3.81, the mean number of high need state scores was 1.2 per student. Likewise, the mean number of low need state scores received was 1.2 per student among the high achieving. These calculations show that, for this sample, the high achieving student tends to have a greater number of high need state activeness scores, and also a greater number of low need state scores than the low achieving student. In other words, the high achiever tends to have more scores that fall beyond the indices of normalcy as described by Cassel and Kahn

Graph 6

The Relationship of Affiliation-Psychosexual Scores
to Nurturance Scores
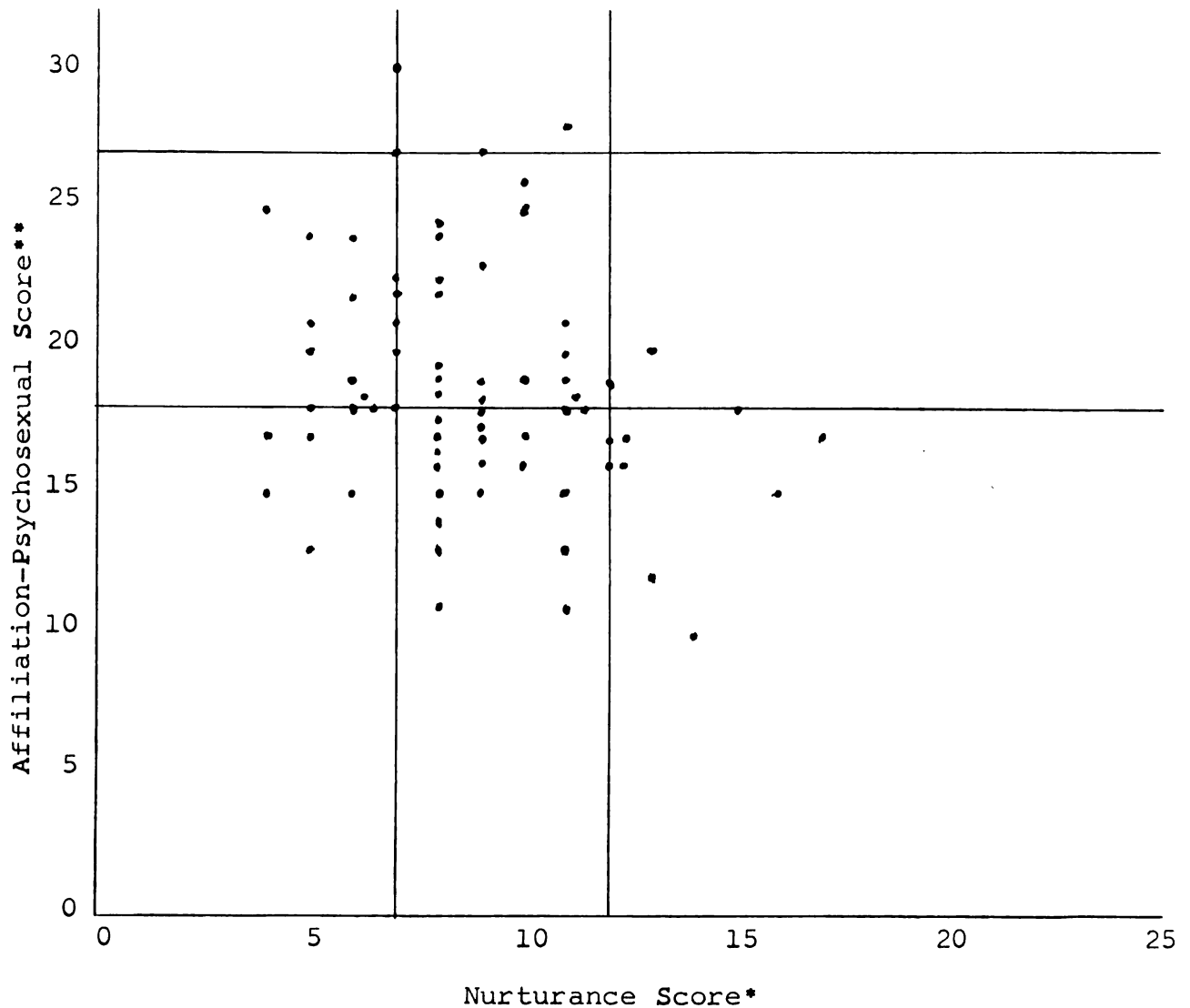
Nurturance Score*

*The range delineated by Cassel and Kahn to indicate normal
adjustment for the Nurturance Score was from 7 to 12.

**The range delineated by Cassel and Kahn to indicate normal
adjustment for the Affiliation-Psychosexual Score was from
18 to 27.

than does the low achiever.

The mean grade point averages were determined for the students whose Total Scores were above 57, for those between 37 and 57 inclusive and for those below 37. Table 6 reports the results.

Table 6

A Distribution of the Total Scores Received by Each
Student and His Corresponding Grade Point Average

Total Scores above 57 and GPA		Total Scores between 37 and 57 and GPA						Total Scores below 37 and GPA	
Scores	GPA	Scores	GPA	Scores	GPA	Scores	GPA	Scores	GPA
76	2.54	57	2.28	50	2.59	44	3.19	35	2.20
73	2.18	57	2.03	50	2.00	44	2.36	35	2.02
68	2.65	56	2.16	49	2.49	44	2.59	33	2.08
68	1.95	55	2.74	49	2.43	44	2.93	33	2.99
68	2.69	55	2.21	49	2.04	43	2.39	32	2.01
66	2.47	54	2.47	49	2.44	43	2.22	30	2.22
66	2.37	54	2.28	49	3.03	43	2.42	29	2.34
65	3.52	53	2.09	47	2.85	42	2.00	29	3.51
64	2.21	53	2.48	46	2.11	42	2.03	27	3.33
64	2.99	52	2.74	46	2.81	42	2.37	26	2.62
64	3.59	52	2.36	46	3.61	42	2.20		
62	2.22	52	2.36	45	2.04	41	2.03		
61	3.81	52	2.67	45	2.02	39	2.54		
61	2.67	52	2.04	45	2.17	38	2.62		
59	2.28	52	3.19	45	2.31	37	2.18		
58	2.05	51	2.13			37	2.63		

The mean grade point average for the students who scored above 57 on Total Score was 2.63. For those scoring

between 37 and 57 inclusive on Total Score, the mean grade point average was 2.42; and for those scoring below 37 on Total Score the mean grade point average was 2.53. The difference between the middle range scores and the higher range scores was .21; the difference between the middle range scores and the lower range ones was .17. The mean of the grade point averages for this sample in the normal range, as described by Cassel and Kahn, was lower than the means of either the high or the low scorers. The figures are not directly comparable, however, as the high range represents 16 students, the normal range 45 students, and the low range 12 students. A weighting of the scores to account for the difference in the number of the students in each of the ranges (high, normal, and low) was not under-taken as the results of the statistical analyses of the data which follow, correlate the relationship of grade point average to Total Scores.

Results of the Statistical Analyses of the Data

The statistical analyses of the data as presented by the Michigan State University 3600 Computer appear in Tables 7 through 12.

Tables 7 and 8 report the computerized results of a problem of least squares in which the data on each student in the sample were submitted as follows:

1. The seven unaltered scores of each student as measured by the GPPT (Tension Reduction Quotient, Nurturance,

Withdrawal, Neuroticism, Affiliation-Psychosexual, Succor-
ance, and Total Score).

    2. The grade point average of each student.

Table 7

Simple Correlations of Unaltered Data

GPA	1	1.000						
TRQ	2	0.031	1.000					
NURT	3	-0.022	0.275	1.000				
WITH	4	-0.051	-0.039	0.168	1.000			
NEU	5	0.073	0.200	0.002	0.006	1.000		
AFF	6	-0.048	-0.353	-0.249	-0.388	-0.362	1.000	
SUCC	7	0.122	0.322	-0.055	-0.359	-0.180	-0.186	1.000
TOTAL	8	0.052	0.963	0.327	0.122	0.272	-0.478	0.384
		1 GPA	2 TRQ	3 NURT	4 WITH	5 NEU	6 AFF	7 SUCC

Key:

  GPA = Grade point average
  TRQ = Tension Reduction Quotient
 NURT = Nurturance
 WITH = Withdrawal
  NEU = Neuroticism
  AFF = Affiliation-Psychosexual Needs
 SUCC = Succorance
TOTAL = Total Score

Of the 28 simple correlations that were reported
in Table 7, 12 factors correlated at the .05 level of sig-
nificance for a sample of 73 persons; and 9 of the factors
correlated at the .01 level of significance.[5] As can be

[5]Helen M. Walker and Joseph Lev, Statistical Infer-
ence (New York: Henry Holt & Co., 1953), p. 470.

seen from the Table of Simple Correlations, the closest
relationship that appeared between any two of the factors
was that of the .963 correlation of the Tension Reduction
Quotient to Total Score.

The factors significant at the .05 level and their
coefficients of correlation are reported below. Those fac-
tors also significantly correlated at the .01 level are
indicated by an asterisk.

1. Nurturance to Tension Reduction Quotient   .275

2. Affiliation-Psychosexual to Tension
   Reduction Quotient   -.353*

3. Succorance to Tension Reduction Quotient   .322*

4. Total Score to Tension Reduction Quotient   .963*

5. Affiliation-Psychosexual to Nurturance   -.388*

6. Total Score to Nurturance   .327*

7. Affiliation-Psychosexual to Withdrawal   .388*

8. Succorance to Withdrawal   -.359*

9. Affiliation-Psychosexual to Neuroticism   -.362*

10. Total Score to Neuroticism   .272

11. Total Score to Affiliation-Psychosexual   -.478*

12. Total Score to Succorance   .384*

For this sample 42.8 percent of the GPPT factors
correlated to one another and to grade point average were
significant at the .05 level; 32.1 percent were significant
at the .01 level. No significant relationship appeared
between grade point average and any of the need states as
measured by the GPPT.

Comparing the correlation of the data results of this study to that reported by Cassel and Kahn[6] in support of the validity and reliability of the GPPT, 66.6 percent of the Cassel and Kahn correlations were significant at the .05 level; and 60 percent were significant at the .01 level.

The factors significant at the .05 level in the Cassel and Kahn study and their coefficients of correlation are reported below. Those factors also significantly correlated at the .01 level are indicated by an asterisk.

1. Nurturance to Tension Reduction Quotient   .188*

2. Neuroticism to Tension Reduction Quotient   .122

3. Affiliation-Psychosexual to Tension Reduction Quotient   -.181*

4. Affiliation-Psychosexual to Nurturance   -.354*

5. Succorance to Nurturance   -.389*

6. Neuroticism to Withdrawal   -.293*

7. Affiliation-Psychosexual to Withdrawal   -.398*

8. Succorance to Withdrawal   -.223*

9. Succorance to Neuroticism   -.314*

10. Succorance to Affiliation-Psychosexual   .268*

Five of the significant correlations in the current study are also significant in the Cassel and Kahn study. These are reported below. The asterisks indicate significance at the .01 level.

---

[6]Cassel and Kahn, _op. cit._, p. 10.

	Correlation of the Coefficients in Current Study	Correlation of the Coefficients in C & K Study
1. Nurturance to TRQ	.275	.188*
2. Affiliation-Psy. to Tension Reduction Quot.	.353*	.181*
3. Affiliation-Psy. to Nurturance	.388*	.354*
4. Affiliation-Psy. to Withdrawal	.388*	.398*
5. Succorance to Withdrawal	.359*	.223*

Table 8 reports the regression coefficients, the standard error of the coefficients, the Beta Weights, and the Standard Error of the Beta Weights as computed from the unaltered GPPT scores and grade point average.

Table 8

Regression Coefficients and Beta Weights of Unaltered Data

	Regression Coefficients	Standard Errors of Coefficients	Beta Weights	Standard Errors of Betas
TRQ	-0.010	0.048	-0.297	1.369
NURT	-0.004	0.028	-0.024	0.176
WITH	-0.009	0.058	-0.061	0.411
NEU	0.007	0.031	0.068	0.285
AFF	0.000	0.020	0.004	0.182
SUCC	0.012	0.053	0.091	0.401
TOTAL	0.001	0.006	0.301	1.583

The values of the regression coefficients, as reported

in Table 8 represent "the determination of the best method

of combining . . . measures in order to predict a criterion.

The coefficients are the best combination of the factors

for the purpose of prediction of any peculiarities which

make one set of (beta) weights more effective than another."[7]

The beta weights, the result of the determination of the

least squares, also appear in Table 8. The degree to which

the standard errors of the regression coefficients and the

beta weights affect the regression coefficients and the

beta weights is reported in Table 9. As determined at the

outset of the study, standard errors which were equal to or

less than .35 of the value of each of the beta weights or

regression values would be accepted as evidence of the pre-

dictive value of the GPPT. A standard error of less than

.35 of the beta weights and of regression values would sup-

port the validity and reliability of the GPPT. Although

the values as determined by the regression analysis repre-

sent the best combination of the factors, the degree to

which the standard error is reflected in the regression

values indicated that the score received on any single need

state as measured by the GPPT has little or no predictive

value in terms of the score received on any other single

need state or to grade point average. The relatively high

value of the standard error of the betas which accompany

the beta weights gives evidence that in testing another

[7]Travers, op. cit., p. 378.

sample with the GPPT the beta weights would be altered significantly. In other words, as calculated from this sample, the magnitude of the standard error of the betas indicated that an accurate prediction of the activeness of any need state or grade point average from any other single factor cannot be applied to another sample.

Table 9

The Degree to which the Standard Error is Reflected in the Regression Values and Beta Weights of Each of the Scores (in the analysis of the unaltered data) as Measured by the Group Personality Projective Test

	Degree to which the standard error is reflected in regression values	Degree to which the standard error is reflected in beta weights
1. Tension Reduction Quotient	4.611	4.611
2. Nurturance	7.461	7.461
3. Withdrawal	6.707	6.707
4. Neuroticism	4.168	4.168
5. Affiliation-Psychosexual	50.888	50.816
6. Succorance	4.400	4.400
7. Total	5.252	5.253

Tables 10 and 11 report the computerized results of a problem of least squares in which the data were submitted as follows:

1. The seven altered scores as described in the Analysis of the Data on page 29 and in Graph 2, that each

student received on the GPPT (Tension Reduction Quotient, Nurturance, Withdrawal, Neuroticism, Affiliation-Psychosexual, Succorance and Total Score).

2. The grade point averages of each of the students in the sample.

Table 10

Simple Correlations of Altered Data

		1 GPA	2 TRQ	3 NURT	4 WITH	5 NEU	6 AFF	7 SUCC
GPA	1	1.000						
TRQ	2	0.019	1.000					
NURT	3	-0.100	0.294	1.000				
WITH	4	-0.155	-0.052	0.153	1.000			
NEU	5	0.093	0.156	-0.048	-0.008	1.000		
AFF	6	-0.045	-0.372	-0.168	-0.124	-0.376	1.000	
SUCC	7	0.151	0.249	-0.098	-0.384	-0.090	-0.121	1.000
TOTAL	8	0.128	0.860	0.254	0.085	0.131	-0.353	0.195

The purpose of this manipulation of the data was to analyze the trend of the relationships between any two factors. The weighting of the scores was, in effect, a summarization of the scores of the students in the sample into three categories: high, normal and low scores. The Table of the Simple Correlations, therefore, presented a generalized view of the relationships of the variables of

the GPPT to one another and to grade point average. Of
the 28 simple correlations that were reported in Table 7,
eight factors correlated at the .05 level of significance,
and five of the factors correlated at the .01 level of sig-
nificance. The closest relationship that appeared between
any two factors was that of the .860 correlation of the
Tension Reduction Quotient to Total Score. The factors
significant at the .05 level and their coefficients of cor-
relation are reported below. Those factors also signifi-
cantly correlated at the .01 level are indicated by an as-
terisk.

1. Nurturance to TRQ   .294

2. Affiliation-Psy. to TRQ   -.372*

3. Succorance to TRQ   .249

4. Total Score to TRQ   .860*

5. Total Score to Nurturance   .254

6. Succorance to Withdrawal   -.384*

7. Affiliation-Psy. to Neuroticism   -.376*

8. Total Score to Affiliation-Psy.   -.353*

Comparing the results of the correlations of the
manipulated data to those of the unaltered data, the eight
significant correlations of the manipulated data are also
significant in the unaltered data. Four of the significant
correlations of the unaltered data, however, do not appear
significant in the correlations of the manipulated data.
These are:

1. Affiliation-Psychosexual Needs to Nurturance

2. Affiliation-Psychosexual Needs to Withdrawal

3. Total to Neuroticism

4. Total to Succorance

Table 11 reports the regression coefficients, the standard error of the coefficients, the Beta Weights, and the Standard Error of the Beta Weights of the altered data. As a result of the manipulation of the data, the regression coefficients and the beta weights tended to be larger than those in the unaltered analysis. Of importance again, however, are the relatively high standard errors of the regression coefficients and of the beta weights.

Table 11

Regression Coefficients and Beta Weights of Altered Data

	Regression Coefficients	Standard Errors of Coefficients	Beta Weights	Standard Errors of Betas
TRQ	-0.372	0.194	-0.469	0.245
NURT	-0.048	0.107	-0.057	0.127
WITH	-0.148	0.111	-0.179	0.135
NEU	0.100	0.138	0.094	0.130
AFF	-0.016	0.114	-0.019	0.139
SUCC	0.092	0.128	0.097	0.136
TOTAL	0.398	0.180	0.523	0.237

The degree to which the standard errors are reflected in the regression values and Beta weights is reported in Table 12.

Table 12

The Degree to which the Standard Error is Reflected in the
Regression Values and Beta Weights of Each of the Scores
(in the analysis of the altered data) as Measured by the
Group Personality Projective Test

	Degree to which the standard error is reflected in regression values	Degree to which the standard error is reflected in beta weights
1. Tension Reduction Quotient	.522	.522
2. Nurturance	2.236	2.236
3. Withdrawal	.751	.751
4. Neuroticism	1.380	1.380
5. Affiliation-Psychosexual	7.171	7.171
6. Succorance	1.395	1.395
7. Total	.453	.453

As in the analysis of the unaltered data, the magnitude of
the standard errors was such that an accurate prediction
of any need state activeness of GPPT from any other factor,
when weighted, cannot be applied to another sample.

CHAPTER 6

SUMMARY, CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to investigate the adult female in terms of the activeness of certain personality needs as measured by the GPPT and how these needs relate to the student's level of achievement. The total sample included 73 Caucasian, female, upper division, Michigan State University, Home Economics students. The GPPT, developed by Cassel and Kahn in 1958, was used to assess the need-state activeness present at the time of testing; and the Michigan State grade point average for each student in the sample was used as a measure of the student's achievement.

Each of the hypotheses of this study is listed below. Each hypothesis is followed by a statement which indicates whether or not the statistical analyses indicate support.

1. The mean grade point average for students scoring above 57 or below 37 on the Total Score as measured by the GPPT is the same as the mean grade point average for students scoring between 37 and 57.

The mean grade point average for the students who scored above 57 of total score was 2.68, for those scoring between 37 and 57, the mean was 2.42, and for those scoring

below 37 the mean was 2.53. In that there is relatively
little difference between the means of the grade point aver-
ages of students who scored high, normal, and low on Total
Score as measured by the GPPT, Hypothesis 1 appears to be
supported.

2. For upper division, female, Caucasian, Michigan
State University Home Economics students:

A. No significant relationship exists between the Ten-
   sion Reduction Quotient and Nurturance, the Tension
   Reduction Quotient and Withdrawal, the Tension Re-
   duction Quotient and Neuroticism, the Tension Reduc-
   tion Quotient and Affiliation-Psychosexual Needs,
   the Tension Reduction Quotient and Succorance, and
   the Tension Reduction Quotient and Total Score, as
   measured by the GPPT.

   Although no significant relationship existed
   between the Tension Reduction Quotient and With-
   drawal, or Neuroticism, a significant relationship
   was indicated between the Tension Reduction Quotient
   and Nurturance (.275), between Tension Reduction
   Quotient and Succorance (.322), and between Tension
   Reduction Quotient and Total Score (.963). A signif-
   icant negative relationship existed between Tension
   Reduction Quotient and Affiliation-Psychosexual Needs
   (-.353). Hypothesis 2A is partially rejected in
   light of these significant correlations.

B. No significant relationship exists between Nurtur-
ance and Withdrawal, Nurturance and Neuroticism,
Nurturance and Affiliation-Psychosexual Needs, Nur-
turance and Succorance, and Nurturance and Total
Score.

Although no significant relationship exists be-
tween Nurturance and Withdrawal, Neuroticism, or
Succorance, a significant relationship was determined
between Nurturance and Total Score (.327). A sig-
nificant negative relationship existed between the
Nurturance Score and Affiliation-Psychosexual Needs
(-.388). Hypothesis 2B is partially rejected in
light of these significant correlations.

C. No significant relationship exists between Withdrawal
and Neuroticism, Withdrawal and Affiliation-Psycho-
sexual Needs, Withdrawal and Succorance and Withdrawal
and Total Score, as measured by the GPPT.

No significant relationship existed between With-
drawal and Neuroticism, or Total Score. A signif-
icant negative relationship did exist, however, be-
tween Withdrawal and Affiliation-Psychosexual Needs
(-.388), and between Withdrawal and Succorance
(-.359). Hypothesis 2C is partially rejected in
light of these significant correlations.

D. No significant relationship exists between Neurot-
icism and Affiliation-Psychosexual Needs, Neuroticism

and Succorance, and Neuroticism and Total Score, as measured by the GPPT.

Of the three correlations applicable to this hypothesis, the relationship of Neuroticism to Affiliation-Psychosexual Needs (-.362) was the only one of significance. Hypothesis 2D is partially rejected in light of this significant correlation.

E. No significant relationship exists between Affiliation-Psychosexual Needs and Succorance or Affiliation-Psychosexual Needs and Total Score.

In that the correlation of Affiliation-Psychosexual Needs to Total Score produced a significant negative relationship (-.478), Hypothesis 2E has been partially rejected. No significant relationship, however, was evidenced between Affiliation-Psychosexual Needs and Succorance.

F. No significant relationship exists between Succorance and Total Score, as measured by the GPPT.

A significant relationship (.384) was evidenced between Succorance and Total Score. Hypothesis 2F was rejected in light of this significant correlation.

G. No significant relationship exists between grade point average as assessed by Michigan State University and the Tension Reduction Quotient, grade point average and Nurturance, grade point average and

Withdrawal, grade point average and Neuroticism, grade point average and Affiliation-Psychosexual Needs, grade point average and Succorance and grade point average and Total Score, as measured by the GPPT.

There were no significant correlations between grade point average and any of the seven scores measured by the GPPT. Hypothesis 2G is supported.

Based on the analysis of the need state activeness as measured by the GPPT for the sample of 73 Caucasian, female, upper division, Michigan State University, Home Economics students, it appears that the study supports the notion that the activeness of personality needs has little, if any, effect on academic achievement in a university setting. This conclusion, however, has been drawn from statistical analyses in which the standard errors of the regression coefficients and beta weights have been relatively high. To state the conclusion in terms of a practical application, the magnitude of the standard errors is large enough that by using the results of this study as the norm, no accurate prediction of the activeness of any of the need states as measured by the GPPT, or of grade point average, could be attempted for another sample.

Several questions are raised by these data.

1. Was the variability of the factors inherent in the sample greater than those for which the GPPT was constructed?

2. The authors of the GPPT have stated that the test has been empirically validated. What factor or combination of factors in this study have been responsible for the magnitude of the standard error of the regression coefficients and of the beta weights?

3. Does the test, in fact, discriminate optimally between normal and non-normal personality constructs in terms of need state activeness?

The implications for further study, therefore, would include research designed to investigate these questions.

In conclusion, it can be stated that the purposes of this study as identified at the outset were not wholly fulfilled. Rather than identifying significant relationships between certain need states, and between these need states and grade point average in an effort to develop a criterion for the prediction of need-state activeness from grade point average or grade point average from need-state activeness, the research serves as a validation study of the GPPT.

Although not identifiable in the planning stages of this study, the GPPT was unsatisfactory for the purposes for which it was intended. As a learning experience for the author, however, the problems that surrounded the instrument pointed out very specifically the advantages for pretesting an instrument. If this study were to be repeated, the author suggests that a pretesting of the instrument precede final selection of an instrument.

BIBLIOGRAPHY

Books

Cassel, R. N., and T. C. Kahn. "The Group Personality Projective Test (GPPT)," Psychological Reports, 8 (1961), (Monograph Suppliment 1-V8, 1961).

Hall, Calvin S., and Gardner Lindzey. Theories of Personality. New York: John Wiley and Sons, Inc., 1957.

Hurlock, Elizabeth B. Child Development. New York: McGraw-Hill, 1964.

McCandless, Boyd R. Children and Adolescents. New York: Holt, Rinehart and Winston, Inc., 1962.

Sullenger, T. Earl. Social Determinants in Juvenile Delinquency. New York: John Wiley and Sons, Inc., 1936.

Teagarden, F. M. Child Psychology for Professional Workers, rev. ed. Englewood Cliffs, N.J.: Prentice-Hall, 1946.

Watson, Robert I. The Clinical Method in Psychology. New York: John Wiley and Sons, Inc., 1963.

Periodicals

Allen, P. J. "Childhood Backgrounds of Success in a Profession," American Sociological Review, 26, 1955.

Campbell, D. T. "The Indirect Assessment of Social Attitudes," Psychological Bulletin, 56, 1959.

Freeman, H. E., and M. Showell. "The Role of the Family in the Socialization Process," Journal of Social Psychology, 37, 1953.

Goldstein, Fred J. "Custom Made or Store Bought Projective Techniques? What Do They Represent?" Journal of Projective Techniques, 1961.

Hoffman, L. W., S. Rosen, and R. Lippitt. "Parental Coerciveness, Child Autonomy, and Child's Role at School," Sociometry, 23, 1960.

Koppitz, E. M. "Relationships Between Some Background Factors and Children's Interpersonal Attitudes," Journal of Genet. Psychology, 91, 1957.

Livson, N., and P. H. Mussen. "The Relation of Ego Control to Overt Aggression and Dependency," Journal of Abnormal Social Psychology, 55, 1957.

Marmor, J. "Psychological Trends in American Family Relationships," Journal of Marriage and Family Living, 13, 1951.

Medennus, G. R. "The Relation between Several Parent Measures and the Child's Early Adjustment to School," Journal of Educational Psychology, 52, 1961.

Mummery, D. V. "Family Backgrounds of Assertive and Non-assertive Children, Child Development, 25, 1954.

Rexford, E. N., and S. T. Van Amerogen. "The Influence of Unsolved Maternal Oral Conflicts Upon Impulsive Acting Out in Young Children," American Journal of Orthopsychiatry, 27, 1957.

Sargent, Helen. "Projective Methods: Their Origins, Theory, and Application in Personality Research," Psychological Bulletin, 42, 1945.

Serot, N. M., and R. C. Teevan, "Perception of the Parent-child Relationship and its Relation to Child Development," Child Development, 32, 1961.

Wallach, M. A., D. N. Ulrich, and M. B. Grunebaum. "Relationship of Family Disturbance to Cognitive Difficulties in a Learning-Problem Child," Journal of Consultant Psychology, 24, 1960.

Thesis

Lange, Merle LeRoy. "A Comparative Analysis of Achieving and Underachieving Twelfth Grade Students of Phoenix Central High School on the Non-Intellectual Factors of the Group Personality Projective Test and the Test of Social Insight." An unpublished doctoral thesis, Colorado State College, 1962.

APPENDIX

Graph 7

A Tabulation of the Non-normal Scores and Non-average Grade Point Averages for Each Student in the Sample

	TRQ		NURT		WITH		NEU		AFF		SUCC		TOTAL	
1	50		15										67	
		1.95		1.95										1.95
2					17									
						1.95								1.95
3														
									16	2.0				2.00
4														
											2	2.01	32	2.01
5							25							
								2.02					35	2.02
6														
											4	2.02		2.02
7														
														2.03
8							28							
								2.03	11	2.03				2.03
9					18									
			6	2.03		2.03					4	2.03		2.03
10					16									
						2.04					3	2.04		2.04
11														
														2.04
12							27							
								2.04	17	2.04				2.04
13	36		15											
		2.05		2.05					16	2.05				2.05
14														
	5	2.08											33	2.08
15					18									
						2.09			13	2.09				2.09
16														
					7	2.11								2.11
17														
									15	2.13				2.13
18														
														2.16
19														
									16	2.17				2.17
20	53												73	
							16							
21														
			4						15					
22														
													35	

Graph 7 (continued)

	TRQ	NURT	WITH	NEU	AFF	SUCC	TOTAL
23			17			4	
24	43						64
25				26	17		
26	36	17	16		17		62
27	5	4					30
28							
29		5	7			20	
30	36	5	6			16	
31	40						51
32					17		
33	3				16		29
34		6					
35							
36							
37				24	15		
38	48	4	6	26	17		66
39			16			3	
40		13	8	12			
41						14	
42		5	17	24	13		
43					17		
44	40			27	11		65
45	36		8			14	
46							

Graph 7 (continued)

	TRQ		NURT		WITH		NEU		AFF		SUCC		TOTAL	
47	61										16		76	
48					8									
49									16					
50					7		30							
51							12							
52	0				5				28				25	
53														
54	43										13		67	
55					17	2.67							61	2.67
56			14	2.67	18	2.67			10	2.67				2.67
57	41	2.69							15	2.69	14	2.69	68	2.69
58			6	2.74					15	2.74	17	2.74		2.74
59														2.74
60			5	2.81										2.81
61			6	2.85										2.85
62									17	2.93				2.93
63	40	2.99							13	2.99			64	2.99
64	8	2.99											33	2.99
65									14	3.03	14	3.03		3.03
66							26	3.19	17	3.19	4	3.19		3.19
67			6	3.19										3.19
68	0			3.33					30	3.33			27	3.33
69	0		6	3.51		3.51							29	3.51
70	45	3.52							17	3.52			65	3.52

Graph 7 (continued)

	TRQ		NURT		WITH		NEU		AFF		SUCC		TOTAL	
71	38	3.59	13	3.59			24	3.59		3.59			64	3.59
									12					
72				3.61		3.61								3.61
			6		6									
73	35	3.81					25	3.81		3.81			60	3.81
									16					

THE GROUP
PERSONALITY
PROJECTIVE
TEST

by

RUSSELL N. CASSEL, Ed.D.

THEODORE C. KAHN, Ph.D.

(Illustrations by Fredrick L. Finch, B.A.)

INSTRUCTIONS

This is a test of your personality. It is concerned with assessing personal, social, and emotional need projections. In order to get an accurate measurement of your personality, you must answer each one of the questions as conscientiously as you can. Many times none of the answers provided in the booklet will quite describe what you believe is taking place, but you are to select the answer that comes closest to your idea, or is most acceptable to you. It is always necessary that you select one of the answers, and only one, for each of the questions, in order that we may compare your answers with those of other individuals who have taken the test.

There are no time limits or other special instructions. When you have decided on your answer, take the answer sheet provided you and find the number of the question you are answering on the extreme left side of the column. Then blacken in the appropriate space under the letter a, b, c, d, or e to indicate your choice for the corresponding answer as shown in the example.

Example: a b c d e
        34. || █ || || || ||

Do not discuss your answers with others while you are taking the test, because it is important that you not be influenced in making your selection of answers.

You should be able to finish the test in one class period, or about 40 minutes.

DO NOT MARK ON THE TEST BOOKLET

PSYCHOLOGICAL TEST SPECIALISTS
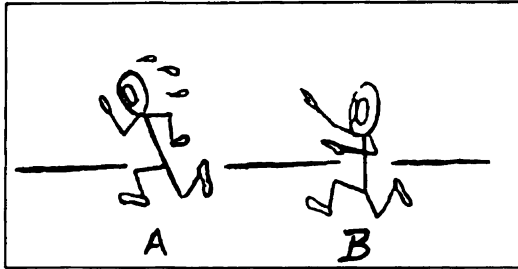
1. What will happen if B catches A?
   a. They are only playing a game of tag.
   b. A will be spanked.
   c. B will make up and become A's good friend.
   d. A will play ball on B's team.
   e. B will teach A not to lie or tell untruths.
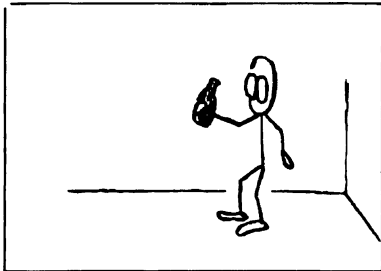
2. If something is in the bottle, what is it?
   a. A great and newly invented medicine.
   b. Vitamins for sick people.
   c. No one knows what it is.
   d. Mixed drinks of an alcoholic type to make cocktails for a party.
   e. Milk for a baby.
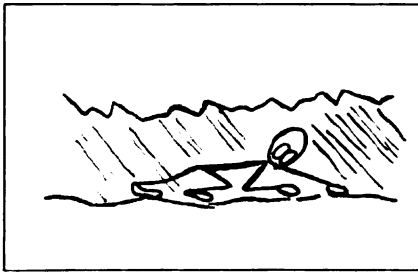
3. What is the person in the picture doing?
   a. On a vacation in the mountains.
   b. Hiding from the police.
   c. Trying to discover gold.
   d. Spying on the enemy.
   e. Crying because he was punished.
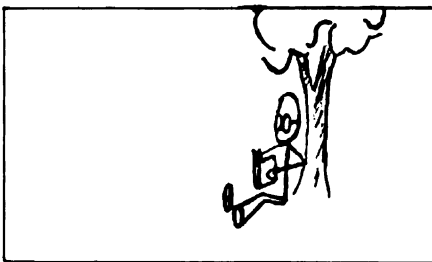
4. What is the person in the picture reading for?
   a. Trying to make counterfeit or fake money.
   b. Trying to forget some troubles.
   c. Trying to solve a hard problem.
   d. Reading a love story.
   e. Studying his school lesson.
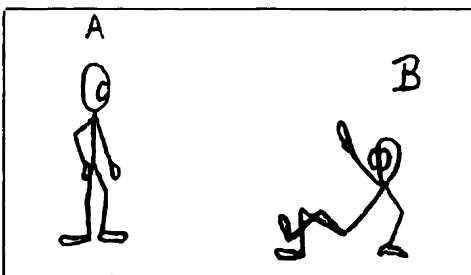
5. What is taking place in the picture?
   a. A and B are working together.
   b. A is showing B how to dance.
   c. A and B were fighting and B is trying to make up.
   d. Two members of a dance team.
   e. A caught B stealing from him.
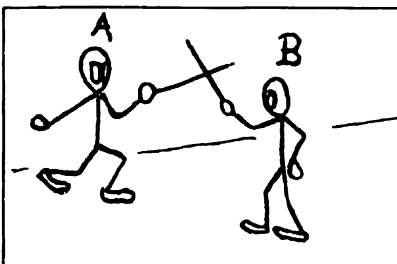
6. What are A and B doing in the picture?
   a. Two boys playing with broom sticks.
   b. B is the teacher of A, and both are soldiers.
   c. A and B are practicing to play in a sport.
   d. A is trying to kill B.
   e. B distrusts A very much.

GO ON TO NEXT PAGE

7. This child is crying because?
  a. It is very happy.
  b. It has run away from home.
  c. It is lost and cannot find its way home.
  d. It has been in a fight with some older children.
  e. It is homesick and wants to go home.

8. What is taking place in this picture?
  a. A is a chicken raiser or farmer.
  b. The chicken is a pet of A.
  c. A is trying to make a pet out of the chicken.
  d. A wants to kill the chicken and eat it.
  e. The chicken does not know whether to trust A.
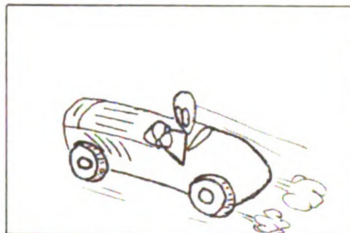
9. What is the man in the automobile doing?
  a. He is trying to win a race.
  b. Going for a ride on Sunday afternoon.
  c. Going home to make up with his wife after having a big argument with her.
  d. Going on a date with his girl friend.
  e. Going to visit mother.
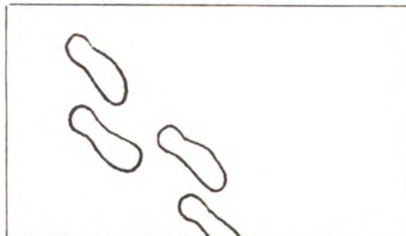
10. Whose footprints are in the picture?
  a. A lonesome person going for a walk.
  b. A child running away from home.
  c. A person trying to solve a very important problem.
  d. A good friend who belongs to the same club.
  e. A thief trying to rob someone.
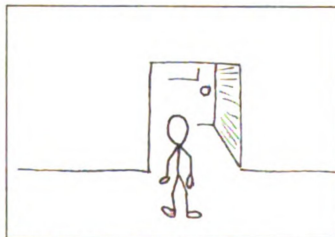
11. Where is the person in the picture going?
  a. On a vacation for a good time.
  b. Just taking a walk.
  c. He is worried because his wife is having a baby in the hospital.
  d. He is going home to his family after work.
  e. He is going to church to listen to the preacher.
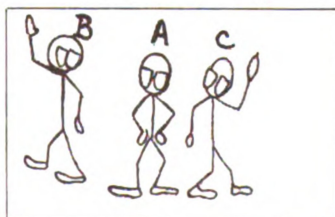
12. What is taking place in the picture?
  a. Three friends at a party.
  b. A is the boss of B and C, and he is talking to them.
  c. A is trying to settle an argument between B and C.
  d. They are all members of the same family.
  e. A is the mother of the children who are B and C.

GO ON TO NEXT PAGE
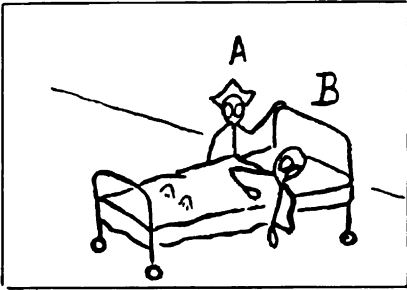
13. Who are the persons in the picture?
    a. B tried to commit suicide.
    b. B is just taking a rest and a good friend came in to talk.
    c. A is a nurse who is treating B.
    d. A and B are husband and wife.
    e. B is having a baby and will be a new mother.
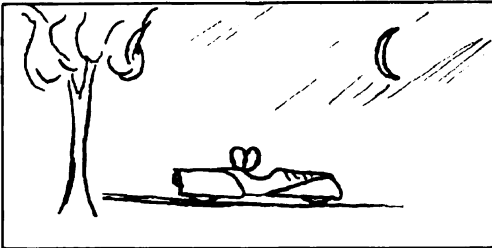
14. What is taking place in the automobile?
    a. Man and wife on vacation, and they are having a good time.
    b. Father and daughter driving.
    c. Two business partners talking.
    d. A boy and girl on a date.
    e. Mother and daughter driving.
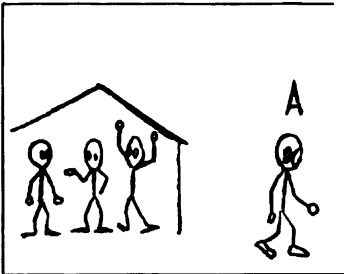
15. What is A doing in the picture?
    a. The other three do not want A in their group.
    b. A is the father of the family.
    c. A is worrying about some big problem which he has.
    d. A is trying to organize a social club.
    e. A is the mother of the family.
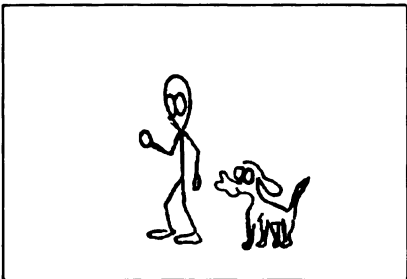
16. What is the dog in the picture doing?
    a. The dog and child are just playing.
    b. The child is training the dog to do some new tricks.
    c. The dog wants to make friends.
    d. The dog is trying to bite the person.
    e. The dog caught the child stealing.
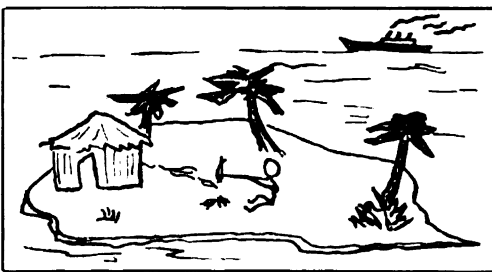
17. What is taking place in the picture?
    a. The person on the island was stranded in a shipwreck.
    b. The island is a lighthouse to guide ships.
    c. The ship is lost at sea.
    d. A tribal family on an island.
    e. A savage church and a mission.
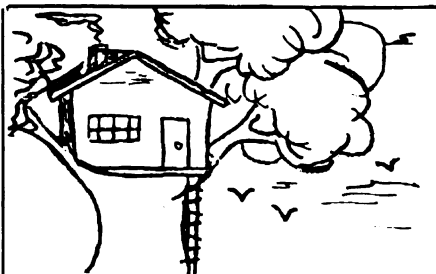
18. What is the house in the tree?
    a. A children's playhouse.
    b. The home of a hermit who is alone.
    c. A person who is trying to make peace with savages.
    d. Home of a beautiful princess.
    e. A hide-out for some robbers.

GO ON TO NEXT PAGE
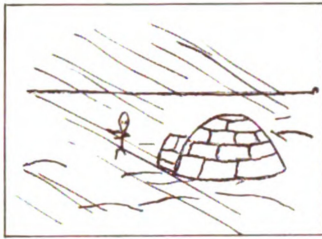
19. What is the Eskimo 'igloo' used for?
    a. A dance hall.
    b. A school house.
    c. A court of justice.
    d. A social club.
    e. A family house.
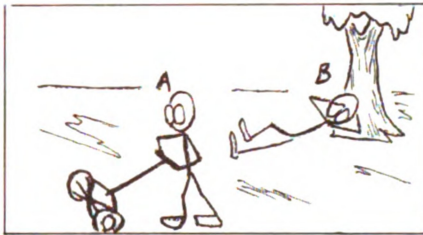
20. Who is B in the picture?
    a. A very sad person.
    b. A friend taking it easy.
    c. A religious minister or preacher.
    d. The brother of A.
    e. The mother of A.
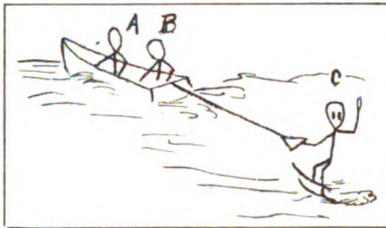
21. What is taking place in the picture?
    a. A, B, and C are friends on a vacation.
    b. C is trying to win a contest.
    c. C is worried about some problem which he has.
    d. A and B are brothers of C.
    e. C does not trust A and is trying to get him to stop the boat.
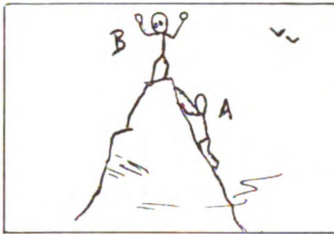
22. What is happening in this picture?
    a. Two lonely persons on a mountain.
    b. Two children running away from home.
    c. Two professors trying to solve a problem.
    d. Man and wife on a camping trip.
    e. A is spying on B because he does not trust him.

23. What is taking place in the picture?
    a. A happy person playing music.
    b. An army bugler getting soldiers out of bed.
    c. A drunken fellow making a fool out of himself.
    d. A high school class dance.
    e. Trying to collect money to give to the poor people.

24. What is the person in the picture doing?
    a. Digging a grave for a dead person.
    b. Building a house for his own family.
    c. Hunting for a buried treasure.
    d. Building a house for club meetings.
    e. Trying to bury his money so that it will not be stolen.

GO ON TO NEXT PAGE
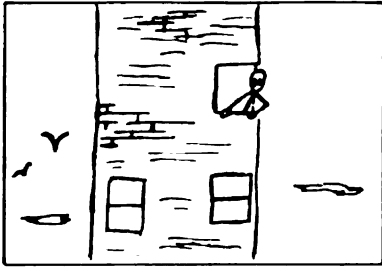
25. What is the person in the window doing?
    a. Trying to commit suicide.
    b. Just passing some time looking out.
    c. Trying to keep a person in the next building from jumping out.
    d. Trying to flirt with a girl next door.
    e. Calling for help to people next door.
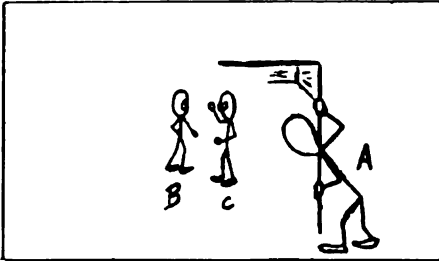
26. What is taking place in the picture?
    a. A is planning to rob B and C.
    b. It is a school playground.
    c. It is a meeting at a community church.
    d. B and C are sisters who are playing with their brother, who is A.
    e. A is a prison guard.
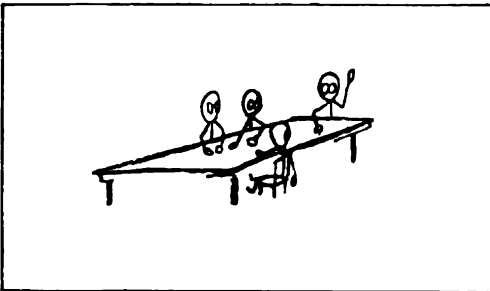
27. What is taking place in the picture?
    a. It is a picnic dinner with friends.
    b. A boss scolding some workmen.
    c. People trying to solve a very difficult problem.
    d. Boys with their girl friends on a dinner date.
    e. Thieves planning a big robbery.
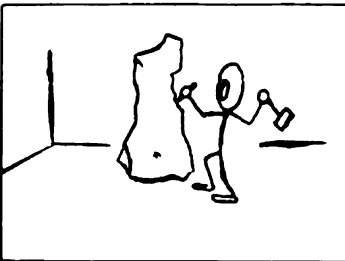
28. What is taking place in this picture?
    a. A person working on his hobby.
    b. Carving the statue of a great army general.
    c. A policeman trying to solve a big crime.
    d. Carving the statue of a beautiful woman.
    e. A convict or prisoner on a labor gang.
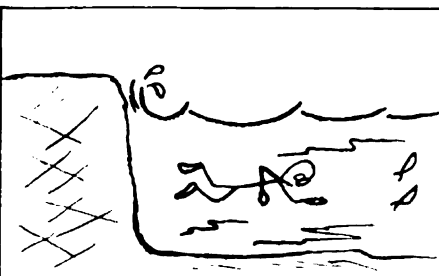
29. What is taking place in this picture?
    a. A person who is drowned and is dead.
    b. A captain of a swimming team.
    c. A person trying to catch some fish.
    d. A girl in a Bikini or short bathing suit.
    e. A person who is drowning and is crying for help.
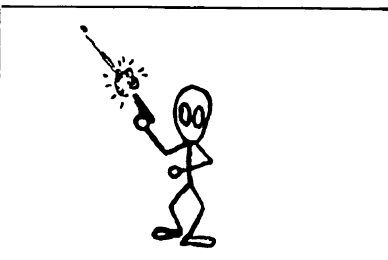
30. What is the man shooting the gun for?
    a. He is starting a horse race at the fair.
    b. A policeman is doing target practice.
    c. A hunter who is lost in the woods, and is trying to attract his buddies.
    d. A drunk trying to attract some girls who are nearby.
    e. A policeman after a robber.

GO ON TO NEXT PAGE
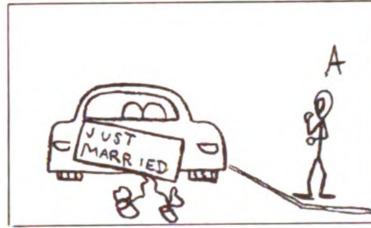
31. Who is A in this picture?
    a. A very sad ex-boy friend of the bride.
    b. A happy father of the bride.
    c. Don't know who it might be.
    d. A happy brother of the bride.
    e. A happy mother of the bride.

32. What is the person doing in the picture?
    a. A person is reading a very happy story.
    b. A preacher studying his sermon for Sunday.
    c. A lawyer reading a law book to find out if something is legal.
    d. A girl reading poetry to her lover.
    e. A baseball coach reading a new book of rules.
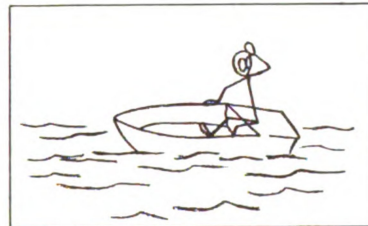
33. What is the person in the boat doing?
    a. Having a good time on a vacation.
    b. Went fishing to get out of a family quarrel.
    c. He is angry because he lost a sail and he cannot get home.
    d. He is a member of a boat club.
    e. He is afraid because he thinks a big storm is coming up and he has no sail.
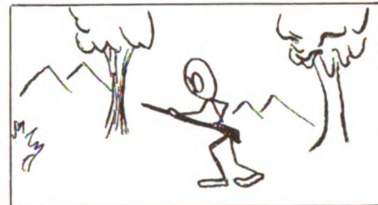
34. What is the person with the gun doing?
    a. On a hunting trip with friends.
    b. A policeman trying to catch a robber.
    c. Likes to fish better, but went hunting to please his friends.
    d. He is in a fight with another person and is trying to shoot him.
    e. He is trying to learn how to shoot a new gun which his father gave him.
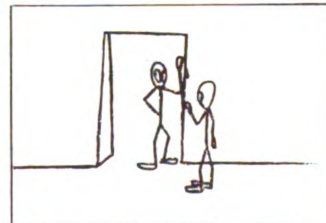
35. What is taking place in the picture?
    a. Two friends are planning for a party they want to give shortly.
    b. Two persons just talking.
    c. An angry person scolding a salesman.
    d. A boy trying to make a date with a girl who lives next door.
    e. An anxious mother getting milk for her baby.
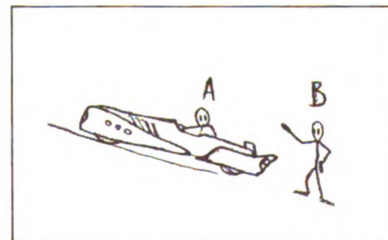
36. What is taking place in this picture?
    a. Two persons going for a ride in a new car.
    b. B is trying to sell A a new car.
    c. B is scolding his son for taking the family car without permission.
    d. B is saying goodbye to his wife who is going to a club meeting.
    e. B is trying to buy a new car.
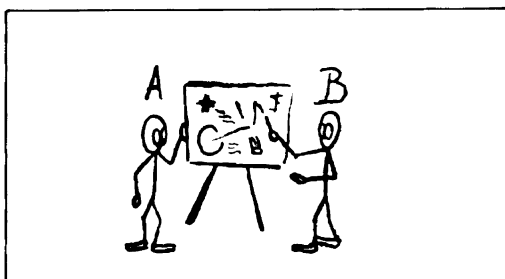
37. What is taking place in the picture?
    a. A and B are making a new invention.
    b. B is explaining how A failed a test in school.
    c. A and B are trying to find out why their new invention doesn't work.
    d. B is explaining how to make money to a partner.
    e. B is trying to find out from a doctor what his illness is.
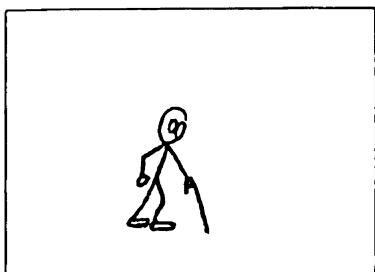
38. What is the man with the cane doing?
    a. Someone has just picked his pocket.
    b. Going for a walk in the park.
    c. Trying to decide whether to go hunting.
    d. The president of a large company or factory.
    e. Collecting money to help build a new church.
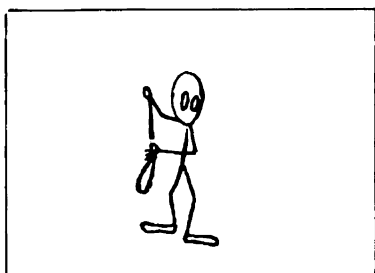
39. What is the rope used for in the picture?
    a. A person plans to commit suicide with it.
    b. It is a cowboy's lasso.
    c. To be used for a tug-of-war or game.
    d. A mad group or crowd wants to use it to lynch or hang someone.
    e. A church bell rope.
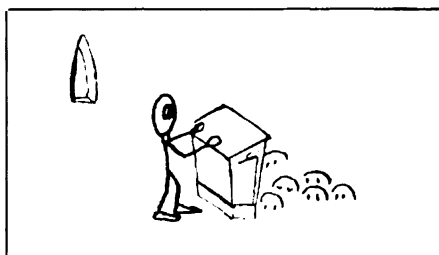
40. What is the preacher's sermon about?
    a. A funeral sermon.
    b. About gambling in the small town.
    c. On war and communism.
    d. On marriage problems and the raising of children.
    e. An Easter sermon during sunrise services.
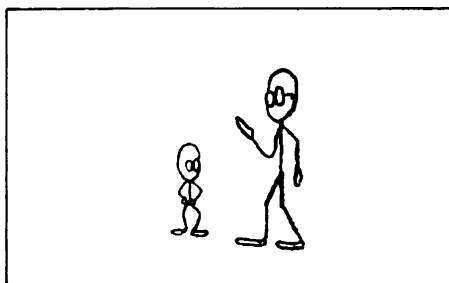
41. What is the person doing with the child?
    a. Taking the child to a circus.
    b. Giving orders to a young worker.
    c. Scolding the child for breaking a window with a ball.
    d. A parent talking to his child.
    e. Telling a child about the troubles of old people.
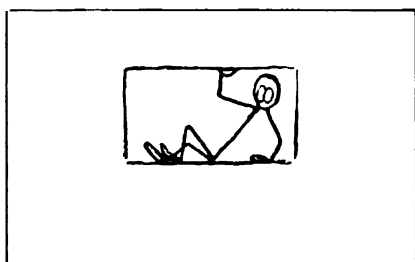
42. What is taking place in the picture?
    a. A child playing a game of hide-and-seek with friends.
    b. A child hiding from an angry parent.
    c. Trying to find where a treasure is hidden.
    d. Hiding from the police.
    e. Watching for a thief.

GO ON TO NEXT PAGE

8
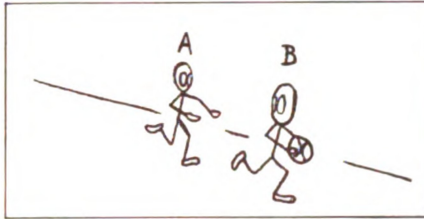
43. What are the persons in the picture doing?
    a. A and B are playing ball together.
    b. They have broken a neighbor's window and are running away.
    c. A is mad or angry at B and is trying to catch him.
    d. B has stolen the ball from A.
    e. B does not trust A very much.
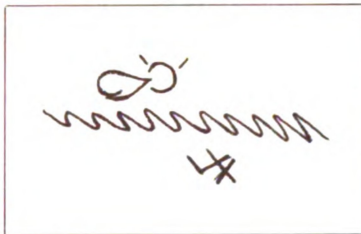
44. What do the drawings in the picture represent?
    a. A sunny spring day in the country.
    b. A bull fight in Mexico.
    c. A big thunderstorm.
    d. A group of cows grazing in the pasture.
    e. A bank hold-up and robbery.
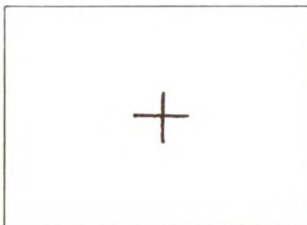
45. What could the symbol in this picture represent?
    a. Money in the bank.
    b. Not anything but a plus sign.
    c. Cross roads of life and mystery.
    d. Religion.
    e. The symbol of a gangster or of a group of bad boys.
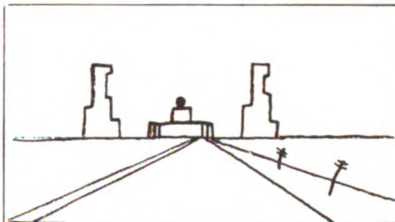
46. What is this picture about?
    a. A vacation resort where people come to spend their holidays.
    b. Only a picture to place on a wall.
    c. The site of a conference about a very important world problem.
    d. An airfield in a war battle zone.
    e. A family altar where prayers are said.
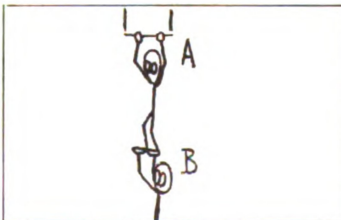
47. What is taking place in the picture?
    a. Children playing on a swing.
    b. B is trying to get A to answer his mother who is calling for him to come home.
    c. A and B are crawling cautiously to the edge of a dangerous canyon.
    d. Two brothers are building a swing.
    e. Two burglars are entering a home.

48. What are the two persons doing in the boat?
    a. They are arguing about where they should go.
    b. They are just talking to pass time.
    c. Trying to decide where to stop for the night.
    d. Partners in a business and are talking about the money they have made.
    e. Game wardens or policemen spying on some hunters.

GO ON TO NEXT PAGE
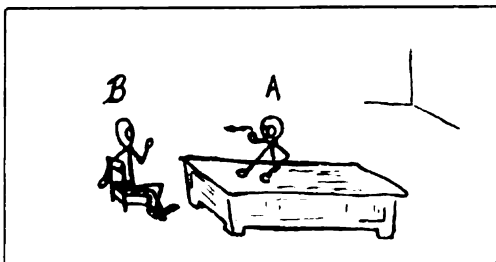
49. What is taking place between A and B?
   a. They are planning to build a new building.
   b. A, the boss, is firing B.
   c. A and B are trying to solve a problem.
   d. Two business men making a deal.
   e. B is trying to borrow some money from A.
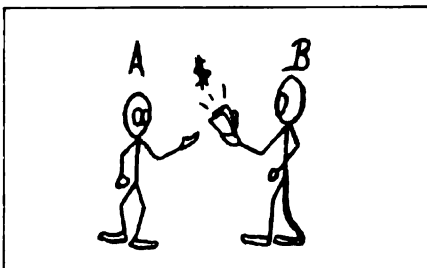
50. What are the persons doing in this picture?
   a. A is buying an airplane ticket to Paris for a pleasure trip.
   b. B is giving A his weekly pay check.
   c. B is buying a ticket to go to the mountains alone.
   d. B is buying candy to give to his girl friend.
   e. A is collecting money to help the poor.
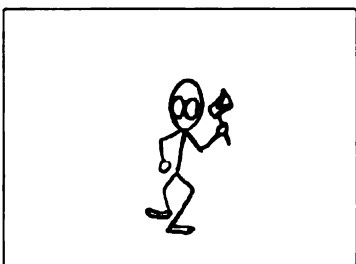
51. What is the person in the picture doing with the hatchet?
   a. A carpenter is building a house.
   b. It is only a toy.
   c. It is an angry boy with a toy.
   d. An Indian with a tomahawk fighting a war.
   e. A hungry boy trying to find something to eat in the mountains.
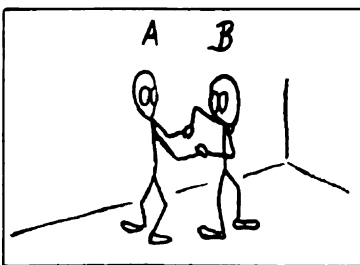
52. Who are the persons in the picture?
   a. Two children playing.
   b. B is teasing A who is smaller.
   c. A is angry and wants to run away.
   d. A boy is dancing with his best girl friend.
   e. Mother and daughter are holding hands in their home.
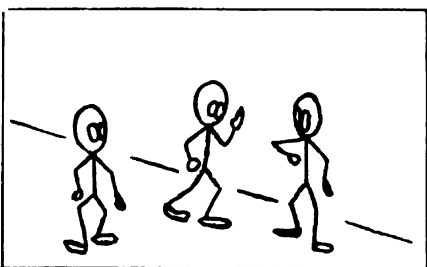
53. The three persons in this picture are?
   a. People at a party talking.
   b. A boss talking to some workers.
   c. Three persons trying to find something to do.
   d. Three persons arguing with each other.
   e. Two natives talking to a missionary in an uncivilized country.
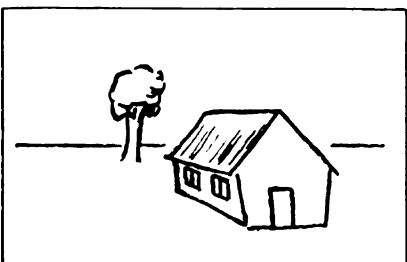
54. What is going on inside the house?
   a. There is a big party going on.
   b. No one is in the house.
   c. Two parents are arguing with some older children.
   d. It is a school which is in session.
   e. It is a church which is in session.

GO ON TO NEXT PAGE
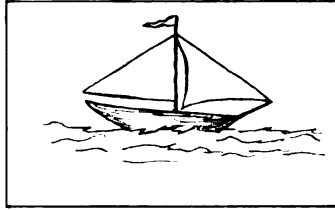
55. What is happening to the ship?
  a. It is sinking out in the ocean.
  b. It is just passing by in the water.
  c. It is caught in a big storm.
  d. It is taking a newly married couple on their honeymoon.
  e. It is a pirate ship and has robbers on it.
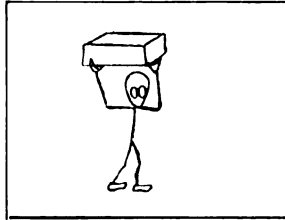
56. What is the person doing in the picture?
  a. Building some furniture for a new home.
  b. Trying to sell vegetables on the street.
  c. Angry and breaking up a good piece of furniture.
  d. Building a new home for his family.
  e. Building a new church for the community.
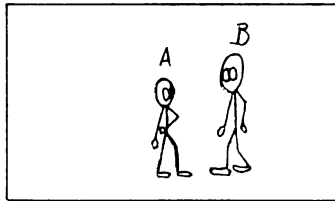
57. What are the persons in the picture doing?
  a. They are going on a long trip together.
  b. B is the father and is showing A how to dance.
  c. B is worried about A's sickness, and wants to take him to a doctor.
  d. B is picking a fight with the little fellow, A.
  e. B wants to take A to the movies.
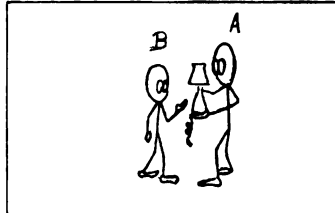
58. What is taking place in the picture?
  a. A and B are fixing up their home.
  b. A is trying to sell a light to B.
  c. A is trying to decide which one of the lights he wants to buy.
  d. A is the mother of B, and is giving him a gift.
  e. B does not know A and doesn't trust him.
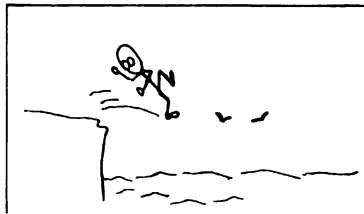
59. What is the person in the picture doing?
  a. Just playing in the water with others.
  b. He is trying to catch someone, but only in fun.
  c. They are practicing an act for the circus.
  d. He is trying to learn how to dive.
  e. A gang of bad boys is chasing him, and he doesn't trust them.
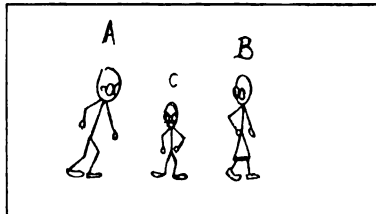
60. What is happening in the picture?
  a. A and B are going for a long stroll or walk in the park.
  b. A and B are scolding C for being in the street.
  c. A is angry because C ran into him.
  d. It is a family going to the grocery store to shop.
  e. C is trying to run away from home.
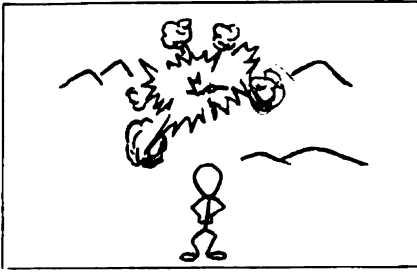
61. What is taking place in the picture?
    a. A home is burning down.
    b. Only a picture to be placed on the wall.
    c. The man is trying to keep the fire from spreading to other buildings.
    d. The boy set the house on fire.
    e. A man is burning some very secret materials to keep the police from getting them.
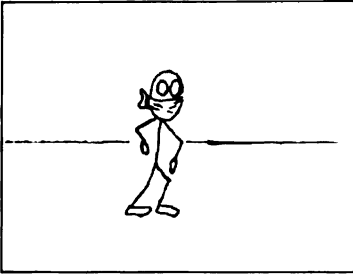

62. Who could the person in the picture be?
    a. A sick person with a bad cold.
    b. It could be anyone.
    c. A doctor ready to operate on a sick patient.
    d. Someone at a masquerade ball.
    e. A robber planning a hold-up.
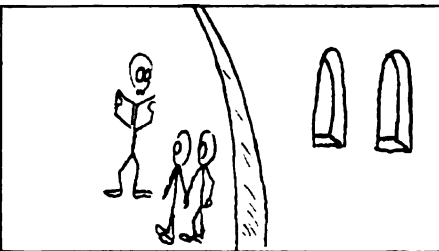
63. What is happening in the picture?
    a. A funeral for a man and wife who were killed in an accident.
    b. Two people talking to a preacher.
    c. New members joining a church.
    d. Divorce proceedings in a court of justice.
    e. A court hearing on the will of a rich man who just died.
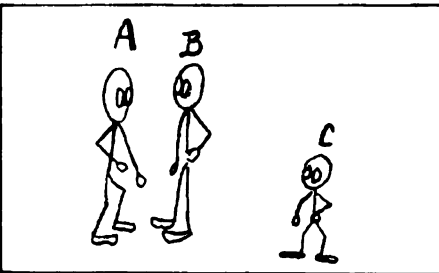
64. What are the persons doing?
    a. A and B are worried because C is sick.
    b. A family going for a stroll in the park near their home.
    c. B, the mother, is trying to make up with A, the father, after a quarrel.
    d. B is trying to pick a fight with A, and they are neighbors.
    e. B thinks that A has stolen something from him.
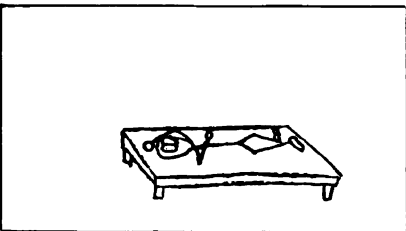
65. What is the person doing in the picture?
    a. He has been hurt in an accident.
    b. He is just resting in the sun.
    c. He is planning some work which he wants to do.
    d. He is the boss of a big factory taking a rest.
   e. A robber whom the police have just killed.
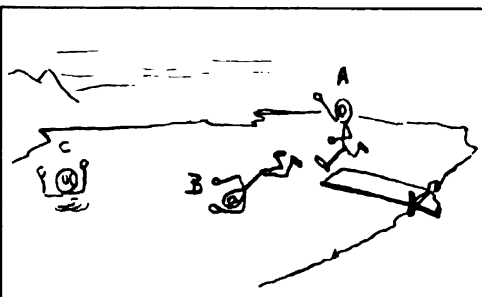
66. What is taking place in the picture?
    a. A is pushing B into the water.
    b. Three persons trying to forget their troubles.
    c. C is trying to get A and B to stop fighting, and he is very angry.
    d. Three neighbors who have built a pool.
   e. C is pretending he is drowning.

GO ON TO NEXT PAGE
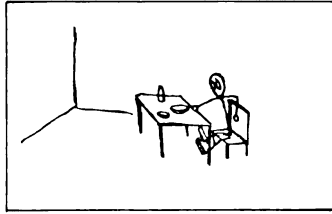
67. What is taking place in the picture?
   a. The food is poisoned.
   b. The person wants to eat alone.
   c. He is waiting for the food to cool so that he can eat it.
   d. It is his birthday and he is celebrating.
   e. The man is very hungry and is waiting to be served by the waiter.
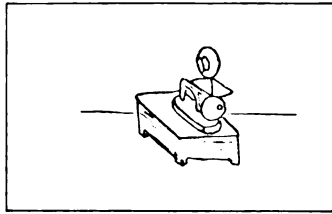
68. What is the woman in the picture doing?
   a. She is lonely and is working to forget.
   b. She is just trying to pass time but is not lonely.
   c. She is working at a store and is showing how the sewing machine works.
   d. She is making clothes for her children.
   e. She is trying to learn how to sew.
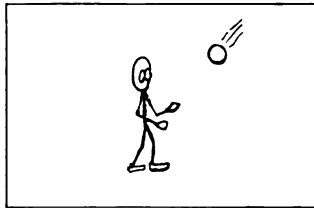
69. What will happen to the ball in the picture?
   a. He will not catch the ball and will be sorry.
   b. He is not trying to catch the ball, but is just passing by.
   c. He is angry because he missed the ball.
   d. He is playing ball with his girl friend.
   e. The mother is throwing a ball to her young child.
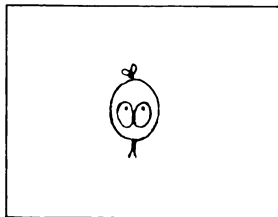
70. What will happen to the bee on the person's head?
   a. The bee will sting the boy and he will be sick.
   b. It is only a dream the boy is having.
   c. The bee will fly away.
   d. He will kill the bee before it stings him.
   e. He is crying for his mother to help catch the bee before it stings him.
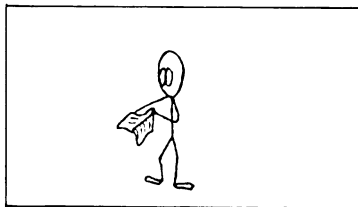
71. What is the person in the picture doing?
   a. He is taking a test because he is sick.
   b. He is just acting silly.
   c. He is a doctor trying to make a test for sick people to take.
   d. He is a member of a group of scientists who are working on a test.
   e. It is a mother dressing for a party.
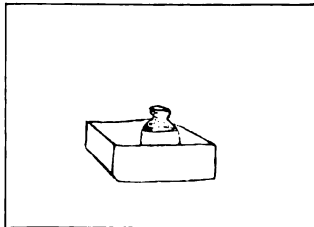
72. What is contained in the box?
   a. A poison to kill someone.
   b. Just some drinking water.
   c. Some wine for a dinner party.
   d. Some explosive material for war.
   e. Some milk or food for a baby.
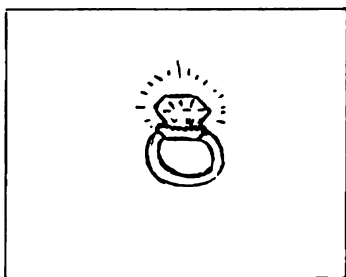
73. What is the precious stone in the picture?
    a. A very valuable gift from a dead mother.
    b. A graduation gift from a father on completing high school.
    c. Someone lost it and is very cross and angry,
    d. It is a wedding ring from a husband.
   e. It is only a cheap one, but looks very much like an expensive one.
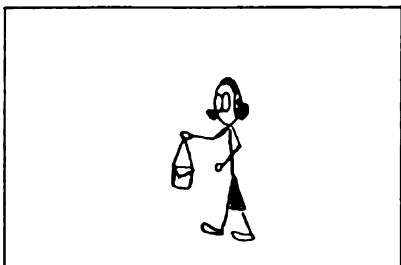
74. What is the woman carrying in her bag?
    a. Poison to kill someone.
    b. Money to pay someone.
    c. A mysterious object and no one knows what it is.
    d. A wild animal.
   e. Food to make dinner for her family.
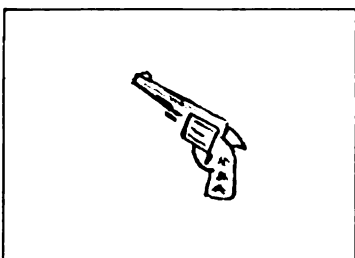
75. What is the gun for?
    a. A person wants to commit suicide or kill himself.
    b. It is only a toy.
    c. It is loaded but nobody knows that it is.
    d. It belongs to a soldier.
    e. It belongs to a robber.
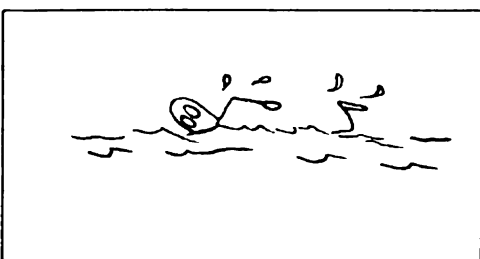
76. The person in the water is?
    a. Having a good time swimming.
    b. He is trying to save someone from drowning.
    c. He is going to drown himself.
    d. He is showing off in front of some young girls.
   e. He is trying to learn to swim.
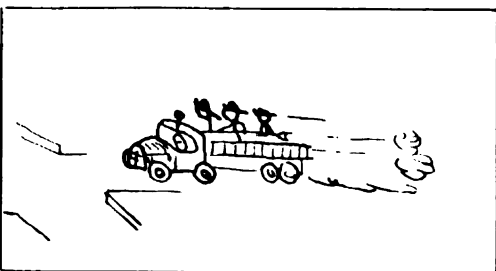
77. The fire engine in the picture is?
    a. Going to put out a big fire.
    b. They are just taking a ride; there is no fire.
    c. It doesn't work right, and they are fixing it.
    d. They are going to a fireman's party.
   e. It was a false alarm; there is no fire.
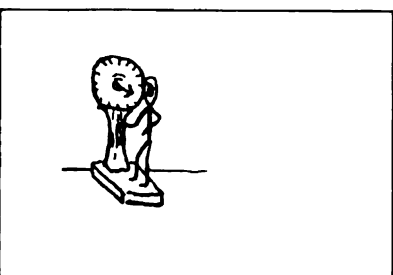
78. The person on the scales will?
    a. Find he is just the right weight, and is happy.
    b. He weighs a little too much.
    c. He is worried because he is too heavy.
    d. He is on a very strict diet.
   e. He would like to weigh more.

GO ON TO NEXT PAGE
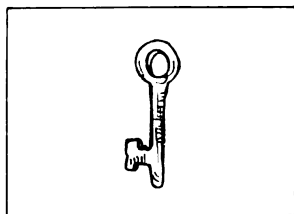
79. The key in the picture is best described as?
a. A key to happiness.
b. A key to wealth, money, and power.
c. A key that doesn't fit anything.
d. A key to a new home for your family.
e. A key to a prison for thieves and robbers.
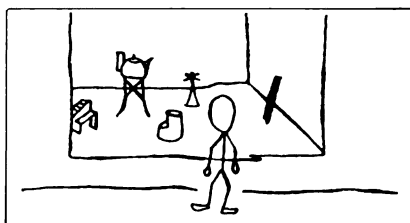
80. The boy, looking in the store window at all of the things which are for sale, is?
a. Sad because he has no money to buy the things he wants.
b. Just looking, and doesn't want anything.
c. Angry because he has no money to buy things he would like to buy.
d. Has the money and is planning to buy things.
e. Is planning to break the window and steal.
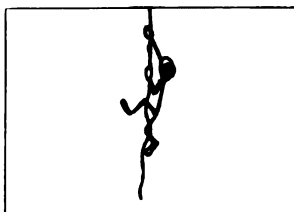
81. The person on the rope in the picture is?
a. Escaping from a prison.
b. Climbing up on a roof to help put out a fire.
c. He is practicing a rope-climbing trick.
d. He is showing off for some girls who are watching.
e. It is a monkey dressed like a person with an organ-grinder.
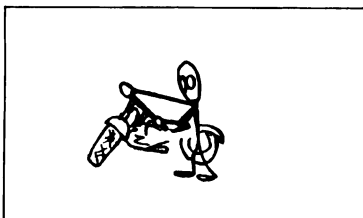
82. The boy with the motorcycle is not riding because?
a. He is not allowed to ride it.
b. He doesn't want to ride.
c. The motorcycle does not work, and will not run.
d. He is trying to fix the motorcycle, and he is pushing it to get it started.
e. He is too old and is afraid.
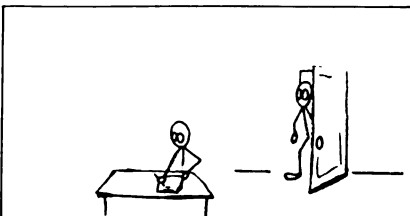
83. The person coming through the door in the picture is?
a. A thief or robber.
b. A father.
c. No person who is known.
d. A brother or sister.
e. A mother or grandmother.
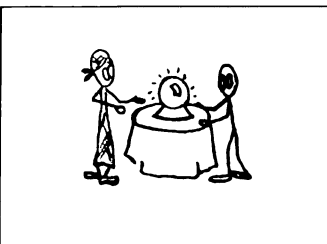
84. The fortune teller in the picture is telling the person?
a. He will have bad luck in the near future.
b. He will become rich and become famous.
c. He will soon have big problems and things to worry about.
d. He will soon get married and raise a family.
e. He is being watched by some enemies.

GO ON TO NEXT PAGE
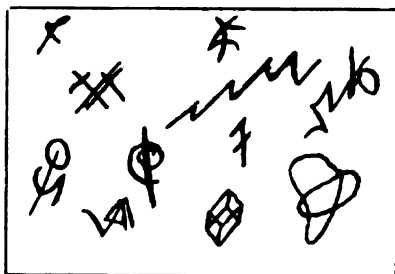
85. The "doodles" in this picture were likely made by what kind of person?
a. An unhappy and sad person.
b. A person who is just daydreaming and passing time.
c. A person who is very angry.
d. A widow with small children.
e. A person who does not trust other people.

86. People who live in this castle are best described as?
a. Don't get along well with their neighbors.
b. Don't know their neighbors very well.
c. Are liked and are very cooperative with neighbors.
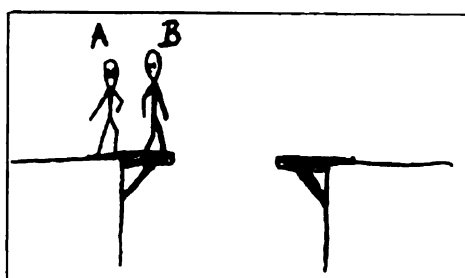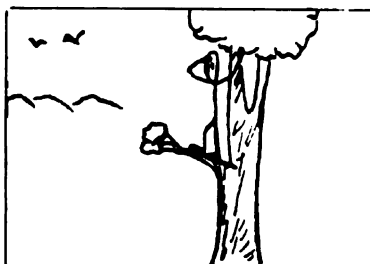d. Are mean to neighbors.
e. Are often dishonest.

87. What are A and B doing on the bridge?
a. B is trying to jump off the bridge and wants to kill himself.
b. Two persons just passing time.
c. Trying to figure out how to complete the bridge.
d. A fellow taking his girl for a walk.
e. Breaking down a neighbor's bridge.

88. What is the person in the tree doing?
a. A person who is hiding from the police.
b. A child getting away from an angry and cross teacher.
c. An angry person who is lost, and is trying to find his way home.
d. A boy scout leader camping out.
e. A policeman trying to find a prisoner.
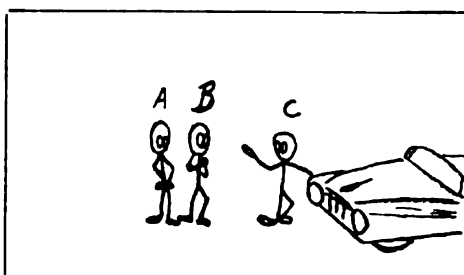
89. What is taking place in the picture?
a. C is telling his parents about an accident.
b. Three persons running away from home.
c. C is trying to get A and B to pay for the repairs of their own cars.
d. A fellow trying to take two girls for a ride in his new car.
e. C is a policeman who found a stolen car with A and B in it.
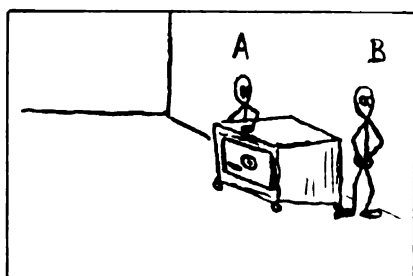
90. What is taking place in this picture?
a. A and B feel bad because they can't move the safe.
b. A and B are just looking, and they have nothing to do with the safe.
c. B is angry because the safe is broken.
d. A and B are moving the safe.
e. A and B are trying to steal some valuable papers.

— END —

GROUP PERSONALITY PROJECTIVE TEST

R. N. CASSEL AND T. C. KAHN

GPPT GPPT GPPT GPPT GPPT

NAME: LAST ___ FIRST ___

DATE ___

AGE: YR ___ MO ___

SEX: M ___ F ___

RAW: HAP ___ DEJ ___ NURT ___ WITH ___ NEU ___ AFF ___ SUCC ___

PAGE 1

	a	b	c	d	e
1					
2					
3					
4					
5					
6					

PAGE 2

	a	b	c	d	e
7					
8					
9					
10					
11					
12					

PAGE 3

	a	b	c	d	e
13					
14					
15					
16					
17					
18					

PAGE 4

	a	b	c	d	e
19					
20					
21					
22					
23					
24					

PAGE 5

	a	b	c	d	e
25					
26					
27					
28					
29					
30					

PAGE 6

	a	b	c	d	e
31					
32					
33					
34					
35					
36					

PAGE 7

	a	b	c	d	e
37					
38					
39					
40					
41					
42					

PAGE 8

	a	b	c	d	e
43					
44					
45					
46					
47					
48					

PAGE 9

	a	b	c	d	e
49					
50					
51					
52					
53					
54					

PAGE 10

	a	b	c	d	e
55					
56					
57					
58					
59					
60					

PAGE 11

	a	b	c	d	e
61					
62					
63					
64					
65					
66					

PAGE 12

	a	b	c	d	e
67					
68					
69					
70					
71					
72					

PAGE 13

	a	b	c	d	e
73					
74					
75					
76					
77					
78					

PAGE 14

	a	b	c	d	e
79					
80					
81					
82					
83					
84					

PAGE 15

	a	b	c	d	e
85					
86					
87					
88					
89					
90					

SUMMARY

	1 RAW	2 T	3 b	4 (1×3)
TRQ			8	
NURT			3	
WITH			8	
NEU			4	
AFF			1	
SUCC			8	
RAW TOT				

$$TRQ = \frac{100\ DEJ}{HAP + DEJ} = \frac{100}{\quad} = \underline{\quad}$$

$$TOT = \frac{RAW\ TOT}{10} = \underline{\quad}$$

GPPT PROFILE

Note: Raw score values corresponding to T-score levels for unselected normals are given in the columns of this profile chart. Ordinarily the user will simply mark the raw scores obtained in the appropriate columns and connect these seven points to construct the profile.**

T Score	TRQ	NURT	WITH	NEU	AFF	SUCC	TOTAL	T Score
80	57	17	20	30	33	21	79	80
75	52	16	19	28	32	19	71	75
70	48	15	18	27	29	17	69	70
65	43	13	17	25	28	15	65	65
60	34	12	15	23	27	13	57	60
55	29	11	13	20	25	10	51	55
50	23	10	11	18	23	8	46	50
45	17	8	10	15	20	7	41	45
40	9	7	9	13	18	5	37	40
35	5	6	7	12	16	3	29	35
30	3	5	6	10	14	2	24	30
25	2	4	5	8	12	1	20	25
20	1	2	4	6	10	0	15	20

**If the user wishes to use norms for other groups, he will find the T-score equivalents in tables in the GPPT manual. These T-score levels can be entered in the columns, and a profile drawn through the points. Be sure to indicate which norms were used.

Norms used: _____