

Family Structure and Parental Involvement Vis-à-vis Science Performance of Grade 7 Students of Samar National School

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ABSTRACT

Factors that could possibly affect science performance were family structure and parental involvement. This study assessed the science performance of three hundred and one Grade 7 students of Samar National School in relation to their family structure and perceived parental involvement of their father, mother and guardian. In attaining the goal of the study, a survey using a self-made questionnaire was used in gathering data. The data revealed that student-respondents' profile has nothing to do with their science performance, on the other hand, their type of family, head of the family, perceived parental involvement of their mother in school-related activities significantly affects their science performance. As perceived by the students, parental involvement of their father, mother, and guardian were significantly different from each other guardian is highly involved compare to their father and mother.

Keywords: Family Structure, Parental Involvement, Science Performance,
Role of parents in science, School-related activities

INTRODUCTION

Science is one of the major subjects in secondary schools which have the highest units when it comes to grading system comparing to English, Mathematics and Filipino. However, learning science is relatively difficult for both successful and unsuccessful students for it is dogmatic and its content has an abstractness that makes it tough.

A considerable body of evidence now exist that, compared to other school subjects, science is failing to engage young people. Yet, students' interest in science at age 10 has been shown to be high. Research has shown that the point of decline begins in the final year of elementary school or at the age of 13 (Murphy and Beggs, 2008).

In the Philippines constitution Article XIV sections 10 to 13 emphasized that science and technology are essential for national development and progress, that the congress provides incentives, scholarship grants and protect and secure the exclusive rights of citizens with special interests in science. But, it is a sad note that, up to this time despite the various programs and projects implemented in all levels of education for academic improvement, performance record of students' academic achievement particularly in science reveals to be very poor as measured by the National Achievement Test (NAT) given every year by the National Educational Testing and Research Center (NETRC).

As such, Samar National School as one of the mother secondary schools in Catbalogan City, Samar is experiencing an abrupt declination of their NAT results in the subject Science over the past three years. In school year 2010-2011 NAT Mean Performance Score (MPS) of the school pegged at 49.97, for school year 2011-2012 it diminished by 12.47 points which resulted to 37.50, and for the school year 2012-2013 it decreases to 34.48. Maybe

these results could be affected by involvement of parents in school and the family structure the students' belonged. Last school year 2013-2014, parents' attendance in general PTA meeting was only 2.54% of students' population, as what the Basic Education Information System assessed.

Most parents want their children to succeed in school but are often unaware that family life itself has significant impact on their children's academic capacity. To properly help solving the invading problem that schools are facing and would be encountered in the future, the researcher found out the family structure and parental involvement of father, mother and guardian as perceived by the students and correlate these variables to their science performance.

FAMILY STRUCTURE

Family structure has changed dramatically over the last 50 years. The family set up in the 21st century has adopted with technological changes.

Basically, there are six types of family structures identified by the society today: nuclear family which consists of two parents and children; single-parent family consist of one parent raising one or more children on his or her own; extended family structure consist of two or more adults who are related, either by blood or by marriage, living in the same home, it includes cousins, aunts or uncles, and grandparents living together; childless family consist of a husband and wife living and working together; blended family consist of a new husband or wife and their children from previous marriages or relationships; and the grandparent family, children is raised by his or her grandparents and the parent is not present in the child life (Fagan, 2011).

Table 1. Family Structure of the Respondents

<i>Family Structure</i>	<i>Modal</i>
Type of Family	Nuclear Family
Size of the Family	2 to 4 siblings
Head of the Family	Father

Table 2. Parental Involvement of Father, Mother, and Guardian

<i>Parental Involvement</i>	<i>Father</i>	<i>Mother</i>	<i>Guardian</i>
School-Related Activities	3.42 (Moderately Involved)	3.46 (Moderately Involved)	3.68 (Highly Involved)
Learning/Tutoring at Home	3.42 (Moderately Involved)	3.51 (Highly Involved)	3.75 (Highly Involved)
School Performance Monitoring	3.44 (Moderately Involved)	3.66 (Highly Involved)	3.76 (Highly Involved)
Legend:	4.51 – 5.00 3.51 – 4.50 2.51 – 3.50 1.51 – 2.50 1.00 – 1.50	Extremely Involved Highly Involved Moderately Involved Slightly Involved Not Involved At All	

This study considered three parameters for family structure which include type of family, size of the family and head of the family. As can be gleaned from table 1, the modal family structure of the respondents in terms of type of family is nuclear with a family size of two to four siblings and is headed by their father.

This implied that nowadays, father is still the dominated head of the family as patterned in the traditional type of family in the Philippines.

PARENTAL INVOLVEMENT

According to Cueto (2012), majority of parents in the Philippines longed to give whatever is best for their children. However, parents and educators often focus mainly on the cognitive skills necessary for academic competence. They must also be concerned about students' social, emotional, and moral development as

the world nowadays is more complex and filled with contradictions. He further stressed that it is primordial role of parents to get involved in teaching of the school. The positive values should be practiced right there and out there at the student's home. The disparity between what is being taught and what is being practiced should wither. If every home will have parent and understandings, the academic problems of the students will turn into air.

Vaughan (2013) supported this idea that for secondary schools especially for the middle level, there is additional concern derive much of academic motivation from perceived support of parents or families, and often seek out and rely on meaningful relationships when parents are stressed, students often irritable, impatient, and easily frustrated and thus, unable to provide the necessary support to help students succeed. He added that secondary school environment varies significantly

from elementary to high school settings because of student's physical, emotional and developmental needs derive from their homes. Secondary school students are becoming more independent and pond of experimentation which inheritably affects school achievement.

In this area, the researcher compares respondents' perceived parental involvement of their father, mother and guardian along three aspects, to wit: school-related activities, learning/tutoring at home, and school performance monitoring. As a result, shown in Table 2 that the respondents perceived their guardian as highly involved in school-related while their father and mother is moderately involved in this aspect, for learning tutoring at home respondents claimed that their mother and guardian are highly involved in this aspect compare to their father, and it is also true for the school performance monitoring.

The data further inferred that parents at present focus more in building bright future of their children that is why they work hard instead of focusing or assisting their children in school-related activities.

Moreover, father asks the assistance of other members of the family to guide their children in making assignments in school in lieu of their absence at home.

CORRELATION ANALYSES

This hypothesis was formulated for the study:

Ho: There is no significant relationship between science performance of the respondents and their: (1) family structure and (2) perceived parental involvement of father, mother, and guardian.

Correlation Between Science Performance and Family Structure

As can be depicted in Table 3, in associating science performance and family structure in terms of size of the family, size of the family has nothing to do with their academic performance. Lastly, correlation between science performance and family structure in terms of head of the family indicates a positive correlation wherein student-respondents claimed that if their family headed by their father, the more they perform well in science.

Correlation Between Science Performance and Parental Involvement

In associating with the correlation between science performance of student-respondents and their rated parental involvement of their father, mother and guardian in terms of school-related activities, learning/tutoring at home and school performance monitoring, parental involvement of student-respondents' father in learning/tutoring at home have positive correlation reflecting that the more their father are involved to their child's learning/tutoring at home the more they performed well in science same with the parental involvement of student-respondents' mother in school-related activities, the more their mother involved to the school-related activities the more they perform well in science while student-respondents' guardian involvement along the three parameters has nothing to do with their science performance.

Table 3. Correlation Between Science Performance and Family Structure

<i>Variate</i>	<i>r-value</i>	<i>Fisher's t-value</i>	<i>Evaluation/Decision</i>
Type of Family	0.157	2.757	S/Reject Ho
Size of the Family	0.033	0.573	NS/Accept Ho
Head of the Family	0.143	2.506	S/Reject Ho
Legend:	Fisher's t-critical Value +1.960 at df= 301 ; $\alpha=0.05$ S = Significant Computed > Critical Values NS = Not Significant Computed < Critical Values		

Table 4. Correlation Between Science Performance and Parental Involvement

Parental Involvement	Father	Mother	Guardian
School-Related Activities	r=0.098 Fisher's t=1.701 NS/Accept Ho	r=0.131 Fisher's t=2.293 S/Reject Ho	r=0.052 Fisher's t=0.903 NS/Accept Ho
Learning/Tutoring at Home	r=0.119 Fisher's t=2.079 S/Reject Ho	r=0.052 Fisher's t=0.903 NS/Accept Ho	r=0.061 Fisher's t=1.060 NS/Accept Ho
School Performance Monitoring	r=0.105 Fisher's t=1.832 NS/Accept Ho	r=0.020 Fisher's t=0.347 NS/Accept Ho	r=0.079 Fisher's t=1.375 NS/Accept Ho
Legend:	Fisher's t-critical Value +1.960 at df= 301 ; $\alpha=0.05$ S = Significant Computed > Critical Values NS = Not Significant Computed < Critical Values		

RECOMMENDATIONS

Inasmuch the father, mother, and guardian significantly differ in terms of involvement in science performance of the child, the researcher proposes that parents must a lot time in meeting and communicating with the teacher in order to achieve accumulative performance of the said subject.

Considering that type of family affects science performance of the students, science teachers are advice to classify his or her students according to the type of family, they also have to compare who performs well and this may be

a good source of something to tackle during the PTA meeting.

Likewise, the family headed by the father tends to perform well in science, it is recommended that science teacher should ask the presence of both father and mother and explained to them what should father do in facilitating learning at home especially in the science subject.

As career paths of the students are planned and not by chance, parents should assist and monitor the science performance of their students so that they could qualify in pursuing the career they will prefer which require a minimum academic performance.

Another study should be conducted among high schools in other divisions to validate the findings and the results of the study.

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