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RELATION OF SELECTED PHYSICAL
AND SOCIAL FACTORS TO
MALADJUSTMENT OF EIGHTH
GRADE PUPILS IN THE JUNIOR
HIGH SCHOOL

Thesis for the Degree of M. A.
MICHIGAN STATE COLLEGE
Cecil P. Randall
1942

THESIS

**RELATION OF SELECTED PHYSICAL AND SOCIAL FACTORS
TO MALADJUSTMENT OF EIGHTH GRADE PUPILS
IN THE JUNIOR HIGH SCHOOL;**

**A study of twenty-two characteristics of
eighth grade pupils in West Junior High School,
Lansing, Michigan**

by

Cecil P. Randall, B. Sc.

A THESIS

**Submitted to the Graduate School of Michigan
State College of Agriculture and Applied
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1942

THESIS

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C.P.R.

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CHAPTER I

INTRODUCTION

The maladjusted junior high school pupil presents a problem that offers an opportunity for careful thought and study. In various ways he expresses his lack of desire to co-operate in class discipline, thus demanding more than his share of the teacher's attention and time. His inability to take his normal place in educational advancement and training for citizenship is of major significance for society.

The increasing complexity of modern life makes the more thorough understanding of the maladjusted pupil a vital consideration in the problem of present day pupil guidance. Most troubles in formal discipline arise with children who are in some way maladjusted. Usually the procedure is to try to correct the difficulty for the moment, without attempting to find the basic or background causes for the behavior problem. This usually creates future difficulties for both the child and society. A need for a more objective approach and a scientific method of prediction and diagnosis, to aid in correction and guidance is evident.

Maladjustment and consequent delinquency are becoming subjects of intensive study by present day sociologists, criminologists, and educators. Unfortunately the older books dealing

with various aspects of the junior high school usually placed little emphasis on maladjustment. One looks in vain in the index to find specific references by such writers as Bruner¹, Koos², Bennett³, and Briggs⁴.

Recently some research has been done on the subject in an attempt to approach an understanding of these problem-children. Marion Jenkins investigated the psychological background of maladjusted children, and found that "The bulk of the evidence at the present time indicates that problem-behavior evolves as a natural process through the interaction of the organism and its environment."⁵ "Maladjustment," she concludes, "is a continuous process extending all the way from mild home problems through truancy tendencies to actual delinquency, involving arrest, and conviction by the court."

Mildred L. Fisher very elaborately measured the intellectual differences between problem and non-problem pupils, and states, "Judged on the basis of raw arithmetical means scores,

¹ Herbert Bascom Bruner, *THE JUNIOR HIGH SCHOOL AT WORK*, New York: Columbia University, 1925.

² Leonard Vincent Koos, *THE JUNIOR HIGH SCHOOL*, New York: Harcourt, Brace, and Company, 1921.

³ Guy Vernon Bennett, *THE JUNIOR HIGH SCHOOL*, Baltimore, Maryland: Warwick and York, 1926.

⁴ Thomas H. Briggs, *THE JUNIOR HIGH SCHOOL*, Cambridge, Mass.: The Riverside Press, 1920.

⁵ M. Jenkins, "Modern Trends in the Psychology of Maladjusted School Children," *PEDAGOGICAL SEMINAR AND JOURNAL OF GENETIC PSYCHOLOGY* XLII (September, 1933) pp. 94-122.

standardized tests showed that the non-problem group was consistently favored over the problem group in terms of desirable intellectual traits, in desirable social traits and background, in emotional social traits and background, in emotional adjustment, in social, economic status, and in physical fitness and vigor."⁶

Everett C. Hirsh, who has worked out a carefully planned case study chart, consisting of questions on physical defects, psychophysical defects, personality difficulties, defective foundation, ineffective habits on work, and on social difficulties, for maladjusted boys and girls, and who has used it in his work, believes, "Antisocial or unsatisfactory behavior in school should be treated as a symptom of difficulty rather than as a difficulty in itself."⁷

Pauline Young in her book "Social Treatment in Probation and Delinquency," goes into great detail suggesting social case studies of unadjusted youth and their parents, and says, "The sensitivity to social relations, the urge to independence, the awareness of his own problems, the search for security and response--(is of)--high diagnostic

⁶ M. L. Fisher, "Measured Differences Between Problem and Non-Problem Children in a Public School System", JOURNAL OF EDUCATIONAL SOCIOLOGY VII (February, 1934) pp. 353-364.

⁷ Everett C. Hirsh, "Case Methods of Dealing with Individual Difficulties in the Secondary School", SCHOOL REVIEW, XXXVIII September, 1930 pp. 523-531.

value in determining the social needs of the boy and possible treatment methods."⁸

Harry J. Baker and Virginia Traphagen list "Sixty-six items (possible causes) which are known to be significant in the diagnosis of behavior maladjustments,"⁹ and outline an elaborate behavior scale.

A careful study of the physical and social factors which underlie maladjustment will increase information, and supplement studies already made, and thus be a valuable aid in the understanding and guidance of this group of pupils who are causing an increasing amount of disturbance in our schools which is in excess of their small proportion in the school population.

Maladjustment of pupils constitutes a social problem which needs careful and extensive study. The treatment of delinquent and maladjusted pupils is the most lax and backward of all our educational activities. There is more lag than is necessary or justifiable between modern social science and actual practice.

Maladjustment in the junior high school is likely to lead to maladjustment in later life. Human nature is neither good or bad--but is plastic.

⁸ Pauline Young, SOCIAL TREATMENT IN PROBATION AND DELINQUENCY, New York; McGraw-Hill Book Co., 1937, p. 51.

⁹ Baker and Traphagen, THE DIAGNOSIS AND TREATMENT OF BEHAVIOR-PROBLEM CHILDREN, New York: The MacMillan Co., 1935, p. 23.

Maladjustment is likely to be the result of many background factors, and manifests itself in antagonism, in indifference to scholastic attainment, and in inability to co-operate in class discipline.

Data on selected physical and environmental factors, obtained from a careful case study of the maladjusted individual, would aid one to determine the procedure to be followed to correct the maladjustment tendencies, thus aiding the individual to lead a more normal life.

The careful use of all science is needed: psychiatric, sociological, psychological, medical, etc., to sort out those pupils who should be carefully studied, and need special guidance in an effort to give them more nearly normal attitudes.

While this study is limited to one school, the factors involved are general in nature, so the study may contribute to a broader understanding of the problem of maladjustment in addition to giving facts prevalent in a particular locality.

PURPOSE

The purpose of this thesis is to investigate the extent to which certain selected physical and social characteristics are associated with maladjustment, to discover their relative importance, and to observe the cumulative effect of multiple occurrence of such significant characteristics.

METHOD OF STUDY

After careful consideration of many factors associated with maladjustment, various books pertaining to the subject were consulted. The principal ones were: The Diagnosis and Treatment of Behavior-Problem Children,¹ by Baker and Traphagen; The Problem of Crime,² by Ettinger; Behavior of Young Children of the Same Family,³ by Weill; and Social Problems,⁴ by Gillin, Dittmar, and Colbert. A tentative schedule was prepared. After discussion as to objectiveness of the answers with interested instructors, a schedule card was devised.* It had places for answers to questions on the following physical and social characteristics: age, sex, race, presence of health defects, father and mother foreign born, language spoken in home, number of brothers and sisters, broken home, education of father and mother, employment of mother outside of home, relief status

¹ Baker and Traphagen, THE DIAGNOSIS AND TREATMENT OF BEHAVIOR-PROBLEM CHILDREN, New York: MacMillan Co., 1935, p. 23.

² Ettinger, Clayton, THE PROBLEM OF CRIME, Long and Smith, Inc. New York, 1932, p. 105.

³ Weill, Blanche, BEHAVIOR OF YOUNG CHILDREN IN THE SAME FAMILY, Harvard University Press, p. 23.

⁴ Gillin, Dittmar, and Colbert, SOCIAL PROBLEMS, New York: Century Co., 1928, p. 430.

* See sample card on following page.

Nº 566

Last Name first

Nº 566

Home Room Grade

Color Age Sex

Present address

Ever attended Parochial school? What grade?

Have you ever repeated a grade in school?..... What grade?

Ever sent from room on blue misconduct slip in Jr. H. S.?

Number of schools attended

Kind of home; single dwelling duplex apartment

Do you go to church at least once a month? Rarely.... Never....

Do you go to Sunday school at least once a month.... Rarely....Never....

Ever a member of Boy or Girl Scouts?

What work do you do for pay outside of home?.....

Has family received help from relief agencies in last 3 years?.....

Health defects

Any doctor's treatment in last 6 months

Any language other than English ever spoken in home?

Is your father living? your mother?

Do you have a step-father? a step mother?

Do parents own home?..... Are they divorced?

Number of brothers and sisters

Is father a high school graduate? Is mother?

Country of father's birth..... mother's.....

Does mother work outside of home? What work?.....

of parents, home ownership, single or multiple dwelling, repetition of grades, parochial school attendance, number of schools attended, Sunday School and church attendance, employment of pupil outside home, and membership of pupil in Boy or Girl Scouts.

After preliminary discussion by the home room teacher, the entire eighth grade class of 1936 at West Junior High School filled out the schedule card under the direct supervision of the home room teacher. It was answered as though it were any of the other regular office forms which the pupils fill out with reasonable accuracy. This was repeated in 1938 and 1940, making a total of one thousand three hundred and thirty-two pupils.

The first step in classifying the information of the cards was to check each name with the records in the office of the school and sort out all cards of students having a maladjustment record. Maladjusted pupils in this study were considered as those boys and girls who had been sent from the room to the principal's office for misconduct, upon the written complaint of either the home room or the class teacher. On this basis 1332 eighth grade pupils were studied and 217 or 17% were then classified as maladjusted, thus leaving 1115 or 83% of the pupils presumable normally adjusted. A normally adjusted pupil is considered as one capable of carrying on regular school work for the two year period of the seventh and eighth grades, without being sent from the room for a breach of discipline.

The next step was to tabulate the results of the answers to questions regarding the various characteristics. Following this the data was classified into four major tables:

1. Physical and physiological characteristics
2. Characteristics of Home Environment
3. School relationships
4. Community relationships

This was done for all the 217 maladjusted pupils, and the non-maladjusted 1936 group.

The problem of determining the significance of various differences in percentages was solved by using the formula described in the next paragraph.

Arkin and Colton state, "If two random samples are drawn, and indicate that a given characteristic is in a certain proportion the difference between the two proportions can be tested to determine whether it is significant or arises out of a sampling fluctuation by use of the formula:

$$\sigma D \% \left\{ \begin{array}{l} \text{Standard error of} \\ \text{the difference in } \% \end{array} \right\} = \sqrt{p q \left(\frac{1}{N_1} + \frac{1}{N_2} \right)}$$

p = the total percentage of occurrence

q = $1 - p$

N_1 = number in first sample

N_2 = number in second sample"⁵

⁵ Arkin, Herbert, and Colton, Raymond, STATISTICAL METHODS, (third edition), New York: Barnes and Noble, Inc., 1938, p. 125.

EXAMPLE

(From Table III)

	Number living in multiple dwellings	Percentage of occurrence	Number questioned
Maladjusted	52	24	217
Non-maladjusted	64	17	372
	116	19	589

$$\begin{aligned}
 \sigma D\% \left(\begin{array}{l} \text{Standard error of the} \\ \text{difference in \%} \end{array} \right) &= \sqrt{(.19) (.81) \left(\frac{1}{217} + \frac{1}{372} \right)} \\
 &= \sqrt{.19 \times .81 \times .007} \\
 &= \sqrt{.001077} \\
 &= .033 \text{ or } 3.3\%
 \end{aligned}$$

To reduce the necessary mathematical calculations, a graph showing the standard error for total percentages of occurrence was worked out. (See Table I and Graph I following). This was possible because the basic figures (N_1 and N_2) were the same in each case. Example: The standard error for a total percentage of occurrence of 19 per cent, when read from the graph is 3.3 per cent.

The following method was used to find significance; the actual difference in percentage of the two samples, divided by the standard error for the total percentage of occurrence, gives a ratio of significance. Thus, if the actual difference in per cent between two samples is 7, and the standard error was 3.3, the quotient would be 2.1; in other words, the actual difference in percentage would be 2.1 times the standard error.

Since a difference of two times the standard error can be considered "significant" and 2.7 times can be considered "very significant", the factor of living in a multiple dwelling* is a significant one in pupil maladjustment. This ratio of the actual difference to the standard error of the difference is commonly called the critical ratio and will be so referred to hereafter in this study.

* See example on preceeding page (from Table III)

TABLE I

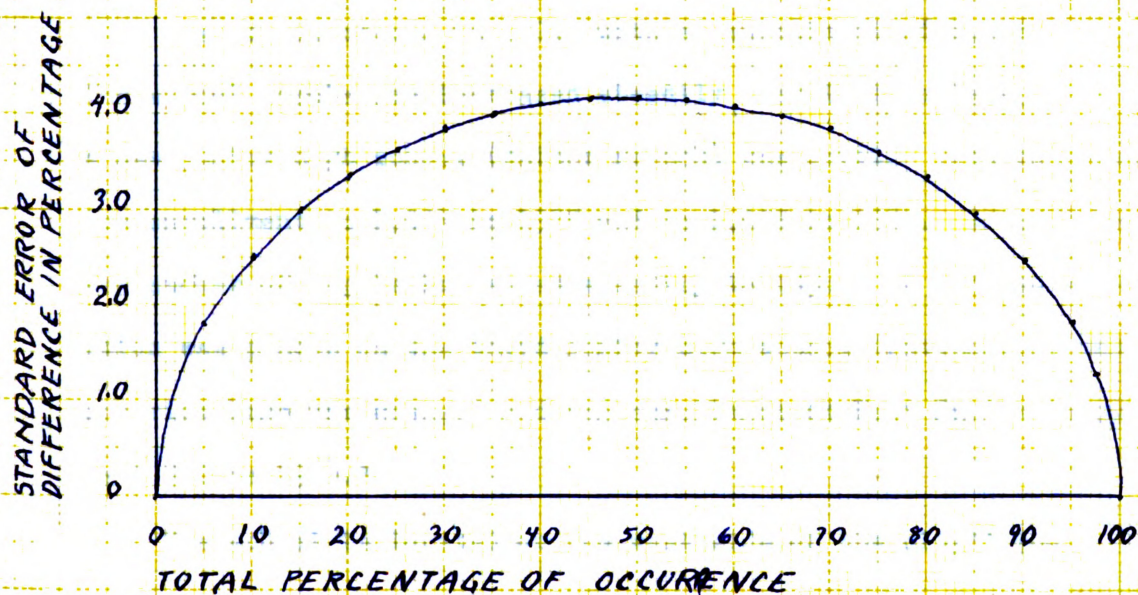
STANDARD ERROR OF THE DIFFERENCE
IN PERCENTAGE FOR TWO SAMPLES

One of 217 cases and the other of 372 cases

$\sqrt{.50 \times .50 \times .007}$	=	4.18%
$\sqrt{.45 \times .55 \times .007}$	=	4.16
$\sqrt{.40 \times .60 \times .007}$	=	4.10
$\sqrt{.35 \times .65 \times .007}$	=	3.99
$\sqrt{.30 \times .70 \times .007}$	=	3.84
$\sqrt{.25 \times .75 \times .007}$	=	3.62
$\sqrt{.20 \times .80 \times .007}$	=	3.34
$\sqrt{.15 \times .85 \times .007}$	=	2.99
$\sqrt{.10 \times .90 \times .007}$	=	2.51
$\sqrt{.05 \times .95 \times .007}$	=	1.82
$\sqrt{.025 \times .975 \times .007}$	=	1.30
$\sqrt{.00 \times 1.00 \times .007}$	=	0.00

GRAPH I

STANDARD ERROR OF DIFFERENCE IN PERCENTAGE
FOR TWO SAMPLES OF 217 AND 372 CASES.



DESCRIPTION OF SCHOOL AND SURROUNDING AREA

All the records in this study were obtained at West Junior High School in Lansing, Michigan. It is located near the business district in a residence and apartment house section. Only a limited amount of extra-curricular activity is sponsored because a wide variety of subjects is offered in regular curriculum. These include band, orchestra, dramatics, etc. There is no room for playground at the school or anywhere nearby, as the area is entirely occupied by buildings.

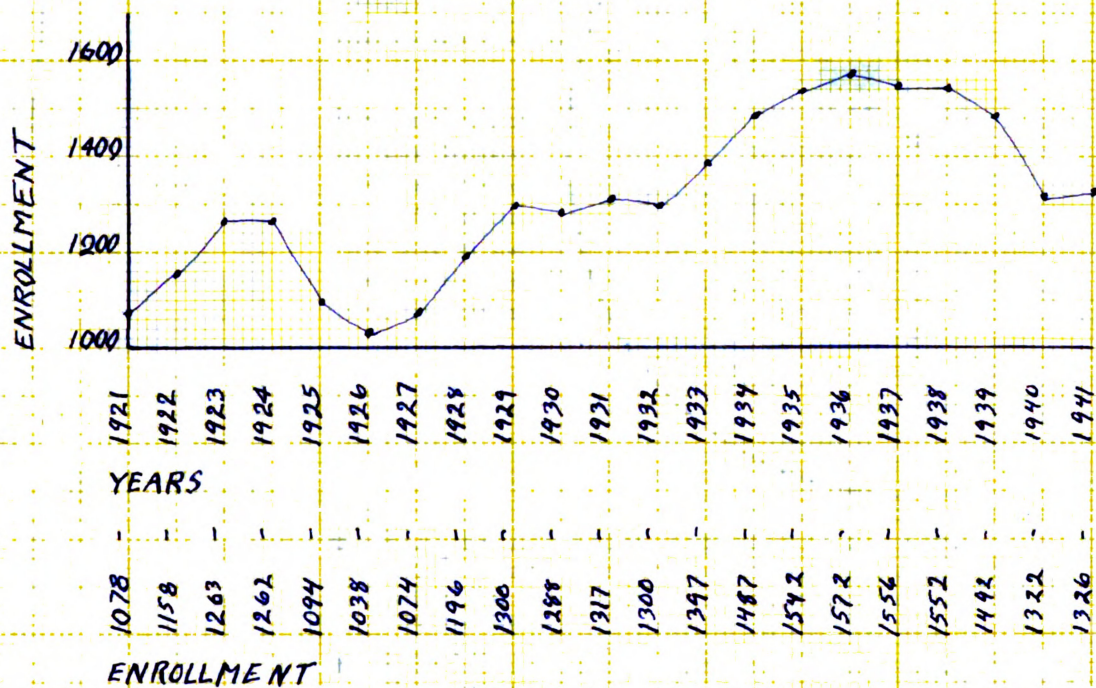
The school opened in 1921, with an enrollment of 1,078. The school population increased steadily from 1921 to 1924, then a new junior high school (Walter French) was built. This decreased the enrollment to 1,094 in 1925 and to 1,038 in 1926. After this the number of pupils increased steadily to 1936. In 1939 an addition was placed on the third junior high school (Pattengill) the district line was changed and the enrollment at West Junior dropped to 1,322 in 1940.*

The school is located on the west side of the city** and its district includes all pupils living north and west of the Grand River, and west of Turner Street. This area includes the main business district, the Oldsmobile, Fisher Body, and Gas Company, other industrial districts, about half of the railroad

* See graph on next page.

** See map on next page.

GRAPH II
WEST JUNIOR HIGH SCHOOL ENROLLMENT



North and West of Grand River and
West of Turner Street
as indicated by green line.

North and West of Grand River and
West of Turner Street

as indicated by green line.

ALBERT 2, 1 S N	HILLCREST AVE. 5 N 4 W	1. WEATHER BUREAU
ALMOND 3 W	HILL CREST 4 W 4 A	2. WARY MAYO DIVISION
ALPINE 1 W	HUNTINGTON 10 W	3. MUSIC CENTER
ALPINE 2 W	KEDD 10 S 2 E	4. HOSPITAL
ARNDSON DR. 7 N 7 N	KENSINGTON 11 W	5. RESIDENTS RESIDENCE
BAL 1 W	LINDEN 4 N 2 E	6. DEAN OF AGENIES RESIDENCE
BEECH 5 4 2 N	LINDEN 4 N 2 E	7. HOME ECONOMICS HOUSE #5
BEHOLD 5 N 2 E	W. A. C. 3 N 3 E	8. HOME ECONOMICS HOUSE #5
BONDI 2 E	W. A. C. 3 N 3 E	9. HOME ECONOMICS HOUSE #5
CEGAR 10 W	W. A. C. 3 N 3 E	10. HOME ECONOMICS HOUSE #5
CHERRY 12 N	W. A. C. 3 N 3 E	11. CENTER HOUSE
CENTERLAND 9 N 4 N	W. A. C. 3 N 3 E	12. MUSIC PRACTICE
CHERRY 12 N	W. A. C. 3 N 3 E	13. MUSIC PRACTICE
CHIFFERHILL 10 W	W. A. C. 3 N 3 E	14. HOME ECONOMICS
CHIFFERHILL DR. 4 N 10 E	W. A. C. 3 N 3 E	15. SQUIRREL HALL
CLAY 10 W	W. A. C. 3 N 3 E	16. BEAUMONT HOUSE
COLUMBIA DR. 7 N 3 E	W. A. C. 3 N 3 E	17. LIBRARY
COLUMBIA DR. 7 N 3 E	W. A. C. 3 N 3 E	18. ADMINISTRATION
CRESCENT 10 W	W. A. C. 3 N 3 E	19. PSYCHOLOGY BUILDING
DELA 2 N 3 W	W. A. C. 3 N 3 E	20. BACTERIOLOGY
DELA 2 N 3 W	W. A. C. 3 N 3 E	21. BOTANY
DOROTHY 5 N 4 W	W. A. C. 3 N 3 E	22. BOTANY GREENHOUSE
DOROTHY 5 N 4 W	W. A. C. 3 N 3 E	23. ENTOMOLOGY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	24. FORESTRY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	25. HORTICULTURE GREENHOUSE
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	26. ENTOMOLOGY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	27. DAIRY CREAMERY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	28. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	29. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	30. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	31. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	32. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	33. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	34. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	35. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	36. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	37. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	38. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	39. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	40. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	41. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	42. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	43. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	44. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	45. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	46. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	47. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	48. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	49. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	50. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	51. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	52. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	53. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	54. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	55. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	56. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	57. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	58. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	59. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	60. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	61. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	62. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	63. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	64. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	65. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	66. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	67. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	68. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	69. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	70. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	71. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	72. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	73. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	74. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	75. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	76. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	77. ANATOMY
ELIZABETH 1 N 1 N	W. A. C. 3 N 3 E	78. ANATOMY

1000	107. SHELL
900	109. HOSPITAL OLIN MEMORIAL
	110. ARBUT HALL DORMITORY
	111. AUDITORIUM
	112. MUSIC
800	113. CAMPBELL HALL DORMITORY
	115. GYMNASIUM FIELD HOUSE
	117. BASEBALL FIELD
	118. TENNIS COURTS

IN FIGHTING OFF THE FIELD OF BATTLE

[illegible]

Lansing Facts and Figures

General

Population of Lansing 1940 Census, 78,479.
Population of East Lansing 1940 Census, 5,790.
Population City Directory Census totals 117,315 arrived at by conservatively estimating two and one-quarter persons for each individual name secured in Lansing, East Lansing and adjacent platted territory one-half mile in each direction. Total retail trading zone area includes thirty-five townships and touches five counties with a total population of approximately 160,000. This population includes large numbers of salaried workers, employed the year around in Federal, State, and City government positions.

City area of Lansing 11.91 square miles.
City area of East Lansing 4 square miles.

Altitude above sea level, 863 feet.

Churches, 72 of all denominations.

Peoples Church at East Lansing.

One Y. W. C. A.

One Y. M. C. A.

Parks, 706 acres.

Lansing became Capitol City by act of Legislature.

Was incorporated into a city in 1859.

First railroads built in 1863.

Lansing gets its name from Chancellor John Lansing of New York. Capitol Building completed 1879 at a cost of \$1,510,130.00. "Palladian" type of architecture. Covers 11.6 acres. No. 1 Amherst (Ohio) sandstone. Cornerstone of New Hampshire granite.

State Office Building completed 1922. Cost \$2,857,500.00. Indiana limestone.

New Federal Building built in 1933. Cost \$850,000.00. Made of Dolemite limestone from Minnesota.

Michigan State College of Agriculture and Applied Science, located in East Lansing is the oldest land grant college in the United States. It was founded in 1857. Covers approximately 2,430 acres.

Lansing has no bonded indebtedness on its entire school system, valued at seven and one-half millions of dollars. This is also true of the County of Ingham, in which the city is located.

Lansing is on the Grand River, 85 miles N. W. of Detroit and 64 miles S. E. of Grand Rapids, and 27 miles N. of Jackson and is on the Michigan Central, New York Central, Pere Marquette and Grand Trunk Railroad, and has one of the finest airports in the country, with airmail to all parts of United States, Canada and Mexico. It is the focal point for bus and truck transportation to all points of the United States over main state trunklines on US-16 (Detroit to Grand Rapids); US-127 (Toledo through to northern Michigan); M-78 (Kalamazoo through Battle Creek to Flint) all of which make Lansing an active trading center.

An average temperature of 70.9° in summer and 22.4° in winter. Rainfall 121 days average.

Lansing has a municipally owned electric light and power system, offering an adequate supply of power for industrial and residential purposes. There is an unlimited water supply from artesian wells at minimum cost; also an abundant natural gas supply for all uses.

A new \$4,000,000.00 municipally owned power plant which will serve all central business property requirements for years to come.

A new \$1,000,000.00 sewage disposal plant.

A new \$1,000,000.00 water softening plant.

A new \$200,000.00 municipal market building.

Good hospitals.

One National and two State Banks, all members of the Federal Reserve System.

139.3 miles of paved streets and is the hub of an extensive system of paved highways leading to every section of Michigan.

One daily newspaper, The State Journal, with daily circulation of 46,124.

A municipal tourist auto camp located just off East Michigan Avenue, east of the city, completely modern.

Four municipal golf courses, numerous playfields and Moores Park swimming pool.

A diversification of some 130 industries and is the home of some of the best known products in the automobile field: Oldsmobile—Reo—Fisher Body—Motor Wheel.

A large industrial payroll augmented by that of the State government and its various branches; also by payrolls of Federal offices, State institutions and by that of Michigan State College with over 8,000 students.

Educational

Two Lansing Senior High Schools, three Junior High Schools, 21 Grammar Schools, six Parochial Schools.

One East Lansing Senior High School, one Junior High School, two Grade Schools.

State Vocational School for Boys.

Michigan School for Blind.

One of the finest Musical Conservatories in Middle West.

Michigan State College of Agriculture and Applied Science.

Miscellaneous

Nativity of Population:	Lansing	Michigan
Percent native white.....	86.1	78.4
Per cent foreign born white.....	12.7	19.8
Per cent negroes.....	1.1	1.6
Per cent others.....	0.1	0.2

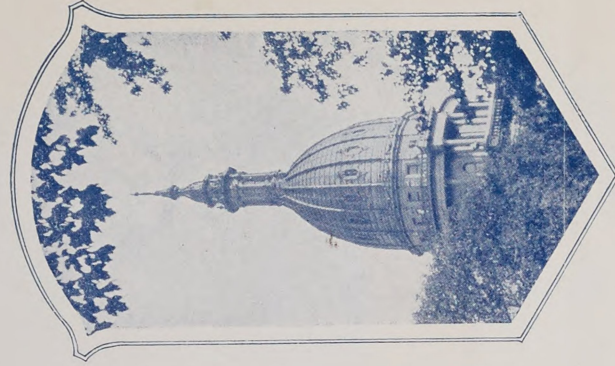
Illiteracy, 10 years of age and over:

Per cent of population.....	1.3	3.0
People per family.....	4.15	4.25

The above figures are estimates arrived at prior to completion of 1940 Census tabulation.

As you read the above statistics note the changes which are taking place. Keep in mind the fact that land is practically the only factor in our economic life which is limited in quantity and its future value will depend largely on the number, type, movements, choices and buying power of the people now here or that plan on moving into this city. Prices may fluctuate from time to time, reflecting economic trends, but the intrinsic basic value of property is always the same.

Greater Lansing East Lansing



"A Good Place to Live"

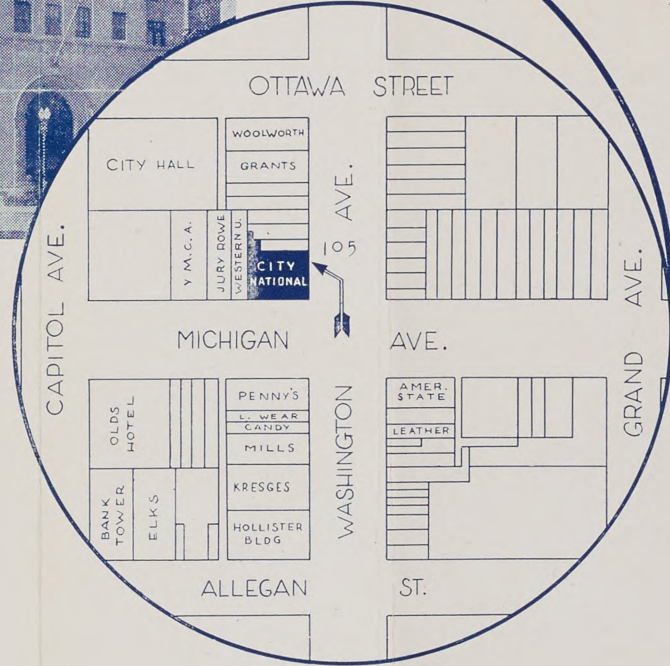
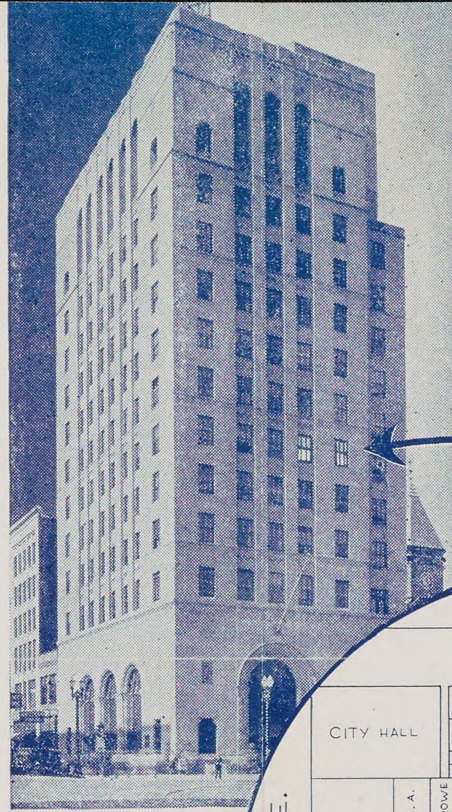
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and presented by

GERALD A. BAKER
Real Estate — Leaseholds

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LANSING

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Our offices on the seventh floor of the City National Building are centrally located and are arranged to adequately handle all phases of real estate service.

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SERVICE

- **REAL ESTATE SALES AND RENTAL DEPARTMENTS.** Our organization is experienced and familiar with both Lansing and East Lansing locations and know property values. We invite you to make our office your real estate clearing house, not on the grounds of acquaintance or friendship, but upon our ability to render a superior service, whether you wish to buy, rent or sell. We may know the very man who wants your property—or the very property you want.
- **APPRAISALS.** This department is under the personal direction of Gerald A. Baker, whose judgment is supported by years of experience in the real estate business. We are prepared to give competent appraisals for estates, property settlements and residential, business or commercial properties.
- **BUSINESS LOCATIONS AND LEASING DEPARTMENT.** Our files contain facts concerning most every piece of business property in Lansing, such as frontage, depth, area, street and number, height and type of building, name of owner, name of tenant, volume of business done, rental paid, lease expirations and assessed valuation, all of which prove of incalculable value in determining market values. Our service includes negotiations for new locations for stores; re-locating existing stores; extensions and revisions of leases on established stores; acquiring or disposing of businesses as going concerns. We represent many large property owners, most of whom demand confidential service. We are often commissioned to secure by purchase or lease acceptable space for organizations or individuals who desire this confidential and individual service. Competent counsel in connection with such transactions is valuable and proceeds from years of training and study.
- **PROPERTY MANAGEMENT.** Property owners are beginning to realize the importance of knowledge and experience in the management of property. Our service includes leasing, collection of rents, repairs, alterations, periodical inspection of your property. We also service mortgages and collect land contract payments. We manage property in a way that will produce for its owners the best net profit possible under existing business conditions. Our greater business volume enables us to secure lowest prices for repairs and materials. For your protection we segregate our clients' funds in a separate trust account, which at all times covers in full all money due clients. The net income from your property accompanying our statements is available to you within a few hours of receipt from tenant. If you wish to be relieved of the responsibility of managing your own property, and desire a higher net income, we invite you to come in and talk over this specialized phase of our service. Save time, expense and worry. This service is open to all individuals and corporations. Your inquiry concerning any of our services will involve no obligation on your part. Call Gerald A. Baker, 4-3021.

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districts, and a wide diversification of residence areas including such contrasts as the negro and foreign area near the Oldsmobile plant and the well-to-do sections of Westmoreland and Heatherwood.

Lansing, being the capitol city of the state of Michigan, has a large number of office workers and state employees. The state capitol and office buildings are located on the west side near the school, as well as the state offices of various insurance companies and other organizations.

CHAPTER II

SELECTED PHYSICAL AND PHYSIOLOGICAL CHARACTERISTICS

In an analysis of maladjustment, it is convenient and logical to study physiological factors first. Owing to the definitely objective nature of the answers, sex, race, and age were chosen for consideration. The chance for error in these data is small. The presence of health defects is not so easily determined in an objective way, but probably the replies were significant nevertheless as they indicated the attitudes which the pupils had regarding their health. The results of this investigation are presented in Table II.

TABLE II. PERCENTAGE OF MALADJUSTED AND NON-MALADJUSTED PUPILS HAVING DESIGNATED PHYSICAL CHARACTERISTICS

Selected characteristics	217 maladjusted pupils (percent)	372 non-maladjusted pupils (percent)	Standard error of difference in percentage	Critical ratio (Actual difference divided by standard error difference in percent)
Age--14 and over	73	44	4.1	7.0
Sex--male	81	47	4.1	8.3
Race--negro	12	6	2.3	2.6
Presence of Health Defects	41	23	3.8	4.7

The approach to a discussion on the age groups of these eighth grade pupils was made by dividing them into nearly equal groups--those fourteen years of age and older which contained 49% of the total, and those thirteen years old and younger which constituted the remaining 51%. The older group, though 1% smaller contained 73% of the maladjusted pupils, leaving only 27% maladjusted who were 13 years old or less. The standard error for the difference in percentage between the 44% non-maladjusted and the 73% maladjusted pupils who were 14 years of age or older (shown in Table II) is 4.1%. Since there is an actual difference of 29%, this makes a critical ratio of seven times the standard error. Thus the age factor is very significant.

The fact that there were four times as many boys as there were girls in the maladjusted group coincides with other statistics. Clyde White says, "Among juvenile delinquents the ratio of males to females is about four to one."¹ Girls who are maladjusted at this age tend to be incorrigible and often become institutional cases. Boys tend to give expression to their maladjustment in acts of commission against disciplinary rules, or failure to accomplish expected work. Thus we can expect to find a greater number of maladjusted boys than maladjusted girls in the junior high school, or at least to find more boys

¹

White, Clyde R., SOCIAL STATISTICS, New York: Harper and Brothers, 1933, p. 19.

that are listed in maladjusted due to repeated infractions of rules, or indifference or antagonism to lessons or school work in general.

Under ideal conditions we should expect to find no differences between various races, but the negro's social position tends to produce differences.

Only 6% of the normal pupils are negro, while 12% of the maladjusted group are colored. This is a critical ratio of 2.6, thus showing that race is significant in maladjustment. This again coincides with general belief.²

Very few records are kept in regard to health defects and little could be done on this topic beyond taking the pupil's own statements as to the defects which they had. In some respects the child's own statement rather than the results of more or less hurried clinical examinations has more bearing on this study, because it probably is the pupil's attitude rather than actual physical disability that may be the important factor causing maladjustment. Table II shows that 41% of the maladjusted and only 23% of the non-maladjusted group mentioned health defects, making a critical ratio of 4.7, thus definitely placing this factor as very significant.

² White, Clyde R., SOCIAL STATISTICS, New York: Harper and Brothers, 1933, p. 19.

SUMMARY

There is proportionally more maladjustment among negroes than among whites, more among boys than among girls, more among the older pupils, and among those pupils with real or fancied health defects. These factors are important in diagnosing the social situation and as they are more prevalent among maladjusted pupils, we can conclude that they have a significant influence in maladjustment.

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CHAPTER III

SELECTED CHARACTERISTICS IN HOME ENVIRONMENT

Home life and family associations are probably the most determining factors in a child's environment so far as influencing his personality and behavior traits is concerned. A study of some selected characteristics in the home environment will give an insight regarding their frequency of occurrence in relation to maladjustment.

Foreign born parentage has been considered a factor of major significance in delinquency and maladjustment. Sutherland says, "The 'second generation' of immigrants generally come into contact with the courts as delinquents more frequently than the first generation." He also says "Native-born whites of native parents have the smallest number of commitments, foreign-born whites rank second, and native-born of foreign or mixed parents (the second generation) rank highest."¹

This belief is partially verified by the figures in Table III, which show 28% of the maladjusted pupils and 15% of the normal group have foreign-born fathers thus making this item very significant. The figures on foreign born mothers, however, were 15% of the maladjusted and 13% of the non-maladjusted pupils, indicating little difference.

¹ Sutherland, E. H., CRIMINOLOGY, Philadelphia: Lippincott Co., 1924, pp. 100-101.

TABLE III. PERCENTAGE OF MALADJUSTED AND NON-MALADJUSTED PUPILS HAVING DESIGNATED CHARACTERISTICS IN HOME ENVIRONMENT

Selected Characteristics	217 maladjusted pupils (percent)	372 non-maladjusted pupils (percent)	Standard error of difference in percentage	Critical ratio
Foreign birth				
- father	28	15	3.3	3.9
- mother	15	13	2.9	.7
Foreign language spoken in home	14	12	2.8	.7
5 or more brothers and sisters	24	10	3.0	4.7
Broken home (divorce, death)	37	18	3.6	5.3
Education of parents				
Father H.S. graduate	36	48	4.1	3.0
Mother H.S. graduate	39	47	4.1	2.0
Mothers work outside home ²	23	16	3.2	2.2
Relief status of parents	25	12	3.0	4.3
Parents own home	41	44	4.1	.7
Multiple dwelling	24	17	3.3	2.1

² 28 maladjusted pupils and 15 of the non-maladjusted pupils reported deceased mothers, so these were deducted from the totals in figuring percentages for work outside the home.

The child's conflict with the father's old-world ideas of parental domination is likely to cause this maladjustment.

A foreign language spoken in the home is generally considered to be a factor associated with maladjustment. Here again the figures in this study do not bear out prevalent beliefs. The data showed a foreign language was sometimes spoken in the homes of 14% of the maladjusted pupils and in 12% of the homes of the normal group--showing little significance. Two possible explanations for this suggest themselves: first, our beliefs are based on studies made in congested areas inhabited by foreigners where other factors were not properly considered; and second, the group considered in this study may have been of a higher type of foreign born parentage than average. The fact that Lansing has not increased rapidly in population in the last ten years might also have a bearing on the behavior of children of the foreign born, because in all probability these people were not new-comers, and therefore they and their children had become more nearly adjusted to community influences.

A greater percentage of maladjusted children come from the larger families, 24% having five or more brothers and sisters, while only 10% of the normal group have this number. As this difference is 4.7 times the standard error, this factor appears to be very significant. This conclusion is borne out by Breckinridge and Abbott of Chicago, in studying 584 delinquent boys

and 157 delinquent girls, found that 47% of the boys and 34% of the girls were from families with six or more children.³

From the viewpoint of demoralizing social influence a broken home has long been considered as a factor of major significance. Gillin, Dittmar, and Colbert say, "In a study of 2,000 cases in Chicago nearly a third of the juvenile delinquents had one or more parents dead," and "from 21 to 30 per cent had parents separated".⁴ This is amply substantiated in Table III which shows that among the normal group of pupils there were 18% who did not live with both of their natural parents, while 37% of the maladjusted pupils come from broken homes. Thus the critical ratio is 5.3, indicating that a broken home is a very significant factor in maladjustment.

The educational attainments of parents are considered as factors in maladjustment, as 48% of the normal and only 36% of the maladjusted pupils reported fathers who were high school graduates, making a critical ratio of 3 and thus being very significant. Here the economic factor might have some effect for presumably the matter of education would be likely to increase the income of the father.

³ Breckinridge and Abbott, *THE DELINQUENT CHILD AND THE HOME*, New York: Charities Publication Com. 1912, p. 116.

⁴ Gillier, Dittmar, and Colbert, *SOCIAL PROBLEMS*, New York: Century Co., 1928, p. 430.

The results for the mothers was similar but the critical ratio was only 2-47% for the normal group and 39% for the mal-adjusted pupils.

In figuring the percentages of mothers working outside the home, the deceased mothers were deducted from the tabulation in order to make the percentage comparable, 23% of the 189 mal-adjusted pupils' living mothers worked outside the home in comparison to 16% of the 357 non-maladjusted pupils' living mothers. These figures place the factor of a mother working outside the home as one of significance in our study of maladjustment. This factor is probably closely allied to the economic status of the family.

The economic status of the parents has a direct bearing on the social attitudes of the pupil. Healy and Bronner show that one-fourth of the cases in their series of studies were from homes so poor that poverty was a factor in the delinquency.⁵ Table III shows those pupils in the present study whose parents have received relief from various agencies during the three years preceding the filling out of the schedule card, but does not take cognisance of those whose economic level was just above relief status. 25% of the maladjusted pupils reported their families had been on relief, while only 12% of the normal group

⁵ Healy and Bronner, *AMERICAN JOURNAL OF SOCIOLOGY*, Vol. 22, July, 1916, pp. 50, 51.

were in this classification. The economic status of the family is also closely associated with other social factors such as the pupil working, and the mother working outside the home.

The factor of home ownership shows a small percentage difference; 41% for the maladjusted and 44% for the normal group. This gives a critical ratio of but .7 and is therefore not significant. These results are likely due to the high type of residence available to those who wish to rent a place to live in Lansing, and the absence of the characteristic tenement districts of large cities.

The type of dwelling in which a child lives must be considered a significant factor, as there is a 2.1 critical ratio in favor of single dwellings. 17% of the normal group and 24% of the maladjusted pupils live in multiple dwellings. In a large city area of congested apartment dwellings we might expect to find a greater percentage of maladjustment.

SUMMARY

In summarizing the factors in home environment, the following statements are pertinent in consideration of maladjustment.

A foreign born father, five or more brothers and sisters, living in a multiple dwelling, a broken home, father and mother not high school graduates, and a relief status family, are factors

associated with pupil maladjustment.

A foreign language spoken in the home, the mother foreign born, and home ownership do not seem to be associated with eighth grade pupil maladjustment.

CHAPTER IV

SELECTED SCHOOL RELATIONSHIPS CHARACTERISTICS

The number of school relationships that can be readily investigated is limited, but a study of grades repeated, number of schools attended, and whether or not the pupil ever attended a parochial school, will give an insight into the problem. Information concerning all of these items was available in this study.

TABLE IV. PERCENTAGE OF MALADJUSTED AND NON-MALADJUSTED PUPILS HAVING DESIGNATED CHARACTERISTICS IN SCHOOL RELATIONSHIPS

Selected characteristics	217 maladjusted pupils (percent)	372 non-maladjusted pupils (percent)	Standard error of difference in percentage	Critical ratio
Repeated a grade	71	41	4.1	7.3
Attended parochial school	11	4	1.9	3.7
Attended three or more schools	77	69	3.8	2.1

In considering the problem of scholarship, the fact of having to repeat a grade is very significant. A percentage of 41 for the normal group is startling enough in itself, but even more so is the

percentage of 71 for the maladjusted pupils. Failing to accomplish the minimum requirements necessary for promotion should not be thought of as entirely the expected result of maladjustment, but is often a direct indication of indifference to school, and antagonism to discipline that results in maladjustment.

Former parochial school attendance must be taken into consideration as a factor associated with maladjustment as 11% of all maladjusted pupils have at some time attended such schools, while only 4% of the normal eighth grade pupils have done so. It is possible that a higher percentage of the former pupils of parochial schools may have left them because of difficulties in maladjustment and then became pupils of the public schools, thus increasing the percentage figures from this item in this study.

Attendance at three or more schools is a significant factor in maladjustment. 69% of the normal group and 77% of the maladjusted group report attendance at three or more schools, making a critical ratio of 2.1. The influence of continually new fellow pupils, changing of teaching methods, and possible loss of credit and time, are likely to cause maladjustment. Especially would this be true with pupils with introvert tendencies or mental attitudes that are easily disturbed.

SUMMARY

Failure to pass grades in school, former parochial school membership, and attendance at three or more schools are significant factors associated with maladjustment of junior high school pupils. The critical ratio of 7.3 for repeating grades, presents an implication for teachers and parents of one very important item that is indicated for intensive study, to find means and methods for betterment.

CHAPTER V

SELECTED CHARACTERISTICS IN COMMUNITY RELATIONSHIPS

Community relationships are considered to be second in importance only to home environment in their influence upon young people. The group contacts that are made at church, Sunday School, at work, at scout meetings, etc., have often been considered important influences on behavior.

TABLE V. PERCENTAGE OF MALADJUSTED AND NON-MALADJUSTED PUPILS HAVING DESIGNATED CHARACTERISTICS IN COMMUNITY RELATIONSHIPS

Selected characteristics	217 maladjusted pupils (percent)	372 non-maladjusted pupils (percent)	Standard error of difference in percentage	Critical ratio
Never attends Sunday School	33	14	3.3	5.7
Never attends Church	21	9	2.8	4.3
Pupil works outside home	60	33	4.1	6.6
Boy or Girl Scout Membership	41	47	4.1	1.5

This study showed that Sunday School and church attendance are very significant in maladjustment, giving a critical

ratio of 5.7 for the former and 4.3 for the latter. 33% of the maladjusted pupils and only 14% of the normal group stated they never went to Sunday School. 21% of the maladjusted pupils and 9% of the normal group admit they never go to church.

According to the data on Table V, there is more maladjustment among pupils that work outside the home. This generalization agrees with Gillin, Dittmer, and Colbert who say, "Working boys provide a delinquent rate from 2 to 10 times as high as those who are not working."¹ Of the maladjusted pupils we find that 60% do work of some kind for pay, while but 33% of the normal group do so.

A number of those who are definitely maladjusted sell papers at noon and night on the streets downtown, and also sell extras whenever possible. This contact with street life at such early ages is likely to tend toward maladjustment.

The conclusions about scout membership, the last item in Table V, is a variance with popular belief. The small difference in percentages of 41 for the maladjusted and 47 for the normal group of pupils who are or have been Boy or Girl Scouts will probably not be accepted by many readers as being true for all school communities. This critical ratio

¹ Gillin, Dittmer, and Colbert, SOCIAL PROBLEMS, New York: Century Co., p. 429, 1928.

is only 1.5 times the standard error and therefore indicates only slight significance. More detailed study is likely to indicate that the maladjusted pupil is a "joiner" but never attained very much advancement. Another assumption might be, that the scout program is superficial, and perhaps does not have the influence upon the youth to the extent that its admirers, leaders, and well-wishers hopefully believe.

SUMMARY

This study shows that failure to attend church and Sunday School, and working outside the home for pay are factors associated with maladjustment, whereas scout membership does not appear to be significant. This suggests more co-operation between church and school, and perhaps more constructive aims and actions on the part of our scout leaders.

CHAPTER VI

CUMULATIVE EFFECT OF CHARACTERISTICS ASSOCIATED
WITH MALADJUSTMENT

Where phenomena are the result of the multiplicity of factors, it is difficult to isolate the results of any specific one. Since the causes of human behavior are complex, it is to be expected that it is associated with a number of factors or circumstances. The study of association of factors is almost endless and usually if two or three are present others are likely to occur also. An example of this is the repetition of grades among the older age groups. In this instance repetition is associated with the attainment of an age above the average.

Since the personality of the pupil is integrated so that his behavior patterns are based on a combination of emotions, environmental influences, inherited characteristics, and attitudes, an analysis of the cumulative effect of factors associated with maladjustment will be of value. While behavior at one particular time is not likely to be a complete index of his attitudes, it may be an indication of maladjustment tendencies or trends. As the occurrence of the characteristics found in this study to be associated with maladjustment increase, the more likely is maladjustment to occur.

The preceding chapters have presented description of single series of data on selected characteristics of maladjusted and non-maladjusted pupils, and have shown the significance of each one as indicated by their critical ratios. It is the purpose of this chapter to present data which will show the effect of more than one of these factors on maladjustment. Clyde White says, "The central interest of the social worker is the relations of different social factors to the condition or situation with which he deals."¹

Burgess says, "Prediction is the aim of the social sciences," also "The study of prediction in human behavior opens up a new avenue of co-operation between sociology and social work," and ends with "Expectancy rates may make a real contribution to the further study of personality in its social setting."² He proposed a system of points based on twenty-one factors and worked out an expectancy percentage rate for parole violation. This approach could be used in the study of maladjustment.

The table on the following page shows the percentages of maladjusted and non-maladjusted pupils reporting twenty-two

¹ White, Clyde, R., SOCIAL STATISTICS, New York: Harper and Bros. 1933, p. 277.

² Burgess, Ernest W., "Is Prediction Feasible in Social Work?", SOCIAL FORM, June 1929, pp. 533-545, University of North Carolina Press.

TABLE VI. RANK OF CHARACTERISTICS ACCORDING TO STATISTICAL SIGNIFANCE

Twenty-two selected physical and social characteristics ranked by significance as shown by critical ratio of percentages of incidence among maladjusted and non-maladjusted pupils.

Rank	Selected Characteristic	217 maladjust- ed pupils (percent)	372 non- maladjust- ed pupils (percent)	Critical ratio
1	Sex--male	81	47	8.3
2	Repetition of grades	71	41	7.3
3	Age--14 or over	73	44	7.0
4	Employment of pupil outside home	60	33	6.6
5.	No Sunday School attendance	33	14	5.7
6	Broken home	37	18	5.3
7	Presence of health defects	41	23	4.7
8	5 or more brothers and sisters	24	10	4.7
9	No church attendance	21	9	4.3
10	Parents on relief	25	12	4.3
11	Father foreign born	28	15	3.9
12	Parochial school attendance	11	4	3.7
13	Father not a high school graduate	64	52	3.0
14	Race--negro	12	6	2.6
15	Employment of mother outside home	23	16	2.2
16	Multiple dwelling	24	17	2.1
17	Attendance at three or more schools	77	69	2.1
18	Mother not a high school graduate	61	53	2.0
19	Never a member of boy or girl scouts	59	53	1.5
20	Mother foreign born	15	13	.7
21	Foreign language spoken in home	14	12	.7
22	Parents do not own home	59	56	.7

selected characteristics, which are ranked according to their critical ratios.

Assuming that critical ratios of two or greater indicate significance, eighteen characteristics were so considered, and the original schedule cards were again checked to find the

number of pupils who possessed designated numbers of these various negative factors.

The results are shown in the following table and graph, which gives the number and percentage of pupils who have negative factors ranging from zero to twelve.

TABLE VII. PERCENTAGE OF 372 NON-MALADJUSTED AND 217 MALADJUSTED PUPILS HAVING DESIGNATED NEGATIVE CHARACTERISTICS

Number of Negative Character- istics	372 non-maladjusted pupils		217 maladjusted pupils	
	Number	Percentage	Number	Percentage
0	14	3.7	0	0.0
1	30	8.1	1	0.5
2	36	9.7	7	3.2
3	61	16.4	8	3.7
4	59	15.9	18	8.3
5	57	15.4	23	10.6
6	34	9.1	34	15.6
7	35	9.4	37	17.0
8	31	8.3	24	11.0
9	12	3.2	29	13.5
10	3	0.8	21	9.7
11	0	0.0	10	4.6
12	<u>0</u>	<u>0.0</u>	<u>5</u>	<u>2.3</u>
	372	100.0	217	100.0

GRAPH III. PERCENTAGE OF 372 NON-MALADJUSTED AND 217 MALADJUSTED PUPILS HAVING DESIGNATED NEGATIVE CHARACTERISTICS.



The non-maladjusted pupils show the following results: fourteen pupils or 3.7% reported no negative factors, the greatest number (61) reported three factors, and none reported over ten; the average was 4.1.

The maladjusted pupils show a consistently higher number of negative factors. No maladjusted pupil reported absence of all negative factors, the greatest number (37) reported seven factors, ten reported eleven factors, and five reported twelve; the average was 7.0.

Thus it is clear that the maladjusted pupil is usually the one who possess a considerable number of negative factors. The average normal pupil reported 4.1 negative factors and the average maladjusted pupil reported possession of 7.0.

Another way to observe the cumulative effect of negative factors on behavior is to calculate the percentage maladjusted of all the pupils reporting possession of a designated number of these negative factors. The table and graph on the following pages show the results of this calculation.

Fourteen pupils reported no negative factors, and none of these were maladjusted. Sixty-eight reported possession of six negative factors, and thirty-four were maladjusted, thus indicating that when a pupil possesses six negative factors there is a 50% chance that he will be maladjusted.

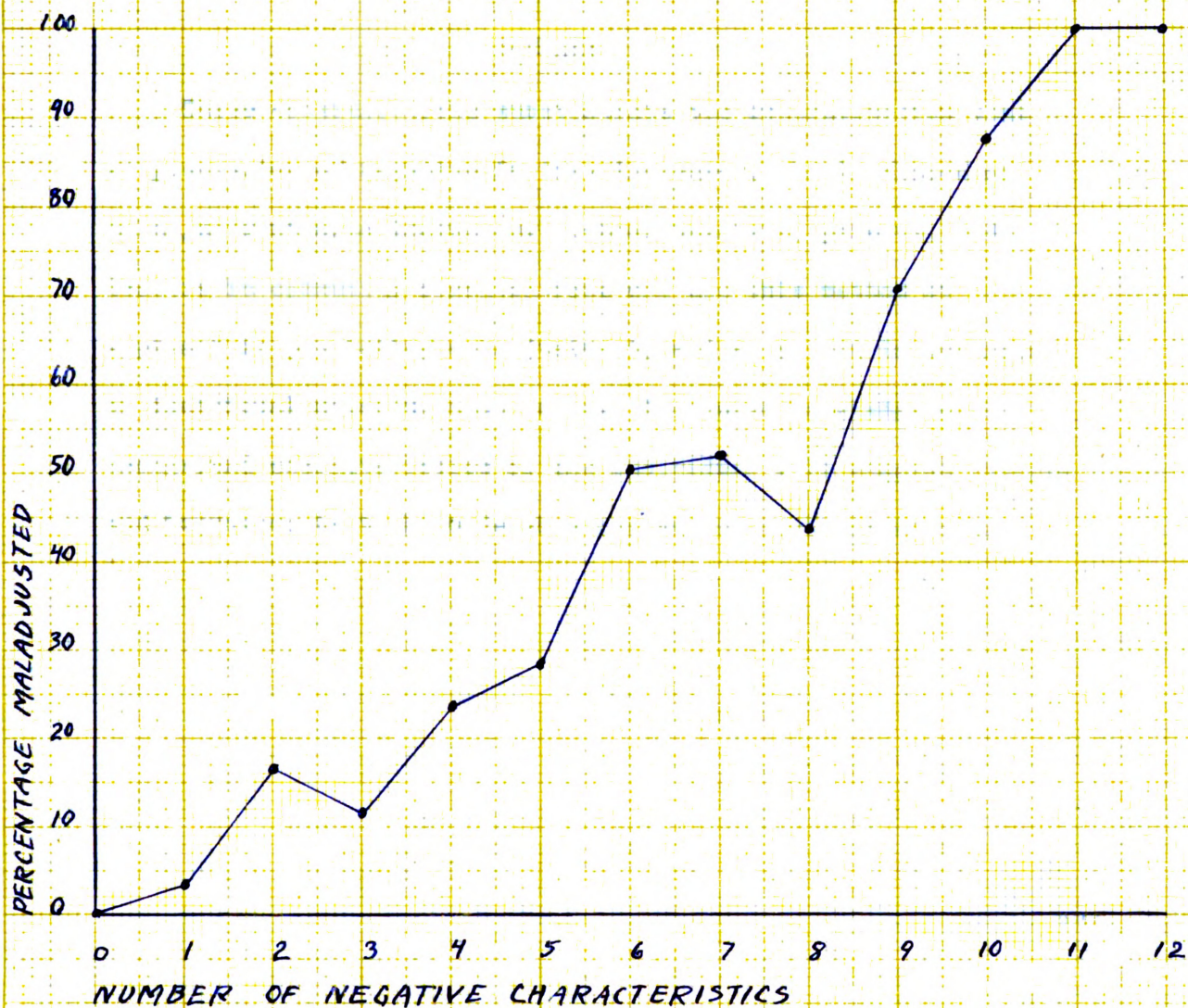
Fifteen pupils reported eleven or twelve negative factors,

**TABLE VIII. PERCENTAGE OF 589 PUPILS HAVING DESIGNATED
NEGATIVE CHARACTERISTICS WHO WERE MALADJUSTED**

Number of Negative Characteristics	Number of pupils having designated number of negative characteristics	Pupils having designated number of negative char- acteristics who are maladjusted	Percent- age mal- adjusted
0	14	0	0
1	31	1	3
2	43	7	16
3	69	8	11
4	77	18	23
5	80	23	28
6	68	34	50
7	72	37	51
8	55	24	43
9	41	29	70
10	24	21	87
11	10	10	100
12	5	5	100

GRAPH IV

PERCENTAGE OF 589 PUPILS HAVING DESIGNATED NEGATIVE CHARACTERISTICS WHO WERE MALADJUSTED.



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and all were maladjusted, leading to the assumption that this large number of negative factors is almost certain to produce maladjustment.

SUMMARY

These considerations substantiate the generalization that as possession of negative factors increases, the likelihood of maladjustment also increases. School teachers, parents, and leaders in community organizations can use this method of approach in predicting maladjustment, and as an aid in guidance of individual maladjustment cases. Increased knowledge of the background characteristics of the individual will suggest changes and improvements to be made thus correcting possible causes.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The purpose of this thesis was to investigate the extent to which certain selected physical and social characteristics were associated with maladjusted pupils, as shown by a comparison with normally adjusted pupils in the same school environment. This was done by making a statistical analysis pertaining to twenty-two characteristics of the eighth grade pupils of 1936, 1938, and 1940 at West Junior High School, Lansing, Michigan.

The findings of this study show that the following characteristics can be considered as significant factors associated with maladjustment: sex, repetition of grades, age, employment, never attending Sunday School or church, broken home, presence of health defects, five or more brothers and sisters in the family, parents on relief, father foreign born, parochial school attendance, father and mother not high school graduates, member of colored race, employment of mother outside home, multiple dwelling, and attendance at three or more schools.

The following factors were found of slight significance in this study of maladjustment: Boy or Girl Scout membership

foreign birth of mother, a foreign language spoken in the home, and home ownership.

Situations outside the home now may influence the lives of the youth more than they did in earlier times, yet family life still has an important influence on delinquency and maladjustment. Of the eighteen significant factors studied, eight are definitely characteristics associated with home environment--although they do not rank in the high five of critical ratios. Factors pertaining to home environment which had significant critical ratios were: broken homes, five or more brothers or sisters, parents on relief, father foreign born, father not a high school graduate, mother employed outside home, multiple dwelling, and mother not a high school graduate.

Since maladjustment is a complex phenomenon it is likely to be associated with a number of characteristics. Possession of any one negative factor or even of a few negative factors may not cause maladjustment but the possession of six or more is definitely serious. Pupils who reported absence of all eighteen negative factors were all normally adjusted, but fifty percent of those reporting a total of six negative factors were maladjusted, and every one of those who reported eleven or more negative factors were maladjusted. This leads to the generalization that as possession of negative factors increases,

the likelihood of maladjustment also increases.

Maladjustments are caused by environmental deficiencies, family and personality troubles, conflicts in wishes, physical defects, and emotional conflicts that the non-maladjusted child normally does not have. The maladjusted individual gets into difficulties because he is expected to conform to the accepted standards of the group--the mores and folkways of the day--but owing to his attitudes based on possession of numerous negative factors, he is disposed to behave otherwise. This results in conflict in which the group wins out and the individual is punished by social degradation or other means. He tries to oppose the group and loses.

Consequently a study of the social and physical background characteristics of a maladjusted pupil will give the teacher or social worker an objective approach in prediction, diagnosis, the treatment of maladjustments which the pupil manifests.

The generalizations herein contained are true, strictly speaking, only for this particular grade and these particular cases, but as the entire eighth grade for three alternate years with a membership of one thousand three hundred thirty-two was taken, the generalizations may be expected to apply to eighth grade pupils in similar situations.

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