

Prairie View A&M University

Digital Commons @PVAMU

All Theses

8-1953

A Study of the Relationship of Personality Development and Achievement in Junior High School Physical Education in the City of San Antonio, Texas

Ada S. Clark

Prairie View A&M College

Follow this and additional works at: <https://digitalcommons.pvamu.edu/pvamu-theses>

Recommended Citation

Clark, A. S. (1953). A Study of the Relationship of Personality Development and Achievement in Junior High School Physical Education in the City of San Antonio, Texas. Retrieved from <https://digitalcommons.pvamu.edu/pvamu-theses/947>

This Thesis is brought to you for free and open access by Digital Commons @PVAMU. It has been accepted for inclusion in All Theses by an authorized administrator of Digital Commons @PVAMU. For more information, please contact hvkoshy@pvamu.edu.

A STUDY OF THE RELATIONSHIP OF PERSONALITY
DEVELOPMENT AND ACHIEVEMENT IN JUNIOR HIGH SCHOOL
PHYSICAL EDUCATION IN THE CITY OF SAN ANTONIO, TEXAS

CLARK

1953

732
75

A STUDY OF THE RELATIONSHIP OF PERSONALITY
DEVELOPMENT AND ACHIEVEMENT IN JUNIOR HIGH
SCHOOL PHYSICAL EDUCATION IN THE CITY OF
SAN ANTONIO, TEXAS

By

Ada S. Clark

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Science

In The

Graduate Division

of

Prairie View Agricultural and Mechanical College
Prairie View, Texas

August, 1953

The W. R. Banks Library
Prairie View A. & M. College
Prairie View, Texas

CV443
CS

Dedication

I am dedicating this thesis to my devoted family, George Henry Clark, Sr., Henri Etta, and George Henry Clark, Jr., and to my lovely mother-in-law, Mrs. Gertie O. Clark, whose patience and cooperation have been responsible for my being able to complete this study.

A. S. C.

Acknowledgement

The writer wishes to express her deepest gratitude to Dr. John C. Mitchem for suggesting many invaluable revisions of this manuscript. Without his guidance and direction, this study could not have been carried out.

Thanks are due also to Coaches William J. Nicks and Vernon C. Wells who helped me with the original organization of this study, and to the Misses A. A. Chaney and D. B. Phelps, and Mr. J. I. Thomas for serving on my advisory committee.

A. S. C.

Table of Contents

| Chapter | | Page |
|---------|---------------------------|------|
| I. | Introduction..... | 1 |
| II. | Survey of Literature..... | 4 |
| III. | Procedure..... | 12 |
| IV. | Analysis of Data..... | 13 |
| | Summary..... | 20 |
| | Conclusion..... | 21 |
| | Bibliography..... | 22 |

Table of Tables

| Table | | Page |
|-------|--|------|
| I. | Personality Test Scores Vs. Physical Education Grades - Zero Order Correlations..... | 18 |
| II. | Summary of Class Data - California Test of Personality..... | 19 |

Chapter I

INTRODUCTION

The problem of personality maladjustment in school children has interested educators for generations. Before the advent of the testing movement, teachers were compelled to rely on estimates that were generally largely subjective in nature and often even erroneous. The development of standardized tests of intelligence achievement and personality traits, however, has provided educators more objective measuring instruments and has eliminated much of the subjective element in the evaluation of pupil achievement and personality adjustment.

Williams and Brownell¹ define a healthy personality as "not one that is perfect and free from defects, but one that is able, when difficulties occur, to adjust, to integrate its wishes, its achievements, and its failures."

The fact that personality is now considered a unity has many implications for physical education. Personality, like muscle, grows through exercise. The child must have opportu-

¹ Jesse F. Williams and Clifford L. Brownell, The Administration of Health and Physical Education, p. 162.

nity to make a contribution, to earn recognition, not too rapidly, but at its own rate. Its personality must have opportunity for expression in relationship not only with people but in those play activities that bring satisfaction.

Physical education helps tremendously to integrate the various phases of school life thus affording the physical education teacher abundant opportunity to mould personality. Because of the nature of physical education activities and the manner in which they are taught, physical education provides laboratory experience in socialization for the pupil. The physical educator guides the timid and hesitant into activity that builds self-confidence. He helps to create much needed successes in those with inferiority feelings. Caring for equipment, participation in turnabout activities, acknowledgement of personal error, cooperation in team play, showing respect for the property of others, and the bumps of competition are in themselves, opportunities for the leadership and for the development of individual initiative that can be experienced through physical education.

The purpose of this study was to determine the relationship between personality development and achievement in physical education. A secondary purpose was to evaluate the physical education of Douglas Junior High School in San Antonio,

Texas by means of the personality ratings, and to make recommendations for any changes that may appear.

Chapter II

SURVEY OF THE LITERATURE

Personality is the pattern of the individual's total behavior. Education is concerned with developing personality expression according to certain ideals of social contribution and cooperativeness, and with developing individual self-reliance and independence.

According to Davis and Lawther¹ teaching must be designed:

1. To decrease internal conflict or desires
2. To develop in the individual definite goals and ambitions approved by society
3. To train the individual in an integration of habits, attitudes, and methods of thinking that, expressed in behavior, bring benefit to mankind and happiness to the individual.

Davis and Lawther² also related how physical education activities can aid in personality development.

Acceptance in social groups and success in social situations is, to a large degree, dependent on the skills of the individual. To swim, to play tennis or golf, to dance, to bowl, or even to participate in the team games implies adequate skill to be an asset

¹ Elwood C. Davis, and John D. Lawther, Successful Teaching in Physical Education, p. 372.

² Ibid., p. 373.

to the group. One psychologist found that participation in games and sports was usually accompanied by personality development. To get along well with the other sex implies practice in co-recreational activities. Skill in music, skill in sedentary activities, in dramatics, or in leading a discussion may secure social acceptance for the adult. Youth prizes the more active type of social, recreational, and co-recreational skills. With the modern emphasis on pleasurable physical activity for tension releases, these active types of social recreation are increasingly becoming a part of the adult social milieu.

¹
Hogue in discussing resolving tensions states:

Many tensions are resolved through recreation or play. But the recreation must be something that meets the needs of the individual. We are not necessarily anti-social if we do not like to play baseball. Folk dancing is a wonderful release for many people - but one of the most painful exhibitions I have seen was given by a woman who was trying devotedly to live up to her husband's idea of a good time - through folk dancing. It is true, however, that we enjoy some activity very much which we had not thought we could enjoy at all.

²
McCloy in pointing out the values of a modern physical education program states:

In pioneer times even the relatively unstable person did some things well; and frequently, sufficiently removed from

¹ Helen G. Hogue, Bringing Up Ourselves, p. 131.

² Charles H. McCloy, Philosophical Bases for Physical Education, p. 12.

others so that the stresses which might break him down today did not affect him greatly, he functioned well and happily. Today the competition of the school, of the job, of society in general, frequently makes such a person feel inadequate and inferior. Physical education supplies much of the means for integrating these individuals with group action of a healthful rather than a harmful type. Even if he is backward in studies and if he is the poorest player on his intramural basketball team occasionally "our" team wins! He is a part of an occasionally victorious group. The modern physical educator uses many devices that build a feeling of group unity, that recognize the contribution of the most humble member of the group, and that give a feeling of positive achievement and success - even though sometimes it is vicarious. To these ends, opportunities must be provided for a participation in activities which will afford positive, personal success. This may be in competition against standards rather than against other pupils. The content of physical education today is so varied and adaptable that it is not difficult to select material that will provide personal successes for every pupil.

The points I should like to stress are: first, adequate adjustments to reality must be made; second, if it is not feasible or possible to adjust as one would wish, some substitution must be made to compensate rationally and in a wholesome manner. The answer to such conflicts is not escape, but adjustment, and such adjustment is usually best accomplished by changing the mind-set and substituting some other approved and wholesome activity or desire for the unattainable one. Physical education has much to offer in this field; especially in the school years.

McCloy¹ goes on to say:

Another aspect of this problem is that man craves an adequate expression of his emotions. It is a frequent failing of each specialist to feel that this must be through his own speciality. Thus the English teacher often feels that literature is the only medium of expression. The musician, the artist, the dramatist, each feels in turn, that his art is the most important. The ancient Greeks were wiser in some ways, I think, than we are today. They classed all education into what we are pleased to call music and gymnastics, but this "music" really was composed of music, drama, dancing, literature, and all of learning and art that expressed the emotions of men; and most important of all, these various branches of art were not separated into waterweight compartments but were integrated. The expression of the soul was held to be of more importance than the technique of the art. We should have expression through literature, through music, through art, through drama, and all of them combined and integrated for the education of the child. In many of these well-planned physical education classes today, many of these means of expression are integrated and combined by the teachers of the various specialities into pageants, simple but vigorous dramas, dance recitals, and other types of activities which might well be classed under anyone of several departments.

But there is also another type of expression that is found in physical competition; the desire for mastery, for self-assertion, the desire to cooperate loyally with others of one's own group, to express one's ego in leading others, in adventuring, in sheer physical striving, in feeling physically adequate, and in the joyous perfec-

¹ Ibid., p. 13.

tion of movement. One sees this in the carefree dancing of the self-forgetful girl, in the joy of achievement in making a perfect smash in tennis, the making of a tackle in football, or the execution of a graceful dive. These physical cravings are deeply rooted in human nature and are more closely connected with those age-old urges which made for survival than are those of the more cultivated aesthetics.

Many psychologist have written about the value of play.

Boynton¹ states:

Few phases of the child's activities have as much significance as play in indicating the type of adjustment which he makes to society and its demands. The child who cannot and does not play the games of other children is revealing an abnormality of interest and attitude which has fundamental social implications.

A study made by Coleman² had implications that should be considered when evaluating factors influencing the personality of Negro children. The conclusions of this study also indicated the influence of factors that could be improved in a good physical education program:

1. There is a definite relationship between socio-economic status and achievement in school subjects;
2. There is a greater personality maladjustment in groupings representing low socio-economic status than in the average or high groups;
3. The number and kinds of hobbies are re-

¹ Paul L. Boynton, Psychology of Child Development, p. 308.

² H. A. Coleman, The Relationship of Socio-economic Status to the Performance of Junior High School Students, pp. 63-65.

lated to socio-economic status.

There have been a number of conflicting reports as to the correlation of measures of personality and achievement in various subject areas. This could be attributed to either poor measurement of personality factors or of poor measurement of subject matter achievement. It is well known subjective judgement is used in grading in many instances. The following studies are examples of both types.

Tyler¹ measured the relationship existing between school grades and emotional adjustment. Using the S. O. G. I. (Subjective, objective, groups, ideal) rating scale he concluded, "The scores are of very satisfactory reliability - their validity for predicting academic marks is uniformly low."

Drought² using eight measures of personality and grades found no correlation between them. Even when the twenty most differentiating items on the personality test were combined into a single indices the correlation was only .20.

Nemzek³ found the Bernrueter Personality Inventory to be useless for predicting junior high school grades in mathema-

¹ H. T. Tyler, The Bearing of Certain Personality Factors Other Than Intelligence on Academic Success, pp. 6, 89.

² N. E. Drought, An Analysis of Eight Measures of Personality and Adjustment in Relation to Relative Scholastic Achievement, pp. 597-606.

³ C. R. Nemzek, The Value of the Bernrueter Personality Inventory for Direct and Differential Prediction of Academic Success As Measured by Teachers' Marks, pp. 576-586.

tics, English, history, social sciences and languages or for predicting differences in grades in these subjects.

Wolf¹ administered two personality tests to fifty sixth grade girls who passed and fifty sixth grade boys who failed the Metropolitan Achievement Test in school subjects. He found greater maladjustment in the failure group.

Durea² in rating of one thousand eight hundred and thirty-eight grade and high school students by fifty-seven teachers from October through April on the Yepsen Adjustment Score Card found a negatively skewed distribution. He concluded that teachers' attitudes may affect adjustment scores.

Ames³ in a study of three junior high school classes found that 12-15% above the medium in classwork were below the median in intelligence. The teachers' ratings of punctuality, cooperation, honesty and sincerity correlated high with achievement. Persistence, common sense and dependability showed as high a correlation with achievement as did intelligence. Multiple factor analysis showed two factors were measured by the fifteen variables:

¹ S. J. Wolf, Comparison of the Woodworth-Cady Personality Data Sheet and Baker's Telling What I Do Test, pp. 353-363.

² M. A. Durea, A Survey of the Adjustment of School Children, pp. 107-117.

³ V. Ames, Factors Relating to High School Achievement, pp. 229-236.

1. Ability to succeed socially which was not related to school achievement;
2. Ability to conform to the school situation which was related to such achievement.

1

Tallman in a psychiatric survey of one hundred and sixty-seven elementary school children concluded:

1. Minor difficulties of adjustment do tend to decrease with age and school experience;
2. Problems occur more frequently in those of both inferior and superior intelligence than normals.

Maladjustment in curriculum may lead to personality problems.

1

F. F. Tallman, Child Guidance in Schools, pp. 436-455.

Chapter III

PROCEDURE

The subjects for this study were fifty girls enrolled in the Douglas Junior High School, in San Antonio, Texas. The girls were from the Eight B and the Nine B grades. An attempt was made to obtain a random sample for the study by taking the subjects from each of the Negro sections in the city.

The subjects were given the California Test of Personality which consisted of two sections with six sub-tests in each section. The scores made on the twelve sub-tests and the corresponding physical education grades of the girls were recorded. Using this data zero correlations were computed.

Chapter IV

ANALYSIS OF DATA

At Douglas Junior High School physical education is taught four days per week and health education one day. The grade given the student is a composite from both areas, and is determined from a point system in which the following items are considered; health education notebooks, summaries of health pictures shown every second week, conduct, attitude, attendance, activity proficiency, and cleanliness of gymnasium uniforms.

The California Test of Personality consisted of two sections, Self Adjustment based on feelings of personal security and Social Adjustment based on feelings of social security.

The definitions of the sub-tests under Self Adjustment as given by the manual of directions are:¹

Self-reliance - A student may be said to be self-reliant when his actual actions indicate that he can do things independently of others, depend upon himself in various situations, and direct his own activities. The self-reliant boy or girl is also characteristically stable emotionally and responsible in his behavior.

¹ Willis W. Clark, Ernest W. Tiegs, and Louis D. Thorpe, Manual of Directions, California Test of Personality - Intermediate Series, p. 3.

Sense of Personal Worth - A student possesses a sense of being worthy when he feels he is well regarded by others, when he feels that others have faith in his future success, and when he believes that he has average or better than average ability. To feel worthy means to feel capable and reasonably attractive.

Sense of Personal Freedom - A student enjoys a sense of freedom when he is permitted to have a reasonable share in the determination of his conduct and in setting the general policies that shall govern his life. Desirable freedom includes permission to choose one's own friends and to have at least a little spending money.

Feeling of Belonging - A student feels that he belongs when he enjoys the love of his family, the well-wishes of good friends, and a cordial relationship with people in general. Such a student will as a rule get along well with his teachers and usually feels proud of his school.

Withdrawing Tendencies - The student who is said to withdraw is the one who substitutes the joys of a fantasy world for actual successes in real life. Such a boy or girl is characteristically sensitive, lonely, and given to self-concern. Normal adjustment is characterized by reasonable freedom from these tendencies.

Nervous Symptoms - The student who is classified as having nervous symptoms is the one who suffers from one or more of a variety of physical symptoms such as loss of appetite, frequent eye strain, inability to sleep, or a tendency to be chronically tired. Boys or girls of this kind may be exhibiting physical expressions of emotional conflicts.

The definitions of the sub-tests under Social Adjustment

are:

Social Standards - The student who recognizes desirable social standards is the one who has come to understand the

rights of others and who appreciates the necessity of subordinating certain desires to the needs of the group. Such a pupil understands what is regarded as being right or wrong.

Social Skills - A student may be said to be socially skillful or effective when he shows a liking for people, when he inconveniences himself to be of assistance to them, and when he is diplomatic in his dealings with both friends and strangers. The socially skillful person subordinates his egoistic tendencies in favor of interest in the problems and activities of his associates.

Anti-social Tendencies - A student would normally be regarded as anti-social when he is given to bullying, too frequent quarrelling, disobedience, and destructiveness to property. The anti-social person is the one who endeavors to get his satisfactions in ways that are damaging and unfair to others. Normal adjustment is characterized by reasonable freedom from these tendencies.

Family Relations - The student who exhibits desirable family relationships is the one who feels that he is loved and well-treated at home, and who has a sense of security and self-respect in connection with the various members of his family. Superior family relations also include parental control that is neither too strict nor too lenient.

School Relations - The student who is satisfactorily adjusted to his school is the one who feels that his teachers like him, who enjoys other students, and who finds the school work adapted to his level of interest and maturity. Good school relations involve the feeling on the part of the individual that he counts for something in the life of the institution.

Community Relations - The student who may be said to be making good adjustment

in his community is the one who mingles happily with his neighbors, who takes pride in community improvements, and who is tolerant in dealing with both strangers and foreigners. Satisfactory community relations include as well the disposition to be respectful of laws and of regulations including those pertaining to the general welfare.

It was felt that physical education might have aided in the personality development of all of his components tested except "Family Relations"; however, it was correlated so as to give a complete picture of all the test components. The zero order correlations are found in Table I, page 18.

¹
Guilford rates the strength of relationship of correlations as follows:

| | | |
|---------------|-------|--|
| Less than .20 | | Slight, almost negligible relationship. |
| .20 -.40 | | Low correlation; definite but small relationship. |
| .40 -.70 | | Medium correlation; substantial relationship. |
| .70 -.90 | | High correlation; marked relationship. |
| .90-1.00 | | Very high correlation; very dependable relationship. |

According to the above ratings all of the correlations would be considered either slight or low. Eight were classified in the first category, slight, almost negligible relationship and the other four in the second category, low corre-

¹ J. P. Guilford, Fundamental Statistics in Psychology and Education, p. 165.

lation: definite but small relationship. The two correlations that were below .10, "Sense of Personal Freedom" (.08), and "Social Standards" (.04) are very near zero, thereby showing no relationship. The negative correlation found with the sub-test "Self-reliance" is difficult to explain but might indicate that this physical education program is developing the opposite characteristic of self-reliance or dependence.

The scores of the subjects on seven of the sub-tests of the California Test of Personality when compared with national norms were quite low. See Table II, page 19. This might be the limitations cited by the authors. However on five sub-tests the subject's scores were either equal to or slightly above the national norms.

TABLE I

ZERO ORDER CORRELATIONS

PERSONALITY TEST SCORES VS. PHYSICAL EDUCATION GRADES

| Self Adjustment Sub-tests | Correlation Coefficients | Social Adjustment Sub-tests | Correlation Coefficients |
|------------------------------|-----------------------------|--------------------------------|-----------------------------|
| Self-reliance | -.15 | Social Standards | .04 |
| Sense of Personal Worth | .10 | Social Skills | .23 |
| Sense of Personal Freedom | .08 | Anti-social Tendencies | .38 |
| Feeling of Belonging | .16 | Family Relations | .21 |
| Withdrawing Tendencies | .25 | School Relations | .18 |
| Nervous Symptoms | .19 | Community Relations | .15 |

SUMMARY OF CLASS DATA - CALIFORNIA TEST OF PERSONALITY

Percentile Rank:

| Section | Test | 1 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 99 | Tot. Pupils | Median | Norm. Diff. | |
|---------|----------------------------------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------|--------|-------------|-----|
| 1. | Self Adjustment | 1 | 4 | 10 | 4 | 5 | 5 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 4 | 2 | | | | 1 | | | 50 | 25 | 50 | -25 |
| 1-A. | Self Reliance | 1 | 10 | 4 | 10 | | 5 | | | 9 | | | | 3 | | | | | | 2 | 2 | | 50 | 20 | 50 | -30 |
| | Sense of Personal Worth | 1 | 2 | 1 | 3 | 5 | 5 | | 7 | 1 | | | | | | 7 | | | 6 | 2 | | | 50 | 50 | 50 | 0 |
| 1-B. | Worth | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sense of Personal Freedom | 3 | 2 | 9 | | 6 | 6 | | 6 | 8 | | | | | | 5 | | | | 11 | | | 50 | 35 | 50 | -15 |
| 1-C. | Freedom | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-D. | Feeling of Belonging | | 2 | 2 | 5 | 4 | 4 | | | 9 | | | | 11 | | | | | | 17 | | | 50 | 55 | 50 | -15 |
| | Belonging | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-E. | Withdrawing | 1 | 11 | 5 | 9 | 5 | 7 | | 4 | 4 | | | | 2 | | | | | 2 | | | | 50 | 15 | 50 | -35 |
| 1-F. | Tendency | 6 | 7 | 6 | 8 | 6 | 6 | | 6 | 4 | | | | 3 | 1 | | | | 2 | | | | 50 | 15 | 50 | -35 |
| | Nervous Symptoms | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | Social Adjustment | 2 | 2 | 2 | 2 | 4 | 7 | 5 | 6 | 4 | 2 | 3 | 3 | 1 | 2 | 3 | 3 | | 3 | 1 | | | 50 | 35 | 50 | -15 |
| 2-A. | Social Standards | 1 | 1 | 3 | | 8 | 7 | | | 11 | | | | 1 | 12 | | | | 1 | 9 | | | 50 | 45 | 50 | -5 |
| 2-B. | Social Skills | 1 | 1 | 3 | | | 6 | | | 10 | | | | 12 | | | | | 10 | 7 | | | 50 | 50 | 50 | 0 |
| 2-C. | Anti-Social Tendencies (Fdm.) | 2 | 8 | 9 | 6 | 2 | 2 | | 8 | 1 | | | | 7 | | | | | 5 | | | | 50 | 15 | 50 | -35 |
| 2-D. | Family Relations | 1 | 3 | 2 | 1 | 3 | 4 | | 4 | 9 | | | | | | | | | 13 | | | | 50 | 50 | 50 | 0 |
| 2-E. | School or Occupational Relations | 1 | 1 | 2 | 4 | 4 | 4 | | 11 | 11 | | | | 6 | 7 | | | | 1 | | | | 50 | 50 | 50 | 0 |
| 2-F. | Community Relations | 2 | 2 | 2 | 2 | 1 | 3 | | 3 | 11 | | | | 12 | | | | | 10 | | | | 50 | 60 | 50 | 10 |
| TOTAL | ADJUSTMENT | 1 | 3 | 2 | 7 | 5 | 7 | 3 | 4 | 4 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | | | 50 | 25 | 50 | -25 |

TABLE IX

Summary

Fifty girls from Douglas Junior High School were given the California Test of Personality. The scores from the personality test and the girls' grades in physical education were correlated to find the relationship of achievement in physical education to personality development. All of the correlation coefficients of the personality sub-tests were low; (below .40) however, four of the coefficients were rated low correlation (.20 - .40) as given in Guilford's definition.

The negative correlation found the sub-test "self-reliance" might indicate that the students were not participating in enough activities of the type to develop independence or that the teacher was in some way fostering the development of dependence.

Conclusions

1. There is a relationship between personality development and achievement in physical education. Although this relationship was negligible in eight of twelve sub-tests, there was a relationship.

2. It is possible that the negative correlation coefficient found with the sub-test "Self-reliance" is the most significant finding of the study. Analysis of the physical education program might show dependence or attributes opposite to self-reliance being fostered.

3. It is possible that with a more objective testing scheme for the physical education program, and a more homogeneous grouping as to reading ability, higher correlation coefficients could have been obtained.

Bibliography

Books

Boynnton, Paul, Psychology of Child Development, Philadelphia: Educational Publishers, Inc., 1940.

Davis, Elwood and John Lawther, Successful Teaching in Physical Education, New York: Prentice-Hall, Inc., 1948.

Guilford, J. P., Fundamental Statistics in Psychology and Education, New York: McGraw-Hill Book Company, Inc., 1950.

Hogue, Helen, Bringing Up Ourselves, New York: Charles Scribner's Sons, 1943.

McCloy, Charles, Philosophical Bases for Physical Education, New York: Crofts and Company, 1947.

Williams, Jesse and Clifford L. Brownell, The Administration of Health and Physical Education, Philadelphia: W. B. Saunders Company, 1946.

Periodicals

Ames, V., "Factors Related to High School Achievement," Educational Psychology Journal, 34: 229-236 (1943).

Coleman, H. A., "The Relationship of Socio-economic Status to the Performance of Junior High School Students," Journal of Education, 9: 63-65 (1940).

Drought, N. E., "An Analysis of Eight Measures of Personality and Adjustment in Relation to Relative Scholastic Achievement," Applied Psychology Journal, 22: 597-606 (1938).

Durea, M. A., "A Survey of the Adjustment of School Children," Child Development, 10: 107-114 (1939).

Nemzek, C. R., "The Value of the Bernrueter Personality Inventory of Direct and Differential Prediction of Academic Success As Measured by Teachers' Marks," Journal of Applied Psychology, 22: 576-586 (1938).

Tallman, F. F., "Child Guidance in Schools," Psychiatric Quarters, 9: 436-455 (1935).

Tyler, H. T., "Bearing of Certain Personality Factors Other Than Intelligence on Academic Success," Teacher College Contributing Education, 468: VI, 89 (1931).

Wolf, S. J., "Comparison of the Woodworth-Cady Personal Data Sheet and Baker's Telling What I Do Test," Genetic Psychology, 53: 353-363 (1938).

Manual of Directions

Clark, Willis, Louis Thorpe, and Ernest Tiegs, "A Profile of Personal and Social Adjustment," California Test of Personality - Intermediate Series, Los Angeles: California Test Bureau, 1942.