CENTRAL PHILIPPINE UNIVERSITY, ILOILO CITY

A STUDY OF THE RELATIONSHIPS OF SOME FACTORS TO ACADEMIC ACHIEVEMENT

2658

A Thesis

Presented to

the Faculty of the School of Graduate Studies

Central Philippine University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

by

Perfecta D. Tamayo

April 1973

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AN ABSTRACT OF THE THESIS

A STUDY OF THE RELATIONSHIPS OF SOME FACTORS
TO ACADEMIC ACHIEVEMENT

by

MRS. PERFECTA D. TAMAYO

Mr. Taylor D. Neely, Adviser

The study was designed to find out the relationships
of different factors: intelligence, socio-economic status,
study habits, and attitudes to academic achievement. Stu-
dents randomly selected from the senior class of the Central
Philippine University High School in 1970-1971 were used as
samples. This consisted of sixty-three boys and sixty-four
girls.

The instruments used to obtain data were the Philip-
pine Self-Administering Mental Ability Test, the Survey of
Study Habits and Attitudes (by Holtzman and Brown) and a
socio-economic questionnaire designed by the researcher.
Achievement tests were constructed, pretested, and validated
on five academic subjects namely: Composition, Literature,
History, Trigonometry, and Physics.

The statistical procedures used in the analysis of
data were the following:

1. Computation of means and standard deviation, and

of the significance of the difference of means.

2. Computation of coefficient of correlations, par-
tial correlations, and multiple correlations, and the signi-
ficance of the difference of correlations.

3. Computation of coefficient of determination.

4. Analysis of variance of variables on the rela-
tionship of intelligence to achievement.

5. Regression equation to determine overachievement
and underachievement, in each ability group.

The pertinent results of the study are:

1. The girls made higher scores in all the tests
except in socio-economic status scale. The difference between
means, in intelligence and in attitudes was significant in
favor of the girls.

2. The boys were significantly higher in socio-
economic status than the girls.

3. The highest correlation was found between intel-
ligence and achievement. The correlations were positive and
high: .85 ± .25 for the boys, .81 ± .25 for the girls.

4. The correlation between socio-economic status and
achievement was positive but low: .35 ± .21 for the boys,
and for the girls, .36 ± .21.

5. The correlation between study habits and achieve-
ment for the girls was .34 ± .21; that for the boys was .27
± .24. The difference was not significant. The correlations

for both groups were positive but low.

6. The coefficient of correlation between attitudes and achievement for the boys was .26 ± .24, an indication of slight relationship; for the girls it was substantial, .52 ± .18.

7. The coefficient of multiple correlations between the criterion and a combination of two or three variables was stable and significant. A very high R was obtained when the independent variable was the combination of intelligence, socio-economic status, and study habits; .87 for the boys and .83 for the girls.

8. Seventy-one per cent of the boys' achievement was due to the effect of intelligence and twenty-nine per cent were "unexplained" or error variances.

9. Seventy-three per cent of the girls' achievement were explained by intelligence and twenty-seven per cent were "unexplained" or error variances.

10. Seventeen per cent of the total group were over-achievers.

11. Twenty per cent of the whole group were under-achievers.

12. Overachievers, normal achievers, and underachievers were found in each ability group of the boys.

13. Overachievers, normal achievers, and underachievers were also found in each ability group for the girls.