

12-1973

The Relationships of Sociometric Status and Personality Factors Among Sixth Grade Children

Mike Fischer

Follow this and additional works at: <http://digitalcommons.wku.edu/theses>



Part of the [Psychology Commons](#)

Recommended Citation

Fischer, Mike, "The Relationships of Sociometric Status and Personality Factors Among Sixth Grade Children" (1973). *Masters Theses & Specialist Projects*. Paper 2001.
<http://digitalcommons.wku.edu/theses/2001>

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Masters Theses & Specialist Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.

THE RELATIONSHIPS OF SOCIOMETRIC STATUS AND PERSONALITY
FACTORS AMONG SIXTH GRADE CHILDREN

A Thesis

Presented to

the Faculty of the Department of Psychology

Western Kentucky University

Bowling Green, Kentucky

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Mike Fischer

December, 1973

THE RELATIONSHIPS OF SOCIOMETRIC STATUS AND PERSONALITY
FACTORS AMONG SIXTH GRADE CHILDREN

Paul C. Hill
Director of Thesis

C. Clinton Payne
John C. Hill

Approved 12-15-73
Date

Edwin Egan
Dean of the Graduate College

Approved 12-26-73
Date

ACKNOWLEDGEMENTS

I would like to acknowledge the assistance I have received in this endeavor both from many members of the faculty of the Psychology Department and my entire family. The help provided by Dr. David Shiek, committee chairman, was of invaluable assistance. Dr. Sandy Reese and Dr. Clinton Layne, members of my thesis committee, also provided enormous support. The understanding and inspiration of my wife, Barbara, and the patience and financial assistance provided by my parents were immensely influential during this effort.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	4
Statement of the Problem.....	9
III. METHOD.....	10
Sample.....	10
Instrumentation: Moore-Shiek	
Sociometric Technique.....	11
Instrumentation: IPAT	
Children's Personality Questionnaire.....	11
Data Collection.....	12
Data Analysis.....	13
Hypothesis.....	13
IV. RESULTS AND DISCUSSION.....	14
V. IMPLICATIONS.....	22
APPENDIX A.....	24
REFERENCES.....	26

CHAPTER I
INTRODUCTION

Historically, social interaction has played a central role in the development of personality constructs. How one sees himself, how others perceive him, and how these variables interact have played a core role in many theoretical systems.

Lewin's (1935) interest in the development of personality within an individual's life space embodied the concept of social interaction. He completely discounted heredity, maturation, and physical interventions as having significant effects on personality. For Lewin, development of personality was a function of the person and his psychological environment, which included social contacts.

Kelly (1955) theorized that a person's behavior was determined by his construct system. A person construes the essence of a particular event in such a way so that he can recognize a similar event in the future. Therefore any social interaction with which a person comes into contact becomes a component of that person's construct system and thus ordains his behavior repertoire. Festinger (1958) expounded identical premises as Kelly, regarding the importance

of social interaction in the development of personality.

Rogers (1959) also saw the importance of social interaction in the development of personality. He made personality a function of the interaction between inherent attributes and environmental encounters. If the common personality attributes of an individual are met with unconditional positive regard from significant others, then that individual will function adequately. However, if the core tendency is met with conditional positive regard, signs of maladjustment will surface. Rogerian theory, therefore, sees social interaction as a requisite entity for the development of personality.

A method of quantifying social interactions was introduced by Moreno. He conceptualized sociometry as a method of analyzing group dynamics for the purpose of better understanding group interactions (Moreno, 1934). Sociometric techniques have been used over the years to measure social choice, social acceptance, social structure of a group, and social status. More recently sociometry has evolved as the measurement of an all encompassing concept or the general social stimulus value of individuals (Mouton, et al., 1955).

If the theoretical assumptions underlying the relationships between personality development and social interaction are true, then significant relationships should exist between

sociometric measures and measures of personality. This was the rationale surrounding the development of this study.

CHAPTER II

REVIEW OF LITERATURE

Studies which have investigated the relationships between sociometric variables and personality factors have been numerous, varied, and their results sometimes contradictory.

Projective techniques have been used as the personality criteria in some studies. Orgel (1959) studied the relationships between the House-Tree-Person projective technique and sociometric status as measured by peer acceptance scores. The House-Tree-Person drawings indicate self-concept, vivacity, and how a person would like to live (Friedman & Kaplan, 1967). Orgel's findings ranged from a correlation of $-.17$ for the Tree scores to correlations of $.38$ and $.34$ for the House and Person scores. The composite scores for all three of the House-Tree-Person tests and sociometric status yielded a correlation of $.27$.

Northway and Wigdor (1947) used projective techniques with eighth grade students and found that those high in social status were characterized as having greater sensitivity in perceiving the feelings of others, and that they made a

more conscious striving for the approval of others. The low social status group showed less ability to control their emotions, were more egocentric, moody, impulsive, and disinterested in the approval of others.

Lindzey and Goldwyn (1954) correlated the Picture-Frustration Test and the Thematic Apperception Test with social status. They found significant differences between the lowest and highest status groups. The high social status group was less extrapunitive, more intropunitive, and had lower group conformity ratings than the group low in social status.

Durojaiye (1970) utilized Raven's Controlled Projection Test and concluded that boys who achieved high sociometric status appeared to view situations with constructive and optimistic attitudes while those of low sociometric status do not. The high sociometric status group also appeared to have a strong need for affection while the low sociometric status group appeared not to desire active participation with others. Mussen and Porter (1959) using the Thematic Apperception Test and Tindall (1955) using the Rorschach, also found that sociometric status is related to results obtained on projective techniques.

Thus, it would appear that when projective techniques were utilized as personality measures, high sociometric status children appeared to be more sensitive, intropunitive,

optimistic and others oriented while low sociometric status children tended to be more self-centered, impulsive, and extrapunitive in their personality structure.

Other studies have found no significant relationships among projective scores and sociometric status. Papinsky, Siegel, and Vznatta (1952) found no evidence to support the hypothesis that significant relationships existed between Rorschach scores and the number of sociometric choices given and received. Nowell (1953) correlated Thematic Apperception and Rorschach scores with peer ratings. No evidence was found that indicated "adjustment" or "maladjustment" was related to social acceptance.

Measures of anxiety have also been used to investigate the relationships between sociometric variables and personality structures. Iscoe and Garden (1961) obtained a significant negative correlation when they looked at the relationships between peer acceptance and anxiety as measured by the Children's Manifest Anxiety Scale (CMAS). This relationship was significant for only the female group. McCandless, Castaneda, and Palermo (1956), using the CMAS, reported negative correlations between anxiety and sociometric status among fourth and fifth graders; i.e., the most anxious children tended to be lower in sociometric status while the least anxious children tended to be higher

in sociometric status. The significant correlations that they obtained ranged from $-.28$ to $-.75$ on their measures of sociometric status and the CMAS.

Horowitz (1962) using the Children's Manifest Anxiety Scale found that there were significant negative correlations between anxiety and social status in fourth, fifth, and sixth grade children. His study yielded significant correlations of $-.44$ for fourth grade children, $-.18$ for fifth grade children, and $-.44$ for sixth grade children. Amerio (1964), Baron (1951), and Trent (1959) also found anxiety to be significantly negatively correlated with social status.

Generally, when the relationships between sociometric status and anxiety are investigated anxiety is negatively correlated with social status. This supported the idea that high status children have lower anxiety levels while low status children have higher anxiety levels.

More comprehensive scales have been used to measure personality variables of low and high status children. Baron (1951) using the Mental Health Analysis questionnaire found that high status pupils tended to feel more self-confident, more physically adequate, and more secure in their school relationships than low status pupils. The high status pupils also gave indications of greater emotional stability.

Grossman and Wrighter (1948) reported that high socio-

metric status sixth grade pupils had significantly higher adjustment scores on the California Test of Personality (CTP) than low sociometric status sixth grade pupils. Scandrette (1953), Bjersteg (1959), and Livesay (1972) used the CTP and found that pupils who rank low in sociometric status in their classrooms were more likely to be poorly adjusted personally and socially than their high sociometric status classmates. Generally, the studies which utilized comprehensive measures of personality as correlates of sociometric status found that high status children were more stable, self-confident, secure, and "adjusted" than low status children.

Guinourd and Rychlak (1962) conducted one of the more comprehensive studies of personality factors and social status using the IPAT High School Questionnaire as the personality measure. Social status scores were obtained in categories which measured the person with whom, "you would like best to play any of the games that we know," and those classmates with whom, "you would like best to work or make something with--any of the work we do." A total sociometric score was also obtained by combining the play and work criteria. Their results pointed out that unpopular children were less self-confident, less intelligent, less cheerful, less enthusiastic, less accepting of group standards, less conventional, and less

concerned with social approval than unpopular children.

Shiek (1971), using the IPAT Children's Personality Questionnaire, found that high and middle sociometric status pupils had total personality profiles which were not significantly different from the statistically normal personality profile. The low sociometric status group, however, had personality profiles which were significantly different from the statistical norm.

Overall, the studies that have investigated the relationships between personality and sociometric status have yielded rather consistent significant results. Past studies have found that children higher in sociometric status generally have discrete and common personality characteristics while lower sociometric status children have different, but rather common, personality characteristics.

Statement of the problem

This study was initiated in an attempt to research further the relationships between specific measures of personality and sociometric status. It was felt that further study of those variables would help define and establish more precisely the nature of the relationships between sociometric status and personality variables.

CHAPTER III

METHOD

The focus of this study was to investigate the relationships between sociometric status and personality factors.

The following methodology was utilized:

Sample

Four self-contained fifth grade classes from each of three school corporations in South-Eastern Indiana were utilized in this study. Each class group was considered typical of the respective school corporation student population. Fifth grade children were used because sociometric measurements appear the most stable at this grade level (Gronlund, 1959), and because they have been utilized as subjects in the majority of past studies of this type.

A total of 310 children were initially included in this study. Six children were dropped from the study because they were unable to read and comprehend the personality measure and ten other children were dropped due to absence from school at the time of administration. A total of 294 subjects were used in the final analysis.

Instrumentation: Moore-Shiek Sociometric Technique

The Moore-Shiek Sociometric Technique (Moore & Shiek, 1970), a group administered computer processed technique, was utilized to assess the sociometric status score. This sociometric technique yields various sociometric measures, but only the Total Choice Status was utilized in this study. This variable purports to incorporate both the amount of acceptance and the amount of rejection accorded a child by his peer group.

Each student received a specially prepared deck of IBM cards with the names of each student in his class group, including himself, printed in the upper portion of the cards. Each child's deck of cards contained a card for each child in the class group. The children were asked to rank order the card deck in relation to the criterion, "who does the best job in school" (Moore & Shiek, 1970).

Instrumentation: IPAT Children's Personality Questionnaire

The IPAT Children's Personality Questionnaire (Porter & Cattell, 1959) is a pencil and paper personality measure designed for use with children from eight to twelve years of age. The child is required to make contrasting choices as to what he thinks and what he does about problems typically encountered by this aged child.

The IPAT Children's Personality Questionnaire variables

contain fourteen first order personality factors which are bipolar descriptions of personality not implying adjustment or maladjustment. There are, however, three second order factors that may suggest personality inadequacy. The ten possible sten scores for each factor are arranged in intervals between opposite concepts on each uni-factor scale. These seventeen factors as measured by the IPAT Children's Personality Questionnaire are described in detail in Appendix A.

The IPAT Children's Personality Questionnaire was used as the measure of personality structure in the present study because it was the only such instrument available which measured a wide variety of orthogonal personality variables with elementary aged school children.

Data collection

The Moore-Shiek Sociometric Technique and the IPAT Children's Personality Questionnaire were administered to class sized groups. All administrations of approximately two hours were made during the morning portions of the school day. The order of administration was the Moore-Shiek Sociometric Technique, The IPAT Children's Personality Questionnaire, Form A, a fifteen minute recess break, and the IPAT Children's Personality Questionnaire, Form B. Both the Moore-Shiek Sociometric Technique and the IPAT Children's Personality Questionnaire were administered in the standardized manner as outlined

by the authors (Moore & Shiek, 1970) and (Porter & Cattell, 1959).

Data analysis

The data obtained in this study were analyzed by separate Pearson Product Moment Correlation Coefficients between each personality factor and the sociometric variable. Correlations were obtained between the fourteen first order personality factors as measured by the IPAT Children's Personality Questionnaire and sociometric status and between the three second order personality factors as measured by the IPAT Children's Personality Questionnaire and sociometric status.

Hypothesis

The null hypothesis associated with each of the seventeen correlation coefficients was that no correlations would be obtained between the sociometric status measure and the personality factor that would significantly differ from a zero correlation. Correlations which differed from a zero correlation at or beyond the .01 level were considered significant.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was to investigate the relationships between objective measures of personality and sociometric status. It was hypothesized that none of the seventeen correlation coefficients would significantly differ from a zero correlation. That is, personality variables are not significantly related to social status.

The obtained correlation coefficients are presented in Table 1. In 14 of the 17 possible correlations the null hypothesis was rejected. These correlations significantly differed from a zero correlation ($p < .01$).

The correlation coefficient obtained for the relationship between sociometric status and Factor A was .42. Cattell defines Factor A as Cyclothymia which is a person's mood level. This relationship indicated that a person who was high in sociometric status tended to be more outgoing, warm-hearted, easy-going, and participating while a person who was low in sociometric status tended to be more reserved, critical, detached, and aloof. This finding substantiated the results

TABLE 1

Correlation Coefficients Between Sociometric Status and the IPAT Children's Personality Questionnaire Factors.

CPQ Factor	Pearson r's
A	.42*
B	.55*
C	.37*
D	-.09
E	.17*
F	.19*
G	.23*
H	.16*
I	-.25*
J	-.23*
N	-.21*
O	-.40*
Q ₃	.22*
Q ₄	.07
Q ₁	-.28*
Q ₁₁	-.02
Q ₁₁₁	-.33*

* $p < .01$

of Northway and Wigdor (1947) and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor B was .55. Cattell defines Factor B as General Intelligence. This relationship indicated that persons who were high in sociometric status tended to be more intelligent, abstract in their thinking, and bright while individuals low in sociometric status tended to be less intelligent and concrete in their thinking. This significant correlation supported the findings of Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor C was .37. Cattell defines Factor C as Ego Strength. This relationship indicated that a person who was high in sociometric status tended to be more emotionally stable, reality-oriented, and calm while a person low in sociometric status tended to be more affected by feelings, emotionally unstable, easily upset, and changeable. This finding was consistent with those of Northway and Wigdor (1947), Baron (1951), Scandrette (1953), Bjerstedt (1959), and Livesay (1972).

The correlation coefficient obtained for the relationship between sociometric status and Factor D was -.09. Cattell defines Factor D as Excitability. This finding indicated that no significant relationship existed between the degrees

of excitability and sociometric status. No previous research was found which could support or contradict this finding.

The correlation coefficient obtained for the relationship between sociometric status and Factor E was .17. Cattell defines Factor E as Dominance. This indicated that individuals who were high in sociometric status tended to be more aggressive, independent, assertive, and stubborn while low sociometric status children tended to be more obedient, mild, and conforming. This finding was in contrast to the results of Guinouard and Rychlak (1962). This difference was attributed to Guinouard and Rychlak's sociometric measure which incorporated a highly specific choice criterion.

The correlation coefficient obtained for the relationship between sociometric status and Factor F was .19. Cattell defines Factor F as Surgency which is a person's cheerfulness. This finding indicated that individuals who were high in sociometric status tended to be more happy-go-lucky, heedless, gay, and enthusiastic while persons low in sociometric status tended to be more prudent, sober, serious, and taciturn. This finding supported the results of Durojaiye (1970) and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor G was .23. Cattell defines Factor G as Superego Strength. This indicated

that persons high in sociometric status tended to be more conscientious, persevering, staid, and rule-bound while persons low in sociometric status tended to be more undependable and disregarding of rules. This finding substantiated the results obtained by Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor H was .16. Cattell defines Factor H as *Parmia* which is an individual's boldness. This indicated that a person who was high in sociometric status tended to be more venturesome, socially bold, uninhibited, and spontaneous while a person who was low in sociometric status tended to be more shy, restrained, diffident, and timid. This substantiated the findings of Northway and Wigdor (1947), Durojaiye (1970), and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor I was -.25. Cattell defines Factor I as *Harria* which is a person's degree of self-reliance. This indicated that a person who was high in sociometric status tended to be more tough-minded, self-reliant, realistic, and no-nonsense while a person who was low in sociometric status tended to be more tender-minded, dependent, over-protected, and sensitive. This finding was consistent with the results of Baron (1951) and Guinouard and Rychlak

(1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor J was $-.23$. Cattell defines Factor J as Zeppia which is the flexibility of a person's superego. This indicated that persons high in sociometric status tended to be more vigorous, group-oriented, zealous, and given to action while persons low in sociometric status tended to be more doubting, obstructive, individualistic, internally restrained, and unwilling to act. This finding supported the results of Durojaiye (1970) and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor N was $-.21$. Cattell defines Factor N as Shrewdness. This indicated that persons high in sociometric status tended to be more forthright, natural, artless, and sentimental while persons low in sociometric status tended to be more shrewd, calculating, worldly, and penetrating. No previous research was found which could support or contradict this finding.

The correlation coefficient obtained for the relationship between sociometric status and Factor O was $-.40$. Cattell defines Factor O as Guilt Proneness. This indicated that persons who were high in sociometric status tended to be more self-assured, placid, serene, and secure while persons who

were low in sociometric status tended to be more apprehensive, worrying, depressed, and troubled. This supported the findings of Baron (1951), Scandrette (1953), Bjerstedt (1959), Livesay (1972), and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor Q_3 was .22. Cattell defines Q_3 as being the degree of the development of self-sentiment. This indicated that a person who was high in sociometric status tended to be more controlled, socially precise, self-disciplined, and compulsive while a person who was low in sociometric status tended to be more casual, careless of social rules, and untidy. This supported the findings of Northway and Wigdor (1947) and Guinouard and Rychlak (1962).

The correlation coefficient obtained for the relationship between sociometric status and Factor Q_4 was .07. Cattell defines Factor Q_4 as Ergic Tension which is a person's drive. This finding indicated that there was no significant relationship between sociometric status and Ergic Tension. Guinouard and Rychlak (1962) also found no significant relationship between sociometric status and Ergic Tension.

The correlation coefficient obtained for the relationship between sociometric status and Factor Q_1 was -.28. Cattell defines Factor Q_1 as Anxiety. This indicated that a person who was high in sociometric status tended to be less anxious

than a person who was low in sociometric status. This finding supported the results of Iscoe and Garden (1961), McCandless, Castaneda, and Palermo (1956), Horowitz (1962), Amerio (1964), Baron (1951), and Trent (1959).

The correlation coefficient obtained for the relationship between sociometric status and Factor Q_{II} was $-.02$. Cattell defines Factor Q_{II} as Introversion-Extroversion. This indicated that there was no significant relationship between sociometric status and Introversion-Extroversion. No previous research was found which could support or contradict the results of this study.

The correlation coefficient obtained for the relationship between sociometric status and Factor Q_{III} was $-.33$. Cattell defines Factor Q_{III} as Neuroticism. This indicated that a person high in sociometric status tended to experience a smaller measure of anxiety and appeared to have more adequate insight into himself and his environment than a person low in sociometric status. Inversely, this finding indicated that individuals low in sociometric status tended to have a relatively higher level of anxiety, incomplete insight into the nature of their difficulties, and possible impairment of their personalities. This supports the results of Baron (1951), Grossman and Wrighter (1948), Srandrette (1953), Bjerstedt (1959), Livesay (1972).

CHAPTER V

IMPLICATIONS

This study attempted to define further the relationships between sociometric status and personality factors. Since social status has been purported to be an important determinant of personality, the relationship between sociometric status and an objective personality measure was used to re-search further this phenomena.

Of the seventeen correlations obtained in this study, fourteen were significant ($p < .01$). This indicated that there were relationships between sociometric status and certain personality factors. The persons higher in sociometric status were characterized as being more outgoing, intelligent, emotionally stable, assertive, happy-go-lucky, conscientious, venturesome, tough-minded, vigorous, forthright, self-assured, and controlled. The persons lower in sociometric status were characterized as being more reserved, less intelligent, emotionally unstable, obedient, sober, undependable, shy, dependent, doubting, shrewd, apprehensive, casual, anxious, and neurotic.

This study was but one in a long line of correlational

research studies that found significant relationships between these variables. The findings of this study add to the knowledge that has already been gathered with regard to sociometric status and personality factors. These studies have merely investigated the relationships without substantiating cause and effect. It is imperative that cause and effect be fully understood before classroom makeups are manipulated as a result of sociometric techniques. The true causal factor would dictate the appropriate type of therapeutic intervention. In the final outcome additional research will be necessary to answer the question of cause and effect. Longitudinal research dealing with sociometric status and personality factors may provide insight into the necessary answers. Only with this additional data will the true cause and effect relationship between sociometric status and personality factors be understood.

It also becomes apparent from this study that a sociometric technique could be utilized as a screening measure. In this way, a preschool or an elementary aged school child with personality or socialization problems could be pinpointed with a minimum expenditure of time and money. Consequently, treatment could be of a preventive nature rather than a remedial nature.

APPENDIX A

Description of IPAT Children's Personality
Questionnaire Factors*

<u>Factor</u>	<u>Low Score</u>	<u>High Score</u>
A	Reserved, critical, detached, aloof	Outgoing, warmhearted, easy-going, participating
B	Less intelligent, concrete thinking	More intelligent, abstract thinking
C	Affected by feelings, emotionally unstable, easily upset, changeable	Emotionally stable, faces reality, calm
D	Phlegmatic, deliberate, inactive, stodgy	Excitable, impatient, demanding, overactive
E	Obedient, mild, conforming	Assertive, independent aggressive, stubborn
F	Sober, prudent, serious, taciturn	Happy-go-lucky, heedless, gay, enthusiastic
G	Disregards rules, undependable, by-passes obligations	Conscientious, persevering, staid, rule bound
H	Shy, restrained, diffident, timid	Venturesome, socially bold, uninhibited, spontaneous

*These are the descriptions given to the factors by Cattell on the IPAT Children's personality Questionnaire Profiles for Forms A and B, 1963.

<u>Factor</u>	<u>Low Score</u>	<u>High Score</u>
I	Tough-minded, self-reliant, realistic, no-nonsense	Tender-minded, dependent, over-protected, sensitive
J	Vigorous, goes readily with group, zealous, given to action	Doubting, obstructive, Individualistic, reflective, internally restrained
N	Forthright, natural, artless, sentimental	Shrewd, calculating, worldly, penetrating
O	Self-assured, placid, secure, serene	Apprehensive, worrying, depressive, troubled
Q ₃	Casual, careless of social rules, untidy, follows own urges	Controlled, socially precise, self-disciplined, compulsive
Q ₄	Relaxed, tranquil, torpid, unfrustrated	Tense, driven, overwrought, frothy
Q _I	Low anxiety, adjustment	High anxiety, some maladjustment
Q _{II}	Introversive, shy, self-sufficient	Extroversive, socially outgoing, uninhibited
Q _{III}	Alert, poised, enterprising, decisive, resilient	Tenderminded, emotionally discouraged

REFERENCES

- Amerio, P. Social status, tendencies toward anxiety and neuroticism and maladjustment in small groups. Rivista di psicologia sociale e archivio italiano di psicologia generale e del lavoro, 1964, 31, 161-167.
(Psychological Abstracts, 1965, 67, 7492).
- Baron, D. Personal-social characteristics and classroom social status: A sociometric study of fifth and sixth grade girls. Sociometry, 1951, 14, 40.
- Bjerstedt, A. Sex and status differences in the JPO: A note. Pedagogue Forskigse Nordisha, 1959, 1, 38-43.
(Psychological Abstracts, 1961, 59, 10432).
- Durojaiye, M. The relationship between controlled projection responses and sociometric status. Child Psychology and Psychiatry, 1970, 2, 143-148.
- Festinger, L. The motivating effects of cognitive dissonance. In G. Lindzey (Ed.), Assessment of human motives. New York: Holt, Rinehart, & Winston, 1958.
- Freedman, A., and Kaplan, H. Comprehensive textbook of psychiatry. Baltimore: Williams and Wilkins Co., 1967.

- Gronlund, D., N. E. Sociometry in the classroom. New York: Harper, 1959.
- Grossman, D., and Wrighter, J. The relationships between selection-rejection and intelligence, social status, and personality amongst sixth grade children. Sociometry, 1948, 11, 346-355.
- Guinouard, D., and Rychlak, J. Popularity in elementary school children. Personnel and Guidance Journal, 1962, 40, 438-442.
- Horowitz, F. D. The relationships of anxiety, self-concept, and sociometric status among 4th, 5th, and 6th grade children. Journal of Abnormal and Social Psychology, 1962, 65, 212-214.
- Iscoe, I., and Garden, J. A. Field dependence, manifest anxiety, and sociometric status in children. Journal of Consulting Psychology, 1961, 25, 184-187.
- Kelly, G. A. The psychology of personal constructs: Volume 1. New York: Norton Press, 1955.
- Lewin, K. A dynamic theory of personality. New York: McGraw-Hill, 1935.
- Lindzey, G., and Goldwyn, R. M. Validity of the Rosenzweig picture-frustration study. Journal of Personality, 1954, 22, 519-547.
- Livesay, K. K. Sociometric criteria of choice and personal-

- social adjustment. (Doctoral dissertation, Indiana State University) Ann Arbor, Mich.: University Microfilms, 1972. No. 6210A
- McCandless, B. R., Castaneda, A., and Palermo, D. S. Anxiety in children and social status. Child Development, 1956, 27, 385-392.
- Moore, D. J., and Shiek, D. A. Preliminary manual: Moore-Shiek sociometric technique. Terre Haute, Indiana: Authors, 1970.
- Moreno, J. L. Who Shall Survive? Washington, D. C.: Nervous and Mental Disease Publishing Company, 1934.
- Mouton, J. S., Blake, R. R., and Frutcher, B. The reliability of sociometric measures. Sociometry, 1955, 18, 7-48.
- Mussen, P. H., and Porter, L. W. Personal motivations and self conceptions associated with effectiveness in emergent groups. Journal of Abnormal and Social Psychology, 1959, 59, 23-27.
- Northway, M. L., and Wigdor, B. T. Rorschach patterns related to the sociometric status of school children. Sociometry, 1947, 10, 186-189.
- Nowell, A. Peer status as related to measures of personality. California Journal of Educational Research, 1953, 4, 37-41.
- Orgel, R. G. The relationship of the h-t-p to a sociometric

- evaluation of a group of primary school children in determining the degree of social acceptance. Journal of Clinical Psychology, 1959, 15, 222-223.
- Papinsky, H. B., Siegel, L., and Vanatta, E. L. The criterion in counseling: A group participation scale. Journal of Abnormal and Social Psychology, 1952, 42, 415-419.
- Porter, R. B., and Cattell, R. B. Handbook for the ipat children's personality questionnaire. Champaign, Illinois: Institute for Personality and Ability Testing, 1959.
- Rogers, C. R. A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), Psychology: A study of a science. New York: McGraw-Hill, 1959, Vol. 3.
- Scandrette, O. C. Classroom choice status related to scores on components of the California Test of Personality. Journal of Educational Research, 1953, 47, 291-296.
- Shiek, D. A. Sociometric self-ranking and personality structure. (Doctoral dissertation, Indiana State University) Ann Arbor, Mich.: University Microfilms, 1971. No. 6275A.
- Tindali, R. H. Relationships among indices of adjustment

status. Educational and Psychological Measurement,
1955, 15, 152-162.

Trent, R. D. Anxiety and accuracy of perception of socio-
metric status among institutionalized delinquent boys.
Journal of Genetic Psychology, 1959, 94, 84-91.