

## SELF-CONCEPT RELATED TO SCHOLASTIC ACHIEVEMENT AND SELECTED VARIABLES OF HIGH SCHOOL STUDENTS AT CENTRAL PHILIPPINE UNIVERSITY, SCHOOL YEAR 2001-2002

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### ABSTRACT

This study described the self-concept of high school students at Central Philippine University High School, school year 2001-2002, and related this to their scholastic achievement and selected variables. The descriptive-relational method was used, particularly a one-shot survey design. Two hundred ninety three, out of 1,303 high school students, served as respondents. Results of the study revealed that the respondents' composite ratings for self-concept and scholastic achievement were Very Good and Fair, respectively. Scholastic achievement had slight positive correlation with self-concept. Scholastic achievement was also found to have significant relationship with sex, number of children, father's occupation, type of elementary school graduated from, involvement in school activities, honors received, rating of parental guidance and supervision, and significant others. On the other hand, self-concept had significant relationship with involvement in school activities, rating for parental guidance and supervision, and significant others. Since the students' scholastic achievement had slight positive correlation with self-concept, it was recommended that efforts be taken to improve both, with the cooperation of home, school, church, and society.

### INTRODUCTION

#### *Background and Rationale of the Study*

Adolescents carry with them a sense of who they are and what makes them different from everyone else (Santrock, 1998).

The sense of self grows slowly. It begins with self-awareness: the gradual realization (beginning in infancy) that one is a being separate from other people and things, with the ability to reflect on himself and on his actions (Papalia & Olds, 1992).

Marsh (as quoted by Huit, 1998), showed that the relationship of self-concept to school achievement is very specific. Hamachek, as quoted by Huit (1998), asserts that self-concept and school achievement are related. The major

issue is the direction of the relationship: does self-concept produce achievement or does achievement produce self-concept? Are some antecedent variables related either to scholastic achievement or to self-concept? These questions this study sought to find answers to.

### *Objectives of the Study*

This study intended to describe the self-concept of high school students at Central Philippine University High School, school year 2001-2002, and relate this to respondents' scholastic achievement and selected antecedent variables.

Specifically, this study aimed to:

1. describe the self-concept of high school students at Central Philippine University, school year 2001-2002;
2. describe the scholastic achievement of high school students at Central Philippine University, school year 2001-2002, based on their previous final average grade in school year 2000-2001;
3. determine whether or not there is a significant relationship between scholastic achievement and the respondents' self-concept;
4. determine whether or not there is significant relationship between antecedent variables of personal characteristics (age, sex, and permanent residence), family characteristics (number of children, father's education and occupation, and mother's education and occupation), academic history (type of elementary school graduated, type of school activities involved in, and honors received), and other pertinent variables namely, proximity to parents while studying, rating of parental guidance and supervision, and significant others; and scholastic achievement; and
5. determine whether or not there is significant relationship of antecedent variables of abovementioned personal characteristics, family characteristics, academic history, and other pertinent variables, and self-concept of high school students at CPU.

### *Theoretical and Conceptual Framework*

The *self-concept* provides an individual with his *personal identity* or sense of who he is (Atwater, 1990). The core of one's personal identity is formed by his *life script* (Corey, 1986). Corey describes life script as made up of both parental teachings and the early decisions one makes as a child.

Marsh (as quoted by Huitt, 1998), showed that the relationship of self-concept to school achievement is very specific. General self-concept and non-

academic aspects of self-concept are not related to academic work; general academic achievement measures are related moderately to academic success. Specific measures of subject-related self-concepts are highly related to success in that content area.

Using linear discriminant analysis, Byrne (as quoted by Huitt, 1998), showed that academic self-concept was more effective than that of achievement in differentiating between low-track and high-track students. Hamachek, as quoted by Huitt (1998), asserts that self-concept and school achievement are related. The major issue is the direction of the relationship: does self-concept produce achievement or does achievement produce self-concept?

In this study, the possible significant relationship to scholastic achievement of antecedent variables such as personal characteristics, family characteristics, academic history, and other variables were also sought. Likewise, the possible significant relationship of aforementioned antecedent variables to self-concept was determined.

Antecedent Variables

Independent Variable

Dependent Variable

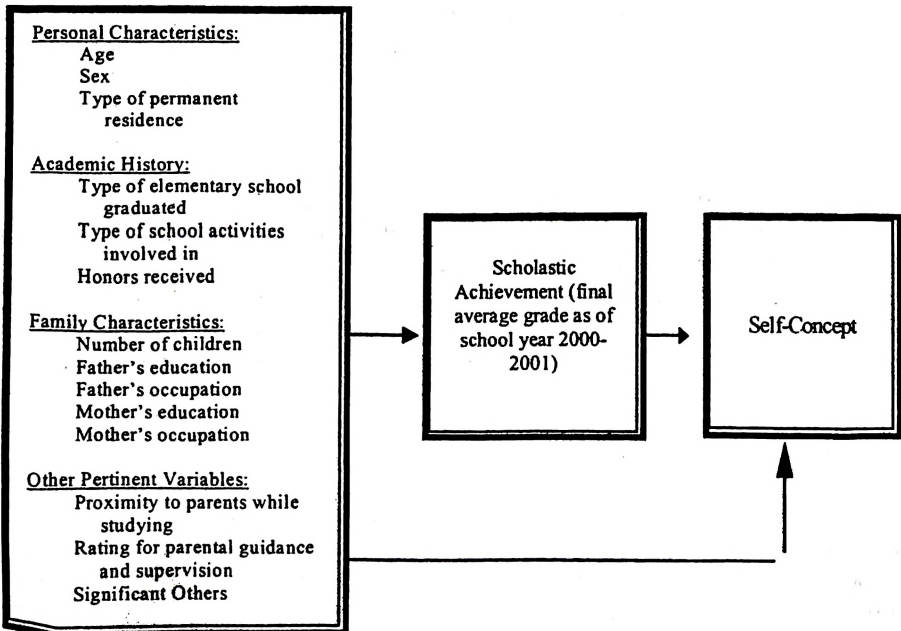


Figure I. Assumed Flow of Relationship Between and Among Variables.

*Hypotheses:*

1. Respondents' self-concept is not significantly related with their scholastic achievement;
2. Antecedent variables of personal characteristics (age, sex, and permanent residence), academic history (type of elementary school graduated from, type of school activities involved in, and honors received), family characteristics (number of children, father's education and occupation, and mother's education and occupation), and other pertinent characteristics namely, proximity to parents while studying, rating of parental guidance and supervision, and significant others (person/s most influential in the life of respondent or who is/are largely responsible for the kind of person the respondent is at present) are not significantly related to the independent variable, scholastic achievement;
3. Antecedent variables of personal characteristics, family characteristics, academic history, and other pertinent variables, are not significantly related to self-concept of high school students at CPU.

## METHODOLOGY

The descriptive-relational method, particularly the one-shot survey design, was used in this study involving the one-time-only administration of the researcher-made questionnaire to the sample respondents identified in the study.

*Two hundred ninety-three, out of the 1,303 target high school students of CPU who enrolled in school year 2001-2002, served as respondents.*

The analyses of the data gathered made use of the SPSS (Statistical Package for Social Science Research) at the then University Research and Outreach Center, Central Philippine University, Iloilo City.

For descriptive analysis, frequencies, percentages, mean, median, and mode, were used. For inferential analysis, however, chi-square, gamma, and Pearson's  $r$  were used to determine whether there is a correlation between the independent and dependent variables, between the antecedent and independent variables, and between the antecedent and dependent variables. The data were likewise shown in tabular form to facilitate data analyses.

## RESULTS AND DISCUSSION

The data in Table 1 shows the distribution of respondents per curriculum year level of the CPU Development High School in school year 2001-2002.

Table 1. The Distribution of Respondents by Year Level (N = 293)

Year Level	Frequency	Percentage
First	82	28.0
Second	71	24.2
Third	69	23.5
Fourth	71	24.2

### *Personal & Academic History, Family Characteristics, & Other Pertinent Characteristics*

*Respondents' personal characteristics and academic history.* Data in Table 2 shows the personal characteristics of the respondents as to age, sex, and type of permanent residence; and academic history. Mean age of respondents was 14.67. There were almost as many boys as there were girls. Almost two-thirds (68.3%) of them live in Iloilo City. As to academic history, almost two-thirds of the respondents (63.8%) graduated from private elementary schools.

Almost one-third of them (23.9%) answered that they were involved in school activities such as convocations, HS day, University Day, Girl/Boy Scout camping, etc. Close to one-third (28.7%) of the respondents reported having been cited for academic honors.

*Respondents' Family & Other Pertinent Characteristics.* As shown in Table 3, the respondents belong to relatively small families, having a mean number of children of 3.3 including themselves but excluding their parents. This number is equivalent to the national mean family size which is 5.3.

The respondents' parents were both predominantly college graduates, with mothers (86%) slightly more than fathers (77.8%). While close to two-thirds of their fathers (68.3%) held white-collar jobs, only less than half of their mothers did. A mean family income of P37,909.90 per month shows that in general, the respondents belonged to families way above the poverty line. Slightly over one-half of the respondents (54.3%) stayed in their homes with both parents while studying at CPU.

Almost half of the respondents rated parent's guidance and supervision as Excellent. Parents and family were considered to be the persons most influential to the life of 37.5% of respondents.

Table 2. Respondents' Personal Characteristics and Academic History (N = 293)

Characteristics	Frequency	Percentage
<u>Personal Characteristics</u>		
Age: 13 years and below	68	23.2
14 years old	75	25.6
15 years old	58	19.8
16 years and above	92	31.4
Mean Age: 14.67		
Sex: Male	144	49.1
Female	149	50.9
Type of Permanent Residence:		
Urban	200	68.3
Rural	93	31.7
<u>Academic History</u>		
Type of Elementary School Graduated from:		
Private	187	63.8
Public	106	36.2
Type of School Activities Involved in:		
Student activities (convocations, HD Day, U-Day, GSP/BSP camping, etc.)	70	23.9
Student organizations (student council, Biology club, Red Cross, etc.)	48	16.4
Sports activities	34	11.6
Honors Received (Elementary until previous HS year level):		
Academic honors (brightest in class, top ten, with honors)	84	28.7
Special awards (best in athletics, journalism, etc.)	56	19.1

Table 3. The Respondents' Family Characteristics (N= 293)

Characteristics (N=293)	Frequency	Percentage
<b>Family Characteristics</b>		
Mean No. of Children	3.3	
Father's Educational Attainment		0.7%
doctorate	2	2.4%
masters	7	77.8%
college	228	6.1%
college undergraduate	18	11.3%
high school	33	0.3%
high school undergraduate	1	
Father's Occupation		
White-collar jobs (Executives, managers, supervisors, professionals including seamen who are 17% of population)	200	68.3%
Blue-collar jobs (Laborers, service workers, farmers, fisherfolk)	55	18.8%
Special Occupation (domestic helper)	12	4.1%
No gainful employment	13	4.4%
Mother's Educational attainment		
masters	2	0.7%
college	252	86.0%
college undergraduate	14	4.8%
high school	19	6.5%
high school undergraduate	4	1.4%
Mother's occupation		
White-collar jobs (Executives, managers, professionals)	130	44.4%
Blue-collar jobs (Laborers, service workers,)	22	7.5%
Special Occupation (domestic helper)	20	6.8%
No gainful employment	116	39.6%
Family Income per month		
P50,001.00 and above	53	18.1%
40,001.00 – 50,000.00	20	6.8%
30,001.00 – 40,000.00	29	9.9%
20,001.00 – 30,000.00	61	20.8%
20,000.00 and below	130	44.4%

Mean Family Income per month (N=293): P37,909.90

Table 3. The Respondents' Family Characteristics (cont'n)

Other Pertinent Variables:	Frequency	Percentage
Proximity to parents while studying/staying with: (N=292)		
both parents	159	54.3%
mother only	50	17.1%
relatives	37	12.6%
sister in the dormitory	25	8.5%
father only	11	3.8%
alone in the dormitory	10	3.4%
Rating of Parent's Guidance & Supervision: (N=293)		
Excellent	140	47.8%
Very Good	97	33.1%
Good	38	13.0%
Fair	15	5.1%
Poor	3	1.0%
Significant Others/Person(s) most influential to respondent (N=2910)		
Parents/Family	110	37.5%
Mother	78	26.6%
Friends/Environment	43	14.7%
Father	25	8.5%

### *Respondents' Self-Concept and Scholastic Achievement*

Overall, the respondents had Very Good self-concept (Table 4) they had a mean final average grade of 82.4 that translates to a Fair composite rating for scholastic achievement (Table 5).

Table 4. Table of the Respondents' Self-Concept (N = 293)

Rating for Self-Concept (N=293)	Frequency	Percentage
Excellent	88	30.0
Very Good	157	53.6
Good	42	14.3
Fair	6	2.0%
Total	293	100.0
Mean Self-Concept: 2.1 (Very Good)		



Table 5. The Respondents' Scholastic Achievement (N = 293)

Description of Scholastic Achievement	Frequency	Percentage
Satisfactory (91 – 93.99)	9	3.1
Very Good (88 – 90.99)	31	10.6
Good (85 – 87.99)	44	15.0
Fair (80 – 84.99)	110	37.5
Needs Improvement (75 – 79.99)	89	30.4
Poor ( 74 and below)	10	3.4
Total	293	100.0
Scholastic Achievement/Mean final average grade as of SY 2000-2001: 82.4 (Fair)		

#### *Correlation Between Students' Self-Concept and Scholastic Achievement*

When the students' scholastic achievement as the independent variable, was correlated with self-concept, a Pearson's  $r$  of .292 significant at 1% level (two-tailed) was obtained (Table 6). The same result was arrived at when self-concept was made the independent variable and correlated with scholastic achievement as the dependent variable.

This means that scholastic achievement has a slight positive correlation with self-concept. Worthy to note is the highly significant relationship between scholastic achievement and self-concept. In other words, a student with a higher scholastic rating would tend to have a higher self-concept, perhaps owing to the fact that he has this history of personal accomplishment that would enhance how he sees himself. Similarly, when someone feels good about himself, he has the tendency to perform well in school. The opposite is true when the student has lower scholastic rating.

Apparently, appropriate intervention could be made by home, society, and especially the school. They could help the student process his weaknesses and strengths so that he could accept his uniqueness as an individual and see himself in a better light. Consequently, he would be motivated to do his level best in school.

Table 6. The Correlation Between the Respondents' Self-Concept and Scholastic Achievement (N = 293)

Person r	Scholastic Achievement	Self-Concept
<b>Scholastic Achievement</b>		
Pearson Correlation	1	.292**
Sig. (2-tailed)		.000
N	293	.293
<b>Self-Concept</b>		
Pearson Correlation	.292**	1
Sig. (2-tailed)	.000	
N	293	293

\*\*correlation is significant at 0.01 level (2-tailed)

Aforementioned outcome establishes the relationship between scholastic achievement and self-concept that corroborates with the findings of Herb Marsh (1992), Hamachek (1995), Gage and Berliner (cited by Huitt, 1998), and Chin, Importante, and Paras (2001).

Hamachek specifically asserted that self-concept and school achievement are related and that the reciprocity of the relationship between academic achievement and self-concept is particularly noticeable by the middle school years, when children are better able to interpret feedback from their academic performance. The respondents of this present study were high school students and thus fall under his category. In addition, the same author pointed out that high self-concept students tend to approach school-related tasks with confidence, and success on those tasks reinforces this confidence. The opposite pattern is likely to occur for children with low academic self-concepts, adds Hamachek. The finding of this present study on the significant, though slight, positive relationship between self-concept and scholastic achievement affirms this.

Gage and Berliner (as quoted by Huitt, 1998) stated "the evidence is accumulating to indicate that level of school success, particularly over many years, predicts level of regard of self and one's own ability..." They underscored the need for teachers to concentrate on the academic successes and failures of their students since it is their history of success and failure that gives them the information with which to assess themselves.

Lastly, Hamachek raised the issue, a major one, about the direction of the relationship: "does self-concept produce achievement or does achieve-

ment produce self- concept?" This study has established that there is to some extent, a positive correlation between self-concept and achievement and vice versa.

### *Relationship Between the Antecedent Variables and Scholastic Achievement*

Sex, number of children, father's education and occupation, type of elementary school graduated, involvement in school activities, honors received, rating of parental guidance and supervision, and respondents' significant others were found to have significant relationship with scholastic achievement as shown in Table 7.

Looking into each of the antecedent variables yielding significant results, sex, for instance, indicates that overall, the males tended to have higher scholastic rating than females in this study. Respondents who graduated from private elementary schools tended to have significantly better scholastic achievement than those from public schools.

Those who were into student organizations like the student councils, Red Cross, Biology club, Boy/Girl Scouts, fared significantly better than those into student activities like convocations, University Day, and Boy/Girl Scout camping, and those into sports.

All respondents in a variety of school participation had significantly better grades than those who had no involvement at all. This supports what Susan Gerber (1996) and William Camp (1990) found out about extracurricular participation promoting greater academic achievement. Holloway also points out that these activity programs are "worth their weight in gold because they help students stay in, and succeed at, school."

Those who received either academic or special awards had significantly higher scholastic rating than those who had no awards at all. Respondents whose fathers held white-collar jobs significantly had the highest scholastic achievement compared to those who held other types of occupation.

Interestingly, parental guidance and supervision had shown negative significant relationship and a weak association with scholastic achievement. This finding seems to negate Ma's (1999) claim that parental involvement improves children's cognitive skills that make them more likely to succeed in academic work. It appears that for students to improve in their performance in school, parents should guide and supervise them well but not too close a supervision as high school students being in their adolescent years and typically ambivalent (not a child anymore but not yet an adult) in their perception toward

parental supervision, may prefer some freedom to be themselves and to discover and learn things on their own.

Those who considered friends/environment as significant others tended to have significantly better grades than those who had other significant people in their lives.

Table 7. The Relationship Between the Respondents' Personal/Family Characteristics/Academic History/Other Variables and Scholastic Achievement

Dependent Variable: Scholastic Achievement			
Independent Variables:			
<u>Personal Characteristics</u>	Pearson's <i>r</i>	Partial Correlation of Coefficient	
Age	.034 <sup>ns</sup>		.563
	Chi-Square value	df	Asymp. Sig. (2-tailed)
Sex	11.991*	5	.035
Type of Residence	4.897 <sup>ns</sup>	5	.429
<u>Academic History:</u>			
	Chi-Square value	df	Asymp. Sig. (2-tailed)
Type of Elem. School Graduated	19.959*	5	.001
Involvement in School Activities	59.705*	25	.000
	Gamma value	Approx. Significance (2-sided)	
Honors Received	.286*	.000	
<u>Family Characteristics:</u>			
	Pearson's <i>r</i>	Partial Correlation of Coefficient	
No. of Children	-.151*		.010
(Kendall's tau_b:	-.095*		.026
	Chi-Square value	df	Asymp. Sig. (2-tailed)
Father's Education	35.778 <sup>ns</sup>	30	.215
Mother's Education	30.939 <sup>ns</sup>	30	.418
Father's Occupation	43.276*	20	.002
Mother's Occupation	17.294 <sup>ns</sup>	20	.634
<u>Other pertinent Variables:</u>			
	Gamma value	Approx. Significance (2-sided)	
Rating of Parental Guidance & Supervision	-.237*	.001	
	Chi-Square value	df	Asymp. Sig. (2-tailed)
Proximity to Parents While Studying	21.237 <sup>ns</sup>	25	.679
Significant Others	109.121*	60	.000

ns - no significant relationship

\*relationship is significant at 5% level (2-tailed)

### *Relationship Between the Antecedent Variables and Self-Concept*

Sex, involvement in school activities, rating for parental guidance and supervision, and the respondents' significant others found to have significant relationship with self-concept are shown in Table 8.

There is a positive significant relationship between involvement and self-concept as shown by a Chi square value of 51.934 (Asymp. Sig. = .000). These means that the more involved the students are in school activities and organizations, the higher their self-concept. This finding corroborates with Herbert Marsh (cited by Holloway, 2000) who concluded from his study that students' participation in school activities has significant effect on their social and academic self-concepts.

Parental guidance & supervision has a positive significant relationship with self-concept. In other words, respondents who rated their parents highly in guidance and supervision rated themselves significantly higher in self-concept than those who rated their parents less highly. This supports Kit Ling Lau's (1995), Elbaum and Vaughn's, and Kennedy's (2001) findings that family relationship had significant relation with adolescent's self-concept and school performance. It may be deduced that the more parental guidance and supervision the young person's have, the better for their concept of self.

Respondents who considered family/parents as significant others tended to have significantly higher self-concept than those who have other people they considered more influential or significant in their lives.

Table 8. The Relationship Between the Respondents' Personal/Family/ Characteristics/Academic History/Other Variables and Self-Concept (N = 293)

Dependent Variable: Self-Concept			
Independent Variables:			
<u>Personal Characteristics</u>	<i>Pearson's r</i>	<i>Partial Correlation of Coefficient</i>	
Age	-.048 <sup>ns</sup>		.522
	<i>Chi-Square value</i>	<i>df</i>	<i>Asymp. Sig. (2-tailed)</i>
Sex	7.709 <sup>ns</sup>	4	.103
Type of Residence	3.633 <sup>ns</sup>	4	.458
<u>Academic History:</u>			
	<i>Chi-Square value</i>	<i>df</i>	<i>Asymp. Sig. (2-tailed)</i>
Type of Elem. School Graduated	4.130 <sup>ns</sup>	4	.389
Involvement in School Activities	51.934*	20	.000
	<i>Gamma value</i>	<i>Approx. Significance (2-sided)</i>	
Honors Received	-.077 <sup>ns</sup>	.341	
<u>Family Characteristics:</u>			
	<i>Pearson's r</i>	<i>Partial Correlation of Coefficient</i>	
No. of Children	.060 <sup>ns</sup>		.305
	<i>Chi-Square value</i>	<i>df</i>	<i>Asymp. Sig. (2-tailed)</i>
Father's Education	37.510 <sup>ns</sup>	24	.039
Mother's Education	18.675 <sup>ns</sup>	24	.769
Father's Occupation	14.704 <sup>ns</sup>	16	.546
Mother's Occupation	13.871 <sup>ns</sup>	16	.608
<u>Other pertinent Variables:</u>			
	<i>Gamma value</i>	<i>Approx. Significance (2-tailed)</i>	
Rating of Parental Guidance & Supervision	.385*		.000
	<i>Chi-Square value</i>	<i>df</i>	<i>Asymp. Sig. (2-tailed)</i>
Proximity to Parents While Studying	16.676 <sup>ns</sup>	20	.674
Significant Others	69.973*	48	.012

ns – no significant relationship

\*relationship is significant at 5% level (2-tailed)

## CONCLUSIONS AND RECOMMENDATIONS

Based on the findings, the following conclusions are drawn: Overall, the respondents had Very Good self-concept. None of them rated self-concept poorly.

The respondents had a mean final average grade of 82.4 that translates to a Fair composite rating for scholastic achievement.

It was found out that self-concept has slight positive correlation with scholastic achievement, and vice versa.

Sex, number of children, father's occupation, type of elementary school graduated from, involvement in school activities, honors received, rating of parental guidance and supervision, and respondents' significant others were found to have significant relationship with scholastic achievement.

Involvement in school activities, rating for parental guidance and supervision, frequency of going home, and the respondents' significant others had significant relationship with self-concept.

In the light of the aforementioned, the following recommendations are hereby given:

Since the students' scholastic achievement had slight positive correlation with self-concept, efforts must be taken to improve or enhance both, with the cooperation of home, school, church, and society.

Since more involvement in school activities and organizations may result to higher self-concept and scholastic achievement, parents and teachers should encourage the students to get more involved in school activities and teach them to choose wisely the activities that will help develop their potentials.

Efforts must also be expended in fostering and enhancing better relationships among family members, friends, and society as a whole because the respondents' significant others had positive significant relationship with self-concept.

There were antecedent variables found to have significant relationship with either scholastic achievement or self-concept, it is therefore, recommended that further studies may be conducted to ascertain their predictability.

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