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Parental Involvement as Correlates to Students' Achievement and Attitude towards Science

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PARENTAL INVOLVEMENT AS CORRELATES
TO STUDENTS' ACHIEVEMENT AND ATTITUDE
TOWARDS SCIENCE

A Thesis

Presented to
the Faculty of the College of Graduate Studies
and Teacher Education Research
Philippine Normal University

In Partial Fulfilment
of the Requirements for the Degree
Master of Arts in Education
with Specialization in
General Science

by

Zoraida A. Balderama

March 2014

APPROVAL SHEET

This thesis entitled **“Parental Involvement as Correlates to Students’ Achievement and Attitude towards Science”** prepared and submitted by Zoraida A. Balderama in partial fulfillment of the requirements for the degree, Masters of Arts in Education with specialization in Science education, has is hereby recommended for approval and acceptance.

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(*Philippians 4: 13*)

Thank you so much.

Zoraida A. Balderama

Dedication

This great work is dedicated to my ever supportive and understanding mama and papa, who taught me that even the largest task can be accomplished if it is done one step at a time; my loving sisters, Jing, Gi and +Deb, who have been great sources of motivation and inspiration, and my dear hubby, Whe, for his unending support, love and care.

ABSTRACT

Researcher:	Zoraida A. Balderama
Title:	Parental Involvement as Correlates to Students' Achievement and Attitude towards Science
Key Concepts:	Parental Involvement, Students' Achievement, Attitude towards science, School Participation, Home Supervision, Material and Financial Support, Behavioral Support, Spiritual Formation, Provision for Recreational Activities
Degree:	Master of Arts in Education with Specialization in Science Education major in General Science
Advisers:	Prof. Abel F. Ole Dr. Rabin R. Rabe

The main purpose of this study was to determine the extent of parental involvement in the academic achievement and attitude towards science of students of the Holy Family School of Quezon City (HFS) for the first and second quarter of School Year 2013 – 2014. This study also sought to determine the relationship between parental involvement and academic achievement; and parental involvement and attitude of the students.

The study utilized prediction-correlational research design. Pertinent data were gathered through Parental Involvement Survey and Adapted Attitude toward Science Inventory.

The extent of parental involvement was analyzed using percentage frequency distribution, and descriptive statistical measures such as the arithmetic mean. The significant relationships between parental involvement and academic achievement; and parental involvement and attitude of the students towards science were tabulated and analyzed using Scatter diagram and Pearson r of the Statistical Package for the Social Science (SPSS) computer program.

Based on the results of the study, it has been identified that under school participation, parents were moderately involved in supervising their children's academics; home supervision, behavioral support, spiritual development/formation and provision for recreational activities were of great extents; and under financial support, parents were highly involved in giving their support to their children; and there is a significant relationship between parental involvement and academic achievement of the students; and parental involvement is not significantly related to the attitude of the students towards science.

Based on the findings presented, the following are recommended: that the school should identify more science-related activities that will allow parents to participate and involve themselves in enhancing the academic achievement and attitudes of the students in science; that the parents must strengthen their involvement in their children's education; and that they should give importance on their relationship as family, for them to enhance the attitude of the students towards learning.

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CHAPTER I

THE PROBLEM AND ITS SETTING

Background of the Study

The molding of a child's character starts at the home. Consequently, every member of the family should strive to make the home a wholesome and harmonious place as its atmosphere and conditions greatly influence the child's development (PD 603, Article 1). The family is a sacred entity. Alongside the church, which gives importance to the role of the family, the government under the 1987 Constitution seeks to protect and strengthen the family as a basic autonomous social institution. It stresses the natural and primary right and duty of parents in the rearing of the youth for civic efficiency and the development of moral character. Thus, a good family structure is the most important factor in child-rearing (Ocampo, 2011).

The family is the chief agency in the child's socialization process. The family transmits the culture of the group, its patterned ways of living and values through modelling, teaching or indoctrination. The children also acquire standards of behavior, aspirations and expectations through the family, and these become part of their personality. The family gives its members status. A child is born into a family which gives him or her name or lineage; whether born into a lower class or upper

class family, he or she is provided with its attitudes and values (Nicolas-Victorino, 2011).

Meador (2012) stressed that parental involvement is the level of participation in their child's education and school. Many parents are tremendously involved, often volunteering to help in their child's classroom, communicating well with their child's teachers, assisting with homework, and understanding their child's individual academic strengths and weaknesses. Unfortunately, there are also many parents who are not directly involved with their child's education.

Similarly, Bakker & Denessen (2007) defines parental involvement as the parents' behaviours related to the child's school or schooling that can be observed as manifestations of their commitment to their child's educational affairs.

Kim (2008) added that parental involvement emerges as another robust influence on educational outcomes. It is multi-dimensional. Examples include monitoring children's activities outside home and school; setting rules; having conversations about and helping children with school work and school-related issues; holding high educational expectations; discussing future planning with children and helping them with important decision making; participating in school-related activities such as meeting with teachers and volunteering in the classroom; and reading to children or engaging in other enrichment or leisure activities together.

Different scenarios describe the common picture of family structure today. These days, it is not uncommon to find the breadwinner of a single-parent home working numerous jobs to support a basic lifestyle for their children. By comparison, two-parent homes usually find both father and mother working full-time in order to financially support the family.

The family is the primary socializing agent of which a child is a member since the child is born into a family. One may rightly say that the family is the informal socializing agent since all its members are blood relations. In this point, it must be clearly known that families differ vastly in terms of their significance in social order as some have more prestige, dignity, money and power than others. However, despite these differences in families, a child in the family resembles the other members closely alike for the following reasons: (1) the people surrounding the child here are generally adults full of experience; (2) the child lives his early life in the family and equally develops his first language; (3) since they are of the same blood, they all work together to mould him in a way that he will perfectly fit into the society; (4) for the same reasons given above, they will not intentionally misdirect him; (5) there is free interaction among the family members which promotes better understanding; (6) there is imposition of the social norm on the child through punishment and praises; (7) a child in the family is going through his primary exposure to the world and hence he is totally guided by the adults in his family, specially the parents; and (8) finally, a child in the family is immune to all the social

ills in the society under normal condition or in an ideal situation (Asikhia, 2010, pp. 4-5).

Belonging to a family gives every person a group identity and a sense of direction in life. Sometimes, however, there can be a feeling that one does not belong. It can be very real and strong. Often, “this feeling comes not from the absence of love but the lack of its concrete expression” (Tulio, 2000, p. 13). Emotional, physical, social, spiritual and cognitive development take place within the core of the family, for it is viewed as the nucleus of people’s behavior. Parents play a vital role in molding their children, most significantly in educational journey of their child but the type of family, family size, family educational background and socio-economic status must be given an emphasis as well.

As noted by Malabanan (2011), the home is the first and most important school the child will ever have. High parental involvement in school enables student to achieve higher grades and test scores, improves student attendance, conduct and attitude, and increases the chance of a child moving on to higher education. Parental involvement is a valuable component in any student’s education. It is a well-established fact that parental involvement is linked to children’s success at school. What is important is not the type of school or the type of school population, but the quality of its relationship with families.

Parents are important, both directly and indirectly, in the social development of the child. They are the primary educators of their children. The children's character traits, personal values and personality are determined basically by the home environment. Parents are the first teachers and are presumed to be the model of their children. They instill values, habits and beliefs that should be the real key to later success in life. Likewise, teachers also play an important role in each student's learning process. They can influence the student attitudes toward science which then can influence student achievement (George & Kaplan, 1998).

Shute (2011) cited the following characteristics of families whose children are doing well in school: an established daily family routine; monitored out-of-school activities; modelled value of learning, self-discipline and hard work; tough but realistic expectations for achievement; encourages children's development and progress in school, and writing and reading; and there are discussions among family members.

Creating a partnership between the school and families refers to a mutual effort toward a shaped goal, and results in a shared responsibility of families and educators in supporting students' academic achievement (Christenson & Sheridan, 2001).

Furthermore, Kleiman and Darling (2011) stated that family involvement can be generally defined as the parent's or caregiver's investment in the education of

their children. It may be demonstrated via participation in a hierarchy of activities such as the following: volunteering at school, helping children with their homework, attending school functions, visiting the child's classroom, sharing expertise or experience with the class, and taking on leadership roles in the school and participating in the decision-making process.

Research has indicated a disconnect between parents' engagement, as well as support, in school activities; because of this shift, schools have been forced to take much of the responsibility in educating students, both academically and socially (Smith, 2011).

When parents, families and members of the community are involved with schools, all children benefit. The benefits for students when parents are actively involved in schools include: higher grades and test scores, better attendance, more homework completed, and more positive attitudes and behaviors (Davis, 2000).

As Desforges and Abouchaar (2003) explored the impact of parental involvement, they emphasized that parental involvement takes many forms including good parenting in the home, the provision of a secure and stable environment, intellectual stimulation, contact with schools to share information, participation in school events, participation in the work of the school and participation in school governance. Moreover, De Fraja, Oliveira and Zanchi (2010) pointed out that a parent's effort is more important for a child's educational

attainment than the school's effort, which in turn is more important than the child's own effort.

The idea that parental involvement has a positive influence on students' academic achievement is so intuitively appealing that society in general, and educators in particular, have considered parental involvement an important ingredient for the remedy for many problems in education (Fan & Chen, 2001, p.1).

Oluwatelure in (2008) connotes that attitude is a concept which arises from the attempt to account for the observed regularities in the behaviour of individual persons, the quality of which is judged from the observed evaluative responses one tends to make. An individual can show positive or negative attitude towards a particular object, subject or idea. Hereditary factors (i.e. inheritance from parents) form the basis of all human activities including developing of attitude as well as learning.

With these in mind, the researcher sought to find out the extent of parental involvement on the academic achievement and attitude of students towards science of Holy Family School of Quezon City, Inc.

Conceptual Framework

The study looked into variables that may be deemed important in establishing factors that affect the academic achievement and attitude of students towards science.

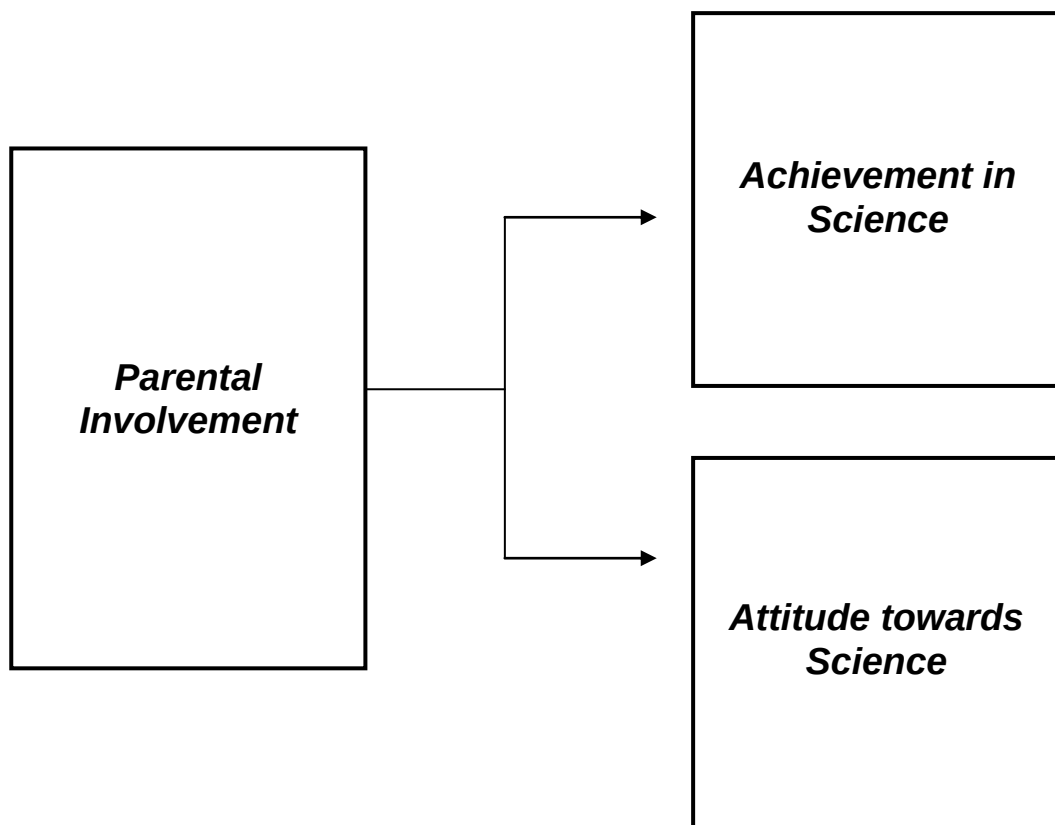


Figure 1. Conceptual Paradigm

The above paradigm shows the constructs of parental involvement in determining the students' academic achievement and attitude towards science. School participation has something to do with the involvement and support given by

parents to their children during school related-activities. Home supervision deals with the attainment of learning goals at home. Material and financial support is the positive attitude of parents towards monetary requirements of children in school. Behavioral support is integrating child and family services with education. Spiritual formation is way of learning how to give support and encouragement of parents to their children. Provision for recreational activities offer positive relations of working closely with the school.

The arrows connecting the frames represent the interaction between and among each variables of the study.

The study is anchored on several theories, one of which emphasizes the importance of mutual action of schools, families and communities in order to assure children's needs.

This study makes use of the Theory of the Intersection of the Influence Spheres of Epstein (1995). This theory recognizes the history of tight connections between major institutions which socialize and educate children and it posits that students succeed at higher levels when the internal and external models of influence intersect and work together to promote student learning and development. The external model postulates that students learn and achieve more when the external contexts in which they live work together to support and enhance the academic learning and the internal model describes the intersection of interpersonal

relations and patterns of influence that occur between individuals at home, at school and in the community. The types of interactions all fall under what is known as the six types of involvement or activities developed to design and implement involvement linked to the school's academic mission.

The six types of involvement that operate within the theory of overlapping spheres act as a framework for organizing behaviors, roles and actions performed by school personnel and family and community members working together to increase involvement and student achievement. These six types of involvement are defined and categorized as parenting, communicating, volunteering, learning at home, decision-making and collaborating with the school.

Epstein's (2001) typology suggests effective parent involvement programs focus on: parenting skills to assist parents in understanding their children's learning needs, and helping teachers understand family needs; communication that allows for two-way, open communication between the school and home; volunteerism that recognizes parents' talents and contributions both in and for the school; learning-at-home strategies that engage the family with their children's school work; decision making that includes parents as key stakeholders in making decisions that will impact student learning; and collaborating with the community to create mutual benefit by sharing resources and contributing to both school and community goals.

Another theory was given by James Comer (2004), a leading child psychologist. He based his theory on the premise that a child's experiences at home and in school deeply affect their psychosocial development, which in turn shapes their academic achievement. Therefore, he created the "Comer Process" which applied principles addressing the barriers that affect the social and cultural needs of parents and students, and their relationship to the school. The School Development Program designed by Comer considered parent involvement as its cornerstone; the program is also designed to be an enriching, supporting, nurturing, and productive environment where children feel valued and secure. He suggested that this type of environment facilitates student's academic learning (Smith, 2011).

Statement of the Problem

This study aims to determine the extent of parental involvement on the academic achievement and attitude towards Science of students of the Holy Family School of Quezon City (HFS) for the first and second quarter of School Year 2013 – 2014.

Specifically, this study aims to answer the following questions:

1. What is the extent of parental involvement in the following constructs:
 - a. school participation;
 - b. home supervision;

- c. material and financial support;
 - d. behavioral support;
 - e. spiritual formation; and
 - f. provision for recreational activities?
2. Does parental involvement affect students' achievement in science?
 3. Does parental involvement affect students' attitude towards science?

Hypotheses

The researcher would like to test the following null hypothesis:

1. There is no significant relationship between parental involvement and students' academic achievement in Science.
2. There is no significant relationship between parental involvement and students' attitude towards Science.

Scope and Limitations of the Study

The study was conducted at the Holy Family School of Quezon City, Inc. Some of the data were taken from the Form-138 of the students. A survey

questionnaire was used to get information on the respondents' extent of parental involvement in the education and attitude of their children.

This research is limited to fourth year HFS students and their respective parents of School Year 2013-2014. Those who have dropped-out, and those who did not return their questionnaires were not included in this study for practical reasons and to minimize the difficulty of data retrieval.

Significance of the Study

This study is significant and beneficial to the following:

For the *Parents*: for them to gain insight regarding the academic performance of their children in school, and for them to find ways and means of spending enough time to monitor their children whether in school or at home. This study will also help them realize the value of close supervision so that they can help their child cope successfully with school learning tasks.

For the *School Administrators*: this study may provide them with a model in evaluating their school's enrichment or remedial programs. This may also help them develop plans or a special curriculum that will engage families to guide their children's learning, from preschool through high school.

For *Students*: this study will help them to be aware of their performance in Science and learn to value their parents' support and effort in sending them to school. The result of this study will also give them insights on how to perform well in school particularly in Science related-activities

For *Future Researchers*: this study may provide further information on the extent of involvement given by parents in the education of their children and for their further study about the topics related to this area.

Definition of Terms

In order to facilitate understanding of the study, some terms are defined as follows:

Academic Performance – this refers to the academic grades of Fourth Year Students from the first to second grading period of School Year 2011 – 2012 in Science and Technology IV.

ATSI – Attitude toward Science Inventory; a survey questionnaire that will assess the attitude of the students in science.

Attitude – this term refers to the tendencies to respond in a particular way to persons, objects or ideas (Lupdag, 2004). As used in this study, it tends to describe the support, love and understanding of parents toward their children.

Behavioral support – pertains to the affection and emotional support given by parents to their children. It emphasizes the importance of strong family involvement in the education of the child.

Focus group discussion - appropriate methodology to generate in-depth and rich information about the perceptions and experiences of parents, and to highlight several perspectives as possible rather than testing specific research hypotheses.

HFS - Holy Family School of Q. C., Inc. is located at 66 Maginhawa St., U.P. Village, Quezon City. It offers pre-elementary for male and female pupils, and elementary and secondary education exclusively for female students.

Home Supervision – refers to monitoring or looking after the child's activities given by parents when at home. It pertains further to parents who directly oversee the academic requirements of their children, help in the completion of school works especially in Science, follow-up school activities and impose wise use of time once at home.

Material and Financial Supports – refer to the support given by parents in pursuing the education of their children especially in providing resources, financing and supporting all the expenses particularly on the major subjects like Science.

Parent - Natural parent, legal guardian, or other person/caregiver including grandparent, step-parent, or person legally responsible for the child's welfare.

Parental Involvement – it refers to the level of participation that a parent has in their child's education and school. This is measured by the Parental Involvement Inventory.

School Participation – this refers to the involvement of parents in school, through school council, parent clubs and/or by directly participating in Science related-activities.

Spiritual Development/Formation – this refers to the guidance given by parents to their children through spiritual formation. Spirituality gives families a sense of belonging, meaning and purpose in times of difficulty, and a powerful source of strength of the family.

Chapter II

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents related literature and studies and serves as a reference for the conduct of this study.

Parental Involvement in School

Article 77 of the Child and Youth Welfare Code, PD No. 603, s. 1974 declares that every elementary and secondary school shall organize a Parent-Teacher Association (PTA) for the purpose of providing a forum for the discussion of problems and their solutions, relating to the total school program, and for insuring the full cooperation of parents in the efficient implementation of such program. All parents who have children enrolled in a school are encouraged to be active members of its PTA, and to comply with whatever obligations and responsibilities such membership entails. Parent-Teacher Associations all over the country shall aid the municipal and other local authorities and school officials in the enforcement of measures to control juvenile delinquency, and in the implementation of programs and activities to promote child welfare.

In the research done by Dufur, Parcell and Troutman (2012) on *Parenting More Important than Schools to Academic Achievement*, it was found that parental involvement is a more significant factor in a child's academic performance than the

qualities of the school itself. They stressed further that parents need to be aware of how important they are, and invest their time in their children through checking homework, attending school events and letting kids know school is important.

Parental involvement is a valuable component in any student's education. It is a well-established fact that parental involvement is linked with children's success at school. When parents are involved in their children's education at home, the children do better in school (Smith, 2011; Henderson & Berla, 1994).

The value of parental participation is widely accepted, but participation is difficult to promote and maintain. Schools are becoming more diverse, and a great challenge facing educators is meeting the needs of all students. Closing the achievement gap and increasing student learning requires the collaboration of various interested groups, most notably parents. Families play an important role in creating a school that meets their child's needs, yet teachers admit they have little information or training on how to effectively work with diverse parents.

Leithwood (2010; as cited in Ken, et.al., 2011), stressed that parent engagement in school is nurtured when parents come to understand that such involvement is a key part of what it means to be a responsible parent, when parents believe they have the skills and know-how to make meaningful contributions to the school's efforts, and when they believe that the school staff, as well as their own children, value their participation in the school.

The results of the meta-analysis done by Jeynes (2005) indicate that parental involvement is associated with higher student achievement outcomes. He further stressed that for the overall population of students, on average, the achievement scores of children with highly involved parents were higher than children with less involved parents.

Conway (2008) found that parental involvement has a strong, positive effect on student achievement; students do much better in school when their parents are actively involved in their education, and parental effort is consistently associated with higher levels of achievement and the magnitude of the effect of parental effort is substantial. Peters, Mark et al. (2007) pointed out that those parents are more likely to see a child's education as mainly, or wholly, their responsibility. They stressed that in two-parent households, it was common for both parents to share some involvement in their child's school life, although women tended to feel more involved than men.

Epstein (2001) suggests that parents who are informed and involved in their children's school can positively impact their child's attitude and performance. Parents' awareness and interest in their children's learning and school activities model for their children the importance of school, which may lead to positive behaviors. More importantly, Epstein's research shows that parental involvement can have a positive impact on student's academic work at all grade levels.

Gonzalez, *et al.* (2002) investigated whether parent involvement (as perceived by students) is predictive of a mastery orientation approach to learning. Participants were asked how active their parents were in the following: helping with homework, attending school programs, attending athletic or extracurricular events, choosing academic courses, and keeping informed about student's progress in school. This study revealed the benefits of parent involvement across groups of diverse ethnicity and socioeconomic status.

Amazona (2010) believes that parents' involvement in the educational activities of their children reveals significant effects and improvement on the children's development of cognitive, affective and psychomotor competencies. She stressed further the need to strengthen parents' involvement in their children's educational activities and their relationship with the school and the teachers through implementation of a teaching-parenting program.

Davis (2000) pointed out that both students and schools benefit from active participation by families in the process of educating children. The benefits for students when parents are actively involved in schools include: higher grades and test scores; better attendance and more homework completed; fewer placements in special education; more positive attitudes and behaviours; higher graduation rates; and greater enrolment in post-secondary education.

Dominguez (2004) suggested that schools should put up a resource center where parents can effectively participate and cooperate with the teachers and the school authorities concerning the education of their children.

The following specific strategies for parents to participate in schools were given by Greene, P. et al. (2003). Suggestions include individual activities with children, setting up homework space and routine, discussing needed resources for home supervision with teachers, or reflecting on one's own assumptions about school. Volunteering in the school and the community are other positive ways that parents can become involved, and on their own terms.

In view of the above-mentioned results and findings, parental involvement was identified as a valuable element of student's success in education and higher positive achievement outcomes. The literature emphasized the role of parents in educating their children to be actively involved in education.

Parental Involvement at Home

Article 76 of the Child and Youth Welfare Code, PD No. 603, s. 1974 states the role of the home, wherein the home shall fully support the school in the implementation of the total school program – curricular and co-curricular – toward the proper physical, social, intellectual and moral development of the child.

The level of parental involvement varies by family structure, and the relationship between parental involvement and educational outcomes depends on the family context as well. One study, for example, found that compared to high school students from intact families, those from single- or stepparent families reported less parental involvement in their school work, supervision, and parental educational expectations, which, in turn, affected school outcomes (Kim, 2008).

Bongat (2012) quoted the findings of Bergantinos (2001), explaining that parents' involvement directly affect of the student's performance. The students' initial stage of education occurs at home as the parents are the first teachers. They set the initial stage of learning, and are the very sources of encouragement and support to the students that drives them to study hard and attain meritorious accomplishments.

The home has a great influence on the students' psychological, emotional, social and spiritual status. As what Ajila C. Olutola (2007) noted, the state of the home affects the individual since the parents are the first socializing agents in an individual's life because the family background and context of a child affect his reaction to life situations and his level of performance. Although the school is responsible for the experiences that make up the individual's life during school periods, parents and the individual's experiences at home play tremendous roles in building the personality of the child and making the child what he is. Thus, Ichado (1998) concluded that the environment in which the student comes from can greatly

influence his performance at school. He further stated that parents' constant disagreement affects children emotionally and this could lead to poor academic performance in school.

Christenson and Sheridan (2001) contend that "families are essential, not just desirable" to the educational success of their children. They recommend an approach to family involvement that: 1) focuses on relationships; 2) recognizes collaboration is an attitude, not activity; 3) creates a vehicle to look at the bigger picture about student learning; 4) shares information and resources; and 5) establishes meaningful roles for all partners.

According to Berger (1996) as cited by Ocampo (2011), "What parents do to help their children learn is more important to academic success than how well-off the family is". Peztaiozzi, the Father of Parent Educators strongly emphasized the importance of the home. "As the mother is the first to nourish her child's body, so should she, by God's order, be the first to nourish his mind". In the midst of many technological adjustments introduced not only in school but in the society at large, there are times confusion between who is primarily responsible between the home and the school arises.

Studies reviewed in this article indicate that parent involvement, both in the home or school context, is associated with positive outcomes for the student's motivation. Studies measured a range of parent involvement behaviors including

parents' attending school programs, remaining abreast of students' progress in school, providing assistance and encouragement, communicating the value of schooling, and engaging their child academically and intellectually in the home (Willems, et al. 2005).

Ken, et al. (2011) enumerated the benefits of good parental involvement for children. Children tend to achieve more, regardless of ethnic or racial background, socio-economic status, or parents' education level; children generally achieve better grades, test scores, and attendance; children consistently complete their homework; children have better self-esteem, are more self-disciplined, and show higher aspirations and motivation toward school; children's positive attitude about school often results in improved behavior in school and less suspension for disciplinary reasons; fewer children are placed in special education and remedial classes; children from diverse cultural backgrounds tend to do better when parents and professionals work together to bridge the gap between the culture at home and the culture in school; junior high and high school students whose parents remain involved usually make better transitions and are less likely to drop out of school.

He further discussed the following benefits for the parents: parents increase their interaction and discussion with their children, and are more responsive and sensitive to their children's social, emotional, and intellectual developmental needs; parents are more confident in their parenting and decision-making skills; as parents gain more knowledge of child development, there is more use of affection and

positive reinforcement and less punishment on their children; parents have a better understanding of the teacher's job and school curriculum; when parents are aware of what their children are learning, they are more likely to help when they are requested by teachers to become more involved in their children's learning activities at home; parents' perceptions of the school are improved and there are stronger ties and commitment to the school; parents are more aware of, and become more active regarding, policies that affect their children's education when parents are requested by school to be part of the decision-making team.

The study conducted by De Fraja, Oliveira and Zanchi (2010) showed that parents' effort is more important for a child's educational attainment than the school's effort, which in turn is more important than the child's own effort. They stressed further that children work harder when parents put more effort into their education.

In the study of Dominguez (2004), as cited by Bongat (2012), found out that the occupations of parents and the number of children in the family play significantly on pupils' achievement.

Bernardo (2012) studied the implication of parental involvement in Preschool children's education: a catalyst for student success. Findings revealed that under home supervision, parents were always involved in supervising their child at home; with home discussion, parents always talked to their child about their quizzes or

examinations; under school communication, parents often attended Parent Teacher Conferences when invited by the teacher to know more about the child's performance and/or behavior in school; and with school participation, parents sometimes support programs of the school.

The review of literature and studies emphasizes the significance of family structure of the learner; the way home directly affects the personality of the children, and how academic achievement of students usually begins at home.

Academic Achievement

Academic achievement is the academic performance of the students on subjects in the curriculum which are commonly expressed in terms of grades that are reflected in their report card. The grades students receive indicate the standing of the students in relation to a group. It represents ability-measure or learning itself on subjects (Octaviano, 2008, as cited in David, 2012).

Asikhia (2010) noted the points of Bakare (1994) on efforts to categorize the factors that work against good academic performance into four principal areas: causation resident in the child such as basic cognitive skills, physical and health factors, psycho-emotional factors, lack of interest in school program; causations resident in the family such as: cognitive stimulation/basic nutrition during the first two years; type of discipline at home; lack of role model and finance; causation

resident in the school such as school location and physical building; interpersonal relationship among the school personnel; and causations resident in the society such as instability of educational policy and under-funding of educational sector.

In the study conducted by Malabanan (2011), it was stated that for decades, numerous studies have been made toward discovering means to improve school childrens' achievement worldwide. In the Philippines, there is an enormous progress on curriculum designs, instructional technique and assessment strategies. However, one of the most effective ways to increase performance lies not only in school, but in the homes of the children. Hill and Tyson (2009) conducted a meta-analysis using middle school research to determine which involvements most significantly affected student achievement. Their analysis of 50 studies showed parental involvement was positively related to student achievement.

Research works have shown that nature of parental discipline affect academic output of children (Aremu, 2000). On the other hand, Berger (1996) enumerated the parents' varied roles related to their children's education being a co-teacher of the child's first lessons. It also connotes instilling in them sense of self-worth, pride, caring, confidence, skills and qualities that will help them succeed both in school and in life. It is equally difficult to be a parent as it is to be a teenager. Parents whose children have entered the adolescent stage all agree of the difficulty in raising a teenaged daughter or son. It is at this time when love and security should be at its prime. Parents should not be affected when they feel that their

children are with their friends more than they are in their home, instead they should be encouraged and as such, parents should enjoy seeing their children grow. As a result, they will still come to cherish family movements even if they spread a great percentage of their time with their peers. This is the importance of “holding and letting go” all at once. So, there is balance.

Morakinyo (2003) believe that the falling level of academic achievement is attributable to teacher’s non-use of verbal reinforcement strategy. Others found out that the attitude of some teachers to their job is reflected in their poor attendance to lessons, lateness to school, unsavory comments about students’ performance that could damage their ego, poor method of teaching and the like affect pupils’ academic performance.

Dimaculangan (2011) said that there are a lot of distractions around students that inhibit them from successfully getting good grades and gaining independence. The common distractions are low motivation in doing school work, lack of interest in certain subjects, computer addiction, and disorganization. In addition to this, they tend to be demotivated by the experiences they encounter in school such as conflict with teachers, lack of challenge in class, pressure from friends, and learning difficulties. Other students are left frustrated by problems at home like parents’ high expectations, sibling rivalry, limited time spent on studies due to electronic gadgets at home and lack of follow-up from parents.

Willingham (2009) emphasized that students differ in terms of their potentials due to IQ scores, self-motivation and persistence in the face of academic challenges. The students' academic performance is evaluated in order to foster improvement and make use of the learning process. As recommended by Malabanan (2011), teachers should continue to develop activities that will allow parent-child collaboration at home and in school. They should also continue to create ways to better communicate to the parents of their pupils, not only through the written word, but through home visits, phone calls, one-on-one meetings and other personalized contacts with parents. This way, there will be an enhanced relationship between the parent and the teacher, to be able to help each other for the success in the education of the pupils.

Orcena (2005) noted that the absence of a father-figure was not detrimental to the academic performance of the "left-behind" children as compared to those children who have mothers or both parents working abroad. Orcenas' study revealed that despite the absence of fathers, due to labor migration, in school functions and activities, the children did not end up as "academic delinquents" and did not manifest behavior and attitude problems in school. In fact, a few students even received academic awards in the elementary and high school levels.

James (2008) found that the parent's level of education attainment was significantly related to the level of parental involvement. A review article of (Shute, 2011) described that parents appear to have an important opportunity to influence

their children's academic achievement though the influence may not be as great as traditionally believed. Correlational studies have found modest associations between various parental involvement variables and student academic achievement, with some of the most consistent relationships being reported for (a) parents talking with their child about school, (b) parents holding high expectations for students' academic achievement, and (c) parents employing an authoritative parenting style.

In the study conducted by Fan, et al. (2001), *Parental Involvement and Students' Academic Achievement: A Meta-analysis*, the following findings were revealed: a small to moderate, and practically meaningful, relationship between parental involvement and academic achievement. Through moderator analysis, it was revealed that parental aspiration/expectation for children's education achievement has the strongest relationship, whereas parental home supervision has the weakest relationship, with students' academic achievement.

Previous studies related to academic achievement as reviewed by the researcher were all similar to the present study. Findings suggest that parental involvement is closely related to academic achievement of the students, same with parental discipline, which affect the academic output of students in terms of their potentials and perseverance in the midst of academic challenges.

Attitude of Students

Attitude is an individuals' point of view or perspective. It is one's frame of mind as pointed out by Corpuz, Salandanan and Rigor (2006).

Gorard (2012) explained that attitude is an individual's feelings about education. A key indicator might be a child's expression of liking or dislike for school.

The study conducted by Oloruntegbe (2010), examines the attitude of students towards Biology and Chemistry. There was also a focus on the parental involvement. His research set out find out how parental involvement influences students' attitude towards, and performance in the two science subjects. The result, obtained through chi square analysis, revealed that the level of the home influence has implication on school learning and that performances of students in science are a function of their attitudes to the subject. According to him, there is a significant difference in the attitude of respondents towards Biology and Chemistry with respect to the level of their parental involvement.

Kind, et al. (2007) viewed attitude as having different components which include cognitive (knowledge, beliefs and ideas); affective (feeling, like, dislike), and behavioural (tendency towards an action).

Oloruntegbe (2010) pointed out that direct experience by learners is one of the most important determinants of attitude. Parents/guardians need to influence their children by increasing familiarity in the science subject, taking interest in their school work, enrol them for extra lessons, ensuring that home work is done, acquire film and other electronic material that can stimulate their interest in science based careers and enable the children to develop friendly attitude towards the science subject.

In the multiple mediational analysis done by Topor, Keane, Shelton and Calkins (2002) on parental involvement and student academic achievement, it was hypothesized that parents who have a positive attitude towards their child's education, school, and teacher are able to positively influence their child's academic performance through two mechanisms: (a) by being engaged with the child to increase the child's self-perception of cognitive competence; and (b) by being engaged with the teacher and school to promote a stronger and more positive student-teacher relationship.

The foregoing literature and studies formed part of the foundation in conducting the study and they give support to the significant interrelationships between and among the variables included herein.

Chapter III

METHODOLOGY

This chapter describes the research design, locale of the study, respondents, instruments used, data gathering procedure and statistical treatment of data.

Research Design

The researcher used prediction-correlational research design, to determine the relationship of parental involvement on the academic achievement and attitude of the students of Holy Family School of Quezon City, Incorporated (HFS) toward Science.

This study also sought to determine the extent of parental involvement on the academic achievement and attitude of the students.

Correlation is a statistical measure of a relationship between two or more variables that gives an indication of how one variable may predict another. Prediction-correlational research is one form of correlational design. Creswell (2008) defined the prediction-correlational research design as a method used to predict certain outcomes in one variable from another variable that serves as the predictor. Prediction designs involve two types of variables: a predictor variable, and a criterion variable; while the predictor variable is utilized to make a

forecast or prediction, the criterion variable is the anticipated outcome of the prediction.

For this research, the researcher used the Parental Involvement Survey, and the adopted Attitude toward Science Inventory. The researcher also employed the use of focus group discussions (FGD) involving parents, students and science teachers. The FGD was done in order to thoroughly discuss the extent of parental involvement, and provide the respondents a venue to share their views and opinions regarding the study's topic. Through this method, the researcher was able to gather the important data needed for the study.

Participants

The study was conducted in the High School Department of Holy Family School of Quezon City, Inc. HFS is a Catholic Center of Education of the Siervas de San José. It provides quality basic education geared towards developing agents of change who uphold the dignity of workers and the sanctifying value of work.

In order to determine the extent of parental involvement on the academic achievement and attitude of the students towards Science, a total of 218 respondents were requested to participate.

The breakdown of the respondents is shown below:

Table 1 *Respondents of the Study*

	Number of Respondents
IV - Nazareth	37
IV – Sagrada Familia	35
IV – San Jose	37
Fourth Year Parents	109

Table 2 *Respondents of the Study: Focus Group Discussion*

	Number of Respondents
Parents	11
Students	35
Science Teachers	3

Profile of the Respondents

The study included the personal information of the parents to gain insight on the respondents' background and other related information. These data were

tabulated based on the frequency of responses and distribution of respondents. The respondent's profile includes the following variables: age, civil status, relationship of the respondent to the student, highest educational attainment and number of children in the family.

Table 3

Frequency Distribution and Percentage of Respondents According to Age

AGE OF PARENTS	FREQUENCY	PERCENTAGE
20 – 30 years old	0	0
31 – 40 years old	25	22.9
41 – 50 years old	63	57.8
51 and older	21	19.3

Table 3 shows that majority of the respondents are within the age bracket of 41 to 50 years old with a total number of sixty three or 57.8 percent, followed by 25 respondents with a corresponding weighted mean of 22.9 percent. This indicates that the respondents are capable enough of monitoring the school-related activities of their children, since their awareness of their roles and responsibilities can be depicted by their age level.

Table 4

Frequency Distribution and Percentage of Respondents According to Civil Status

CIVIL STATUS	FREQUENCY	PERCENTAGE
Single	18	16.5
Married	80	73.4
Separated	11	10.1

In table 4, it can be seen that eighty or 73.4 percent of the respondents are married; single-parents, on the other hand, comprise 18 or 16.5 percent of the population; and 11 or 10.1 percent of the population were separated from their spouses.

This suggests that the majority of the respondents are married, implying that they are capable of collaborating with one another in facilitating or working directly with their children's educational performance. These data further reveal that only few of the respondents are single or separated; thus it can be inferred that in one way or another, only a small percentage of students will receive less supervision from their parent/s due to their status in life.

Table 5

Frequency Distribution and Percentage of Respondents According to the Relationship of the Respondent to the Student

RELATIONSHIP OF THE RESPONDENT TO THE STUDENT	FREQUENCY	PERCENTAGE
Father/ Mother	97	89.0
Guardian	12	11.0

Table 5 revealed that 97 or 89 percent of the respondents are the biological parent/s of the students; the result suggests that they have direct protection, guidance and constant communication with their children. They can further help the educational needs of them. Only 12 or 11 percent of the respondents are guardians: the grandparents or relatives of the students. The researcher concluded that they can assume the roles and duties of parents and can offer support and nurture the needs of the students.

The data on table 6 presents the distribution of the respondents according to their highest educational attainment. Out of 109 respondents, 92 or 84.40 percent of them have earned college degree. On the other hand, 14 or 12.84 percent attended

post-graduate courses. The college graduates prevail as the majorities' educational attainment. This implies that parents are equipped with the necessary training and knowledge on how to support the learning process of their children.

Table 6

Frequency Distribution and Percentage of Respondents According to Educational Attainment

EDUCATIONAL ATTAINMENT	FREQUENCY	PERCENTAGE
Elementary graduate	1	0.92
High School graduate	2	1.83
College graduate	92	84.40
Post-graduate degree holder	14	12.84

Table 7 shows that 57 or 52.3 percent of the respondents have three to four children in the family. Around 47 or 43.1 percent prefer one or two children. With this in mind, the researcher assumes that almost half of the respondents preferred to have one or two children for them to monitor, give enough support and be highly

involved in the educative process of their children. Parental involvement is more or less high when the family type is small.

Table 7

Frequency Distribution and Percentage of Respondents According to the Number of Children in the Family

NUMBER OF CHILDREN	FREQUENCY	PERCENTAGE
5 above	5	4.6
3 - 4	57	52.3
1 -2	47	43.1

Research Instrument

A survey questionnaire on parental involvement and attitude towards science was used as the main data-gathering instrument for this study. The questions in the instrument were structured using the Likert format. The choices represent the

respondents' degree of agreement towards the given question/statement. The scale below was used to interpret the total responses of all the respondents for every survey question after computing the weighted mean of each item:

Range	Interpretation
3.01 – 4.00	Strongly Agree
2.01 – 3.00	Agree
1.01 – 2.00	Disagree
0.00 – 1.00	Strongly Disagree

The survey questionnaire was validated by a Science Education Associate of UP NISMED, Human Resource Officer, and the Guidance Counselor of Holy Family School of Quezon City, Incorporated.

The researcher used inter-rater reliability to get the reliability coefficient of the instrument. Phelan and Wren (2005) defined inter-rater reliability as a measure of reliability used to assess the degree to which different judges or raters agree in their assessment decisions. They pointed out that inter-rater reliability is useful because human observers will not necessarily interpret answers the same way; raters may disagree as to how well certain responses or material demonstrate knowledge of the construct or skill being assessed.

Reliability Analysis – Scale Alpha

Reliability Coefficients

N of Cases = 15.0

Alpha = .8008

The above data shows that with the computed value of .8008, the instrument for parental involvement is highly reliable for data gathering purposes.

Other data were taken from other source such as: (a) Family Background of the Students – the information will be based on the files of the Guidance office and (b) Student's Academic Performance (grade point average in Science) from Academic records of the school.

Furthermore, the academic performance of the respondents were represented by their general average in Science and Technology for the School Year 2013 – 2014 (First and Second quarter). These grades were requested by the researcher for the purpose of this study.

Data Gathering Procedure

The researcher submitted the intention to conduct the study to the School Directress of Holy Family School of Quezon City, Incorporated. Upon the approval

of the School Directress, the researcher coordinated with the High School Principal, Guidance Counselor, and the Registrar of the school to seek the necessary data for this research.

The primary data of this study were collected through the use of survey questionnaires on parental involvement and adopted attitude toward science inventory. The instruments were designed to gather relevant information related to the study. The parental involvement questionnaire was composed of six constructs: school participation, home supervision, material and financial support, behavioral support, spiritual development/formation and provision for recreational activities. These constructs were related to the respondents' perception on determining the extent of parental involvement on the achievement and attitude of students towards science. It went through a series of revisions and was validated by three experts.

After validation, the researcher reproduced and distributed the questionnaires to the respondents of the study. With the data gathered, the researcher then carefully examined and collated the information, and made a summary of the responses of the respondents,

Data Analysis

The following statistical treatment was used to analyze and interpret the data:

The study used a 0.05 level of significance to test and interpret the given hypothesis.

Weighted Mean

The mean refers to the sum of all the given values or items in a distribution divided by the number of values or items summed.

The mean was used in this study to find out the average of academic achievement according to the categories of variables.

To interpret the academic achievement of the students in Science and Technology, the following rating scale was used.

Range and Interpretive Guideline in Determining Academic Grades

<i>Numerical Grade</i>	<i>Verbal Interpretation</i>
98 – 100	Excellent
95 – 97	Superior
90 – 94	Above Average
86 – 89	High Average
80 – 85	Average
75 – 79	Low Average
71 – 74	Below Average
70 and below	Poor

Percentage

The percentage was utilized in this study to determine the proportion of respondents based on the following variables: age, civil status, relationship of the respondent to the student, highest educational attainment and number of children in the family. It was also used to uncover the quantitative value of the occurrence of responses in each item.

Pearson Product-Moment Correlation

The Pearson product-moment correlation was employed to determine whether there is a significant association between the two variables. It is denoted by r , a descriptive measure that determines the magnitude or degree of relationship between two variables.

The correlation scale is

<i>Value of r</i>	<i>Verbal Interpretation</i>
$\pm .80$ to $\pm .99$	high correlation
$\pm .60$ to $\pm .79$	moderately high correlation
$\pm .40$ to $\pm .59$	moderate correlation
$\pm .20$ to $\pm .29$	low correlation
$\pm .01$ to $\pm .19$	negligible correlation

Inter-rater reliability was used to evaluate the degree to which survey instruments meet certain standards.

The *scatter diagram* graphs pairs of numerical data, with one variable on each axis, to look for a relationship between them. If the variables are correlated, the points will fall along a line or curve (Tague, 2004).

The software program known as Statistical Package for Social Sciences (SPSS) was used to process the data gathered in this study.

CHAPTER IV

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of the data gathered from the survey on the extent of parental involvement on the academic achievement and attitudes of students towards Science.

Extent of Parental Involvement

These are the constructs in determining the extent of parental involvement.

- a. school participation
- b. home supervision
- c. material and financial supports
- d. behavioral support
- e. spiritual formation
- f. provision for recreational activities

School Participation

School participation refers to the involvement and support given by parents in school through school council, parent clubs and/or by directly participating in science related activities.

Table 8

The Respondents' Level of Parental Involvement in terms of School Participation

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents attend general assembly, participate in the election of officers and support all the school policies.	3.2	Moderate	2.9	Moderate
2. The parents support the use of effective forms of school-to-home- and home-to-school communications (circular letters and parentline) and visit the school website for an updates.	4.0	Great Extent	3.7	Great Extent
3. The parents attend parent-teacher conferences to know more about the achievement of the learner.	3.9	Great Extent	3.7	Great Extent
4. The parents attend special events of the school (performances of the student, faculty and staff projects, parent's recollection and others...)	3.1	Moderate	2.4	Little Extent
5. The parents help organize, volunteer school wide activities and encourage the learner to engage in co-curricular activities of the school.	2.8	Moderate	2.1	Little Extent
Total	3.4	Moderate	3.0	Moderate

Table 8 denotes the level of participation of parents in the school activities of their children. Based on the given data, it can be inferred that item number 2 got the highest mean of 4 for parents and 3.7 on the assessment of students. This shows that a greater number of parents support the use of effective forms of school-to-home and home-to-school communications (circular letters and parentline), and visit the school website for updates.

Another way of communicating with the school is attending parent-teacher conferences to know more about the achievement of the learner. This item has a mean of 3.9 from parents and 3.7 from the students' assessment. This implies that parents perceive that their involvement in their children's education is extensive.

The respondents' level of parental involvement in terms of school participation can be viewed as far-reaching. Parents supervise the academic performance of their children in school, monitor the status of their children and help them with school work and school-related issues.

In item number 5, parents see themselves as moderately involved, while students see their parents as less involved when it comes to organizing, and volunteering in school-wide activities, and in encouraging them to engage in co-curricular activities of the school. There is minimal involvement when it comes to co-curricular activities of the children. This coincides with the study conducted by (Desforges, et al. 2003). According to them, parents wanted to increase their

involvement, like supporting extra-curricular initiatives, but they felt that the limitations on their own time became the main barrier to further involvement.

Home Supervision

Home supervision is looking after the child's activities given by parents when at home. It involves parents who directly oversee the academic requirements of their children, help in the completion of school works especially in Science, follow-up school activities and impose wise use of time once at home.

Table 9 gives an idea on the extent of parental involvement at home. Majority of the variables were observed by the parents at home. The result shows that most of the parent-respondents check the requirements of their children, and supervise their activities when at home. This got a mean of 4.3 which marked highest among the variables. The table also reveals that most of the parents make sure that their children have time to study at home, with a mean of 4.1.

The students viewed item number 1 and item number 5 as of great extent when it comes to the involvement of their parents at home. There is a difference between the assessment of parents and students for items 2, 3 and 4. In general, a mean of 3.9 confirms that there is a great extent of participation on the part of the parents and they are actively involved in the education of their children; on the other hand, the students assessed their parents as moderately involved in academic supervision once at home.

Table 9

The Respondents' Level of Parental Involvement in terms of Home Supervision

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents supervise the activities of the learner when at home and make sure that the learner has time to study.	4.1	Great Extent	3.5	Great Extent
2. The parents follow-up the learner about the lessons she learned for the day.	3.6	Great Extent	2.5	Moderate
3. The parents set limit on the amount of time spends watching television, texting, using social media and surfing the net for researches and other related matters.	3.9	Great Extent	2.8	Moderate
4. The parents give enough time and energy to supervise learner's homework and school requirements.	3.7	Great Extent	2.9	Moderate
5. The parents check the homeworks / requirements of the learner after it was completed.	4.3	Great Extent	3.7	Great Extent
Total	3.9	Great Extent	3.1	Moderate

Parental support at home indicates how parents extend their love and care for their children in terms of giving and supporting their educational requirements.

The findings correlate with the result of the study conducted by Desforges, et al. (2003) where it was found that at home, parental involvement clearly and consistently have significant effects on pupil achievement and adjustment which far outweigh other forms of involvement.

On reviewing the article of Shute (2011) the following ideas were drawn: home supervision and rules refers to moderate levels of parental support, and when combined with appropriate monitoring of home-related behaviors (such as television viewing), have shown positive associations with academic achievement. Stelmack (2004) believed that parental involvement at home seems to have a more significant impact on children than parental involvement in school activities.

The involvement of the parents at home is highly commendable. They give enough time to follow-up the activities of their child and set home as a good avenue for a better learning place of their child.

Material and Financial Support

Material and Financial Support entails the responsibility given by parents in pursuing the education of their children especially in providing resources, financing and supporting all the expenses particularly on the major subjects like Science.

Table 10

The Respondents' Level of Parental Involvement in terms of Material and Financial Support

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents are responsible on the financial expenses of the learner in school.	4.8	Very Great Extent	4.7	Very Great Extent
2. The parents allot sufficient amount for the school fees of the learner, which include the complete set of books, supplementary materials to aid learning, uniform, tutorials and other related requirements /materials of the learner.	4.8	Very Great Extent	4.6	Very Great Extent
3. The parents provide the learner with daily school allowance and give rewards when the learner performs well in school.	4.5	Very Great Extent	4.1	Great Extent
4. The parents has a ready cash for financial contributions and support unexpected expenses of the learner.	4.2	Great Extent	4.0	Great Extent
5. The parents look for ways and means for the continuity of financial and material support to learner's education.	4.7	Very Great Extent	4.6	Very Great Extent
Total	4.6	Very Great Extent	4.4	Great Extent

Table 10 presents the level of parental involvement in terms of material and financial support. Based on the assessment of the respondents, the table confirms that most of the parents shoulder the financial expenses of the learner in school, and allot a sufficient amount for the school fees, which include the complete set of books, supplementary materials to aid learning, uniform, tutorials and other related requirements or materials of their children.

Among the five variables, item number 4 - the parents has ready cash for financial contributions and support unexpected expenses of the learner - got the least mean value of 4.2 for parents and 4.0 from the student's analysis.

The findings suggest that parents are concerned of their children's financial and material needs and it is very evident quality to parents who do not want anything but a good future for their children.

Behavioral Support

Behavioral support pertains to the affection and emotional support given by parents to their children. It emphasizes the importance of strong family involvement in the education of the child.

Table 11 reveals the level of parental involvement in terms of behavioral support. The table shows that the respondents give moral support to their child in terms of understanding the learner's shortcomings, and encouraging the learner not to give up when things become difficult.

Table 11

The Respondents' Level of Parental Involvement in terms of Behavioral Support

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents understand learner's shortcomings and encourage the learner not to give up when things get hard.	4.5	Very Great Extent	3.8	Great Extent
2. The parents help raise learner's confidence about school performance.	4.5	Very Great Extent	3.8	Great Extent
3. The parents boost the self-esteem of the learner through academic support and parental involvement.	4.3	Great Extent	3.5	Great Extent
4. The parents encourage the learner to stay focus at her own pace while doing schoolwork.	4.5	Very Great Extent	3.8	Great Extent
5. The parents support the rules and regulations of the school particularly the policies stated in the student's handbook on behavior (bringing of cellular phone and others...)	4.4	Great Extent	3.4	Moderate
Total	4.4	Great Extent	3.6	Great Extent

Parents help raise learner's confidence towards school performance, and encourage the learner to stay focused and work at her own pace while doing schoolwork. Both parents and students viewed the level of parental involvement as of great extent.

These findings are in line with the ideas of Peters, Mark et al. (2007). They cited that parents can be involved with their child's school by supporting the school's policies on children's behavior, as well as by attending events such as parents' evenings. They asked parents for their perception on the importance of participating in their child's school. Eight out of ten respondents (80%) said that it was extremely important to support the school's policies on children's behavior in school. Seventy five percent also thought it was extremely important to attend parents' evenings, tutor days, and other parent-teacher contact.

The findings showed the strong support the parents give to their children, which is truly an expression of love and care to their children.

Spiritual Development/Formation

Spiritual development/formation pertains to the guidance of the parents through spiritual actions of the family.

Table 12

The Respondents' Level of Parental Involvement in terms of Spiritual Development/Formation

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents celebrate/attend religious or worship activities with the family.	4.0	Great Extent	3.7	Great Extent
2. The parents practice faith formation at home and allow/permit the learner to join recollection/retreats.	4.5	Very Great Extent	4.3	Great Extent
3. The parents motivate the learner to be a part of any religious activities of the school and the church.	4.1	Great Extent	3.9	Great Extent
4. The parents allow the learner to participate in the social-action program of the school and support fund-raising projects of the school and church.	4.1	Great Extent	3.7	Great Extent
5. The parents instill the value of trusting God in times of difficulties and achievements in learner's studies.	4.6	Very Great Extent	4.4	Great Extent
Total	4.2	Great Extent	4.0	Great Extent

The data in table 12 show the level of parental involvement in terms of spiritual development/formation. It is exhibited on the table that the parents instill the value of trusting God in times of difficulties and achievements in learner's studies with a mean of 4.6 for parents and 4.4 for the students respectively.

In the study conducted by Abar et al. (2009), only 85 students, and the correlated measures, including attainment, were self-reported. The research found that highly religious students tended to perform well academically, study better, and engage in fewer risk behaviors than young people who were less committed to religion, and that the authoritative style of their parents was associated with high levels of academic performance and study skills.

The results denote the concern of parents for the spiritual growth of their daughters. This finding also reveals the fact that parents are religious enough to give their full support to the spiritual development of their children, ready then to enroll and retain their children in Holy Family School, a predominantly a catholic school.

Provision for Recreational Activities

Recreational activities refer to the involvement of parents through various activities of the child.

Table 13

The Respondents' Level of Parental Involvement in terms of Provision for Recreational Activities

	PARENTS		STUDENTS	
	Mean	Interpretation	Mean	Interpretation
1. The parents allow the learner to use their leisure time productively.	4.2	Great Extent	4.2	Great Extent
2. The parents permit the learner to engage with their peers in their community and allow the learner to join recreational activities with their friends.	4.0	Great Extent	4.0	Great Extent
3. The parents give importance on the quality time of the family.	4.3	Great Extent	3.9	Great Extent
4. The parents participate in school sports – related activities.	2.3	Little Extent	2.2	Little Extent
5. The parents support the learner in their co-curricular involvement in the school.	4.0	Great Extent	3.8	Great Extent
Total	3.8	Great Extent	3.6	Great Extent

Table 13 indicates the level of parental involvement in terms of provision for recreational activities with a composite mean of 3.8 and 3.6 respectively.

These indicators are as follows: the parents give importance on the quality time of the family; the parents allow the learner to use their leisure time productively; the parents permit the learner to engage with their peers in their community; parents allow the learner to join recreational activities with their friends and the parents support the learner in their co-curricular involvement in the school.

Among the given variables, only item 4 got the least mean value of 2.3 and 2.2, which can be interpreted as of little extent.

The researcher inferred that parents support the essential activities of their children and are mindful enough on the type of activity their children should be involved in.

The results in table 14 show the summary of the mean rating on the extent of parental involvement. It shows that parents perceive that they have great involvement and participation in the education of their children as shown in the table with a mean of 4.1 from parents and 3.6 from student's assessment.

Table 14

Summary of the Mean Rating on Level of Parental Involvement

INVOLVEMENT OF PARENTS	PARENTS		STUDENTS	
	MEAN	INTERPRETATION	MEAN	INTERPRETATION
School Participation	3.4	Moderate	3.0	Moderate
Home Supervision	3.9	Great Extent	3.1	Moderate
Material and Financial Supports	4.6	Very Great Extent	4.4	Great Extent
Behavioral Support	4.4	Great Extent	3.6	Great Extent
Spiritual Development/ Formation	4.2	Great Extent	4.0	Great Extent
Provision for Recreational Activities	3.8	Great Extent	3.6	Great Extent
TOTAL	4.1	Great Extent	3.6	Great Extent

Academic Achievement

The academic performance profile of the students in science of Holy Family School are represented by their grades for first and second quarters.

Table 15

Frequency Distribution and Percentage of Respondents in Terms of their First and Second Quarter Grades

First and Second Quarter Average Grade	FREQUENCY	PERCENTAGE	INTERPRETATION
98 – 100	0	0	Excellent
95 – 97	3	3	Superior
90 – 94	21	19	Above Average
86 – 89	38	35	High Average
80 – 85	42	38	Average
75 – 79	5	5	Low Average
71 – 74	0	0	Below Average
70 and below	0	0	Poor

Table 15 reveals the ratings obtained of the students in science for first and second quarters. It can be gleaned from the table that majority of the students obtained the rating of 80 to 85 or on the average level of performance.

38 respondents, or 35 percent of them, have achieved the level of high average and around 19 percent got a grade point average ranging from 90 to 94. This implies that the students have attained level of knowledge they are expected to achieve. Only 5 percent of the students are within the level of below average.

It is implied in their academic performance that students attained the level of instruction they are expected to have achieved and learned.

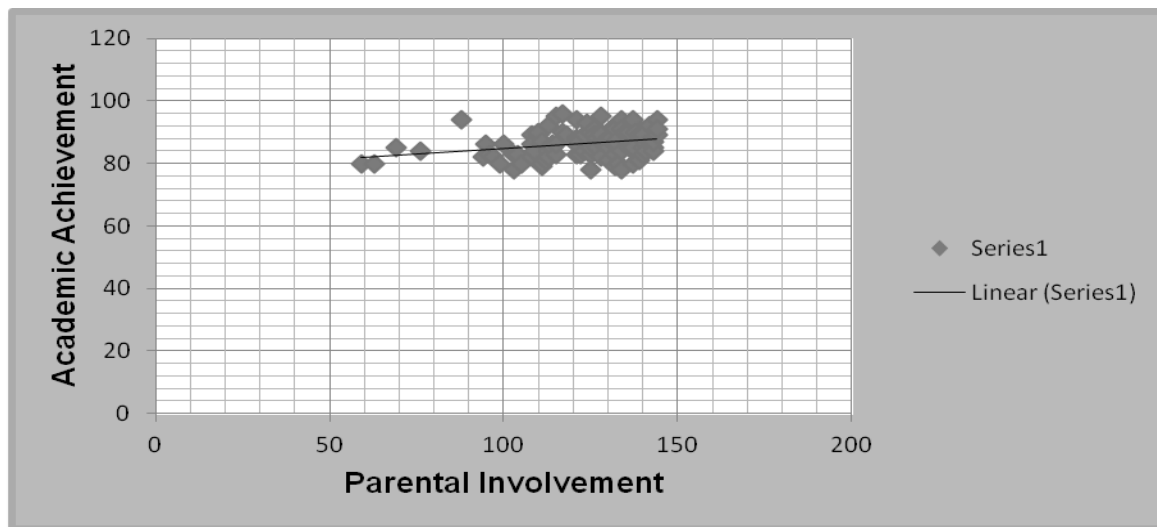
Parental Involvement, Academic Achievement and Attitudes of Students.

To determine what relationship exists among parental involvement, academic achievement and attitudes of students towards Science, the researcher used Scatter Plot and Pearson Moment Product of Correlation.

Hypothesis 1

There is no significant relationship between parental involvement and students' academic achievement towards Science.

Scatter Plot on Parental Involvement and Academic Achievement of the Students in Science



The graph shows a none to weak linear relationship between parental involvement and academic achievement of the students in science.

Table 16 shows the relationship between parental involvement and academic performance of the students towards Science. It shows the following findings: there is a low correlation between the variables of academic performance and school participation ($r = .242$), behavioral support ($r = .230$), spiritual development/formation ($r = .200$) and provision for recreational activities ($r = .210$); while the correlation between academic performance and material and financial supports ($r = .156$) and home supervision is ($r = .181$) are negligible.

Table 16

Relationship between Parental Involvement and Academic Performance of the Students towards Science

PARENTAL INVOLVEMENT	ACADEMIC ACHIEVEMENT	INTERPRETATION
School Participation		
Pearson Correlation	.242	Low correlation
Sig. (2-tailed)	.011	
Home Supervision		
Pearson Correlation	.181	Negligible correlation
Sig. (2-tailed)	.060	
Material and Financial Supports		
Pearson Correlation	.156	Negligible correlation
Sig. (2-tailed)	.106	
Behavioral Support		
Pearson Correlation	.230	Low correlation
Sig. (2-tailed)	.016	
Spiritual Development/Formation		
Pearson Correlation	.200	Low correlation
Sig. (2-tailed)	.037	
Provision for Recreational Activities		
Pearson Correlation	.210	Low correlation
Sig. (2-tailed)	.029	

The findings are supported by the study done by Desforges, et al. (2003). They mentioned that parents will be involved to the degree that they see that supporting and enhancing their child's school achievement is part of their 'job' as a parent. Likewise, parents will get involved to the degree that they feel they have the capacity to make a difference. People can learn new roles and skills.

The results are also quite similar to the point of view of Campbell, et.al. (2010). Parents are the children's first and most important teachers. If children are to be successful in school, parents must participate actively in their children's academic lives. A lack of parental involvement impacts negatively on children's academic performance. Therefore, by increasing parental involvement their child's academic life, grades and overall academic achievement will be improved.

In the review article of Shute (2011), it was shown that school involvement, which refers to participation in parent-teacher organizations (PTOs) or associations (PTAs), community involvement, volunteer work, and so on, has shown a positive association with academic achievement. He discussed further some studies that show parental involvement and its probable influence on achievement as children progress through school. There are several reasons for this decline: (a) middle and high schools become more complex, with more demanding curricula that can intimidate parents, (b) there are fewer school outreach efforts to involve parents in

the secondary school years, (c) parents may exert progressively less influence over their adolescent children as they become more independent. As students become more older, they start to rely on peers for advice and support more than on their parents.

A case study on lack of parental involvement in the academic performance of students pointed out that most students, especially in the lower sections, are not guided properly by their parents when it comes to academic performance.

The age of children can be a barrier to the involvement of parents since it is widely acknowledged that parental involvement decreases as children grow older and is at its lowest level for children of secondary school age. The tendency for parental involvement to be greater for parents of younger children may be partly because younger children are more positive about their parents going into school. Whereas, older children are less keen about school involvement, such as parents going on class trips, which is at least partly due to adolescents wanting to become independent of their parents (Eccles & Harold, 1993).

Table 17

Summary of the Relationship between Parental Involvement and Academic Performance of the Students towards Science

	PARENTAL INVOLVEMENT	INTERPRETATION
ACADEMIC ACHIEVEMENT		
Pearson Correlation	.277**	Low correlation
Sig. (2-tailed)	.004	

Table 17 presents the summary of the relationship between parental involvement and academic performance of the students towards science. It can be gleaned that there is a low correlation of $r = .277$ between parental involvement and academic achievement of the students with the computed value of significance of .004 at 0.05 level of significance, thus the null hypothesis was rejected.

The result of the study is quite similar with the case study on Parental Involvement in the Academic Performance of the Students at Pedro V. Panaligan Memorial National High School. Based on the assessment of the teachers, most students in the lower sections are not guided properly by their parents when it

comes to their academic performance. This results to low academic performance of the students. There came a time when the school had been labeled as one of the low performing schools in the Division of Calapan City during the National Achievement Test (NAT) in SY 2005-2006. Most students could not attend the review classes because of lack of financial and moral support from the parents.

Desforjes, et al. (2003) believed that both involvement in the school and parental monitoring of students' behavior had effects on moderating discrepant behavior but less on achievement in science.

This result is entirely consistent with Sacker, et al.'s (2002) study using the BCDS data. Together, they show that parental involvement is much less influential on the achievement of adolescent pupils.

On the other hand, Gonzalez-Pienda et. Al. (2002), explored the effects of parental involvement on achievement for a sample of 261 Spanish adolescents.

The researchers concluded that the results clearly supported the thesis that parental involvement behaviors significantly affect children's academic achievement; however, this influence is not direct.

Shute (2011) pointed out the data of Chen (2008) and Deslandes, et al. (1997) when they found a negative relationship between parental supervision and

children's achievement. This negative association might be related to the fact that some parents increase their support/supervision when they become concerned with their children's underachievement. In other words, parents adopt strategies based on their children's academic performance.

The results of the study go in line with the findings of Epstein, Sanders, Simon, Salinas, Jansorn, and Van Voorhis (2002). They drew three key conclusions about parental involvement: First, parental involvement tends to decline across the grades unless schools make conscious efforts to develop and implement partnerships with parents. Reasons for this declining pattern include parents' lack of familiarity, with the curriculum at the higher grades; adolescents' preference to have their parents stay involved in less visible ways; parents' decisions to return to the work force once their children gain more independence; and secondary teachers' lack of awareness of how to effectively involve parents at the higher levels; Second, affluent parents tend to be more positively involved in school; whereas economically distressed parents have limited contact with schools, and usually, only in situations dealing with students' achievement or behavior. Schools that work on building relationships with all parents, however, can equalize the involvement of all socioeconomic groups; Finally, single parents, employed parents, fathers, and parents who live far from the school, on average, are less involved in the school unless the school organizes opportunities that consider these parents' needs and

circumstances. Although these patterns are generally observable among schools, they can be overcome if schools develop programs that include families that otherwise would not become involved on their own.

Nevertheless, the results of the study are in direct contrast with the study done by Olatoye and Ogunkola (2008). Their findings support the fact that influence of parental involvement enhances achievement in science. This was supported by Serin and Mohammadzadeh (2008), who found out in their study that there was a meaningful relationship between students' attitudes towards science and their science achievement.

Furthermore, De Fraja, et.al., (2010) described that the findings of his study on parents' effort as key to the child's educational performance suggests that there is a relationship between children's performance and the effort put in by parents in supporting their education. Derrick-Lewis (2001) pointed out that the results of this study indicated significant relationships between student achievement and the parent involvement typologies volunteering, learning at home, decision-making, and collaborating with the community. The relationships between student achievement and parent involvement are in conjunction with parents' educational level and income levels were also significant. Both parental involvement typologies and family demographics emphasize goals that are achieved most effectively when families and schools work together.

Nevertheless this finding is somewhat congruent with the study conducted by George and Kaplan (1998) which suggested that the more the parents showed a positive attitude to science the better the pupils achieve in science.

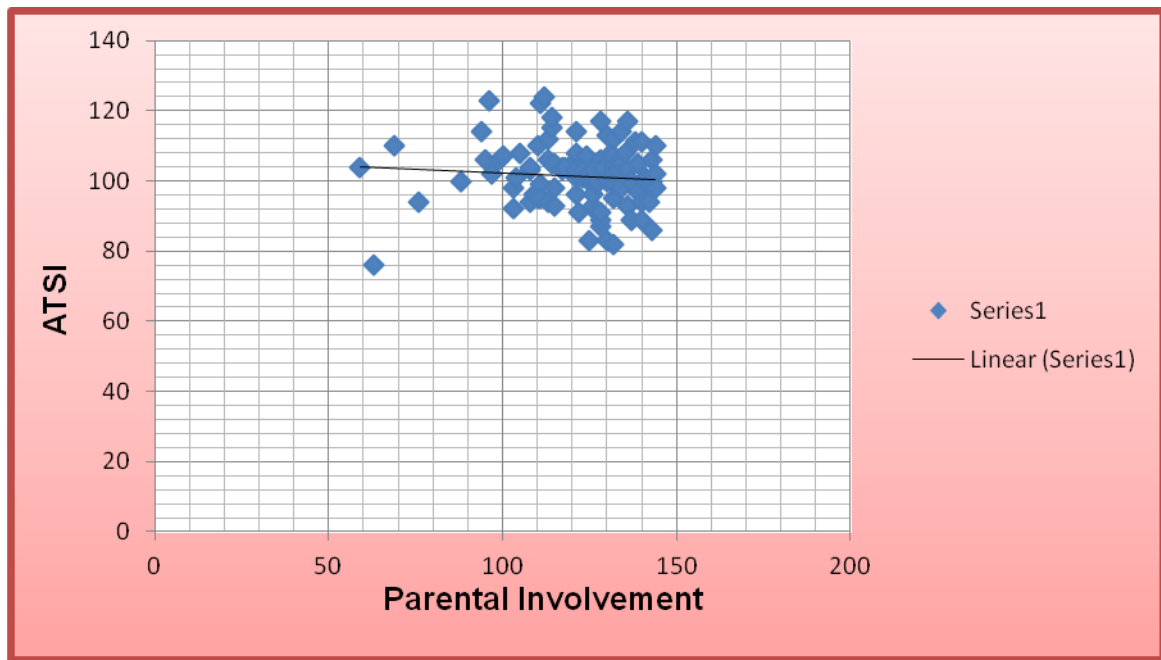
The table shows the responses of the parents during the group discussion on parental involvement. Most of the parents agreed that parental involvement has a strong impact on students' academic achievement in science. They believed that through proper modelling, they can demonstrate that learning is an important and enjoyable process.

This pattern of results implies that the higher the involvement of parents the better the attitudes of students towards science and the higher the academic success of such students in science.

Hypothesis 2

There is no significant relationship between parental involvement and students' attitude towards Science.

Scatter Plot on Parental Involvement and Attitude of the Students towards Science



The graph shows the relationship between parental involvement and attitude of the students towards science. Plotted on the x-axis are the variables on parental involvement while on the y-axis are the data gathered on attitude toward science inventory. The results demonstrate a negative linear relationship among variables.

Table 18

Relationship between Parental Involvement and Attitude of the Students towards Science

	PARENTAL INVOLVEMENT	INTERPRETATION
ATTITUDE TOWARDS SCIENCE		
Pearson Correlation	-.083	No correlation
Sig. (2-tailed)	.391	

Table 18 reveals the relationship between parental involvement and attitude of the students towards science. The data $r = -.083$ shows that there was no correlation for parental involvement with student's attitude towards science. The finding of this study accepts the given hypothesis.

Parental involvement is not significantly related with the attitudes of the students towards science.

A research done by Stelmack (2004) pointed out that parent involvement can have an impact on student learning throughout all grades. Although involvement in high school tends to decrease, students' study habits, behavior, and attitude toward school can be influenced by parents' interest even in the final year of school.

Moreover, the finding of this study contradicts the finding of Ken, et al. (2011) which pointed out that parents have a primary influence on their children's attitudes towards school, their learning and their future success.

When children develop a reputation for exhibiting challenging behavior, their parents can be reluctant to go into schools for fear of getting more bad news. In fact, there is usually a negative correlation between parental involvement and children's behavior problems, such that the more disruptive the behavior, the less parents are inclined to be involved with the school. When behavior problems become so severe that schools begin to consider suspension or expulsion. Conflict between schools and parents is almost inevitable and presents a formidable barrier to meaningful parental involvement (Parsons, 1999).

Changing family structures are marked by an increase in parents' working hours and mobility, greater numbers of families where both parents work, accompanied by an increased number of divorces and separations, resulting in increases in sole parenting and the number of re-partnered families. Concurrently, there are fewer extended family arrangements, a decrease in religious practice, and increased community fragmentation, as well as greater individualism and competition (David et al. 1993)

The impact of parents' involvement on their child's learning and achievement is significant in school setting. Parents are supportive in the academic venture of their children. The performance of the child is better when parents do their part, not

only in school but at home as well. The parents are the first and most important teacher of their child.

The attitude is not a good indicator in determining the extent of parental involvement. When the members of the family work together, mutual respect and trust among the children is recognized.

Table 19 *Patterns of Responses on FGD*

	Frequency	Percentage
Parents greatly influence the students' attitude towards science	5	45%
Parents are not accountable on the attitude of the students towards science	6	55%

Around 45% of the respondents strongly agreed that parents greatly influence students' behavior/attitude in science, while 55% disagreed with this idea. They stressed that the attitude of their children in school, particularly in science subjects, might be affected by their family problems, single parent homes, and children switching between homes.

Respondents pointed out that they may view themselves as greatly involved in the science education of their children, but these is not enough for their children, who are also affected by other issues such as peer pressure, and other related-issues.

Most of the parent-respondents said that they are immensely involved in the education of their children, believing that this is requisite for their children's school success. Few of them noted that they were not as involved as they could be, or thought they should be, due to constraints in time, schedule, and heavy workloads.

Parents viewed their involvement in several different ways and levels, with some parents having little or no involvement at all.

The following were the views and opinions of parents in their school participation, home supervision, material and financial support, behavioral support, spiritual formation and provision for recreational activities particularly in science subject.

School Participation

Most of the parents noted that they can participate in school-related activities particularly in science (e.g. science fair) if their work schedule is not loaded.

Respondents agreed on the following notions: they encourage their children to observe, ask questions and seek their own understanding of science-related activities; they support the creativity, critical thinking and resourcefulness of their children by engaging them with various everyday activities; and they encourage their children to participate in extra-curricular activities focused on science and technology in school, such as science club and science-related activities.

Home Supervision

Majority of the respondents said that they cannot give their full support to their children once at home due to time constraints. Despite this, the parent-respondents accepted the fact that they need to help their child feel the excitement of observation and discovery through television program on science documentaries (i.e. Why do objects fall?) and by joining their children in learning new things about science and technology and by embracing opportunities to learn science together.

Material and Financial Support

Around 80% said that they give their full support when it comes to money matters, such as financing science-based projects like investigatory projects;

while 20% said that in some ways they cannot give enough financial support because of various family expenses.

Behavioral Support, Spiritual Formation and Provision for Recreational Activities.

Respondents noted that in some ways they can supervise the behavior, spiritual and recreational manners of their children. They admitted that they cannot give their full time and attention due to busy family and work schedule. Parents however agreed that they need to model values that support learning, responsibility, and determination in pursuing their career interests in science technology; they need to involve the learner in worthwhile games requiring scientific or physical skills; and provide opportunities for science learning at home through outdoor activities like trips to parks, museums, zoos and other interesting science-rich sites in the community.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, the findings, conclusion and recommendations.

Summary of Findings

This study aimed to determine the effects of parental involvement on the academic achievement of the students in science. It also looked into the probable impact of parental involvement on the attitude of the students towards science. Using a descriptive method of research, this study involved 109 students of the Holy Family School of Quezon City, Inc., and their parents/guardians. The main instrument used to gather data for this research is the validated researcher-made questionnaire checklist on parental involvement and the adapted questionnaire on Attitude toward Science Inventory (ATSI). The data gathered were analyzed and interpreted using frequency, percentage and weighted mean. The Pearson product-moment correlation coefficient was also used to determine if there is an existing relationship between parental involvement of parents and students; parental involvement and academic achievement of students in science for the 1st and 2nd quarters of SY 2013-2014; and parental involvement and attitude of students towards science.

The study answered the following questions:

1. What is the level of parental involvement in the following constructs:
 - a. school participation;
 - b. home supervision;
 - c. material and financial support;
 - d. behavioral support;
 - e. spiritual formation; and
 - f. provision for recreational activities?
2. Does parental involvement affects students' achievement in science?
3. Does parental involvement affects students' attitude in science?

The following hypotheses were tested:

1. There is no significant relationship between parental involvement and students' academic achievement towards Science.
2. There is no significant relationship between parental involvement and students' attitude towards Science.

The major findings of the study are as follows:

1. Level of Parental Involvement

1.1 Based on the assessment of parents and students, the extent of parental involvement in terms of school participation was moderate, as shown by a composite mean of 3.4 and 3.0.

1.2 Parents assessed their involvement at home as of great extent whereas students rated their parents' supervision as moderate, with a composite mean of 3.9 and 3.1.

1.3 Very great extent and great extent were the interpreted variables for the extent of parental involvement in terms of material and financial support, as reflected by a composite mean of 4.6 and 4.4.

1.4 The respondents' level of parental involvement in terms of behavioral support is of great extent, as shown by a composite mean of 4.4 and 3.6.

1.5 Both of great extents were the assessment of parents and students on the level of parental involvement in terms of spiritual development/formation, as reflected by a composite mean of 4.2 and 4.0.

1.6 The parents' involvement in their children's recreational activities is of great extent, as shown by a composite mean of 3.8 and 3.6.

2. Academic Achievement

Forty two (39%) of the students are in the average range, thirty eight (35%) are in the high average range, twenty one students (19%) are in the above average range, five (5%) are in the low average range while three (3%) are superior in their first and second quarter grades in Science.

3. Correlation between parental involvement and students' academic achievement in science.

There is a low correlation between parental involvement and students' academic achievement towards Science with the computed value of $r = .277$. With the computed significance value of .004, the null hypothesis was rejected at 0.05 level of significance.

4. Correlation between parental involvement and students' attitude towards Science.

With the computed value of $r = -.083$, it was found that there is no correlation between parental involvement and the attitude of students towards Science. It has no predictive potential in determining the said variable.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. The status of the parents does not matter when it comes to parental involvement.
2. Current activities offered by the school for the parents are not science-related activities.
3. Low involvement of parents in the academic performance of students could indicate that school administrators' roles traditionally do not call for them to engage in various science activities as frequently as the other types of activities offered by the school.
4. Few families are involved in the science-related school activities.
5. Parental involvement is not an indicator in determining the attitude of the students towards Science.
6. Material/financial support, behavioral, spiritual formation and provision for recreational activities have an impact on student learning. Meaningful parental involvement on these variables tends to increase students' study habits, behavior, and attitude toward school.
7. The extent of the support given by the parents in their children's education of their children was recognized by their daughters through their constant communication, follow-up and involvement in school and at home.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are hereby presented for consideration.

1. The school should identify more science-related activities that will allow parents to participate and involve themselves in enhancing the academic achievement and attitude of the students in science.
2. The school should find ways on how to involve the parents in all science activities and strengthen the school-parents partnership, for it is not a common occurrence in science.
3. The parents must strengthen their involvement in their children's education and they should give importance on their relationship as family, for them to enhance the attitude of the students towards learning.
4. A similar or related study can be done to determine the possible changes in the perceptions and practices of parents towards parental involvement and academic achievement of their children in science

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APPENDICES

August 20, 2013

Mrs. Teresita Arcos-Surot

Directress

Holy Family School of Quezon City, Inc.

Re: Request for Permission to Conduct Study

Good day!

The undersigned is a student of Master of Arts in Science Education, Major in General Science at Philippine Normal University and is currently working on a study entitled *"Parental Involvement as Correlates to Students' Achievement and Attitude towards Science"*.

In line with this, the researcher would like to seek your approval to conduct activities related to her study in this school. These activities, if approved, will include: distribution of questionnaires to parents, and requesting of First and Second Quarters, SY 2013-2014 of Fourth Year students. The questionnaire for parents will be distributed during the Parent-Teacher conferences in the school.

Attached is a copy of the survey questionnaire for parents.

Rest assured that any information collected for this study will be treated with utmost confidentiality.

Thank you for your time and consideration in this matter.

Respectfully yours,

Ms. Zoraida A. Balderama

August 23, 2013

Mrs. Ivy P. Mejia
Science Education Associate
UP NISMED

Re: Validation of Research Instrument

Dear Mrs. Mejia,

Good day!

The undersigned is a student of Master of Arts in Science Education, Major in General Science at Philippine Normal University and is currently working on a study entitled *“Parental Involvement as Correlates to Students’ Achievement and Attitude towards Science”*.

With your expertise, the researcher is humbly asking your permission to validate the attached questionnaire to be used in gathering necessary information and data. It would be better if you can write your comments, suggestions and recommendations that will help in improving the above-mentioned questionnaire.

Thank you for your favorable response regarding this matter.

Respectfully yours,

Ms. Zoraida A. Balderama
Researcher

August 23, 2013

Mrs. Aurelia T. David

Guidance Counsellor

Holy Family School of Quezon City, Inc.

Re: Validation of Research Instrument

Dear Mrs. David,

Good day!

The undersigned is a student of Master of Arts in Science Education, Major in General Science at Philippine Normal University and is currently working on a study entitled *“Parental Involvement as Correlates to Students’ Achievement and Attitude towards Science”*.

With your expertise, the researcher is humbly asking your permission to validate the attached questionnaire to be used in gathering necessary information and data. It would be better if you can write your comments, suggestions and recommendations that will help in improving the above-mentioned questionnaire.

Thank you for your favorable response regarding this matter.

Respectfully yours,

Ms. Zoraida A. Balderama

Researcher

August 23, 2013

Mrs. Lilibeth M. Danuya
Human Resource Officer
Holy Family School of Quezon City, Inc.

Re: Validation of Research Instrument

Dear Mrs. Danuya,

Good day!

The undersigned is a student of Master of Arts in Science Education, Major in General Science at Philippine Normal University and is currently working on a study entitled *“Parental Involvement as Correlates to Students’ Achievement and Attitude towards Science”*.

With your expertise, the researcher is humbly asking your permission to validate the attached questionnaire to be used in gathering necessary information and data. It would be better if you can write your comments, suggestions and recommendations that will help in improving the above-mentioned questionnaire.

Thank you for your favorable response regarding this matter.

Respectfully yours,

Ms. Zoraida A. Balderama
Researcher

Validator's Questionnaire

Please encircle the answer that best describes your assessment on the following variables by using the following scale:

5 – Strongly agree	4 - Agree	3 – Undecided	2 – Disagree	1 – Strongly Disagree
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Content, Objectives and Format	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	(5)	(4)	(3)	(2)	(1)
1. Intentions of the study are clearly stated.	5	4	3	2	1
2. The questionnaire has a short introductory set of instructions on how to answer the survey questions.	5	4	3	2	1
3. The variables can assess the purpose of the study.	5	4	3	2	1
4. The variables/extent of parental involvement are well-defined.	5	4	3	2	1
5. The content of each level of parental involvement specify the variables of interest.	5	4	3	2	1
6. The variables are grouped according to the level of involvement.	5	4	3	2	1
7. Each of the variables gives the respondents all the information needed for assessment.	5	4	3	2	1
8. The variables can generate data at the level of measurement required for the analysis.	5	4	3	2	1
9. The items provide sufficient data to answer the hypotheses or research questions raised.	5	4	3	2	1
10. The data are presented in a clean and organized layout.	5	4	3	2	1
11. The appearance and style of the questionnaire has a very strong impact to the respondents.	5	4	3	2	1
12. The variables are consistent and easier for respondents to find the answer that is relevant to them.	5	4	3	2	1
13. The variables are relevant to the objectives of the study	5	4	3	2	1
14. The questionnaire is brief, attractive and user friendly.	5	4	3	2	1
15. The variables are simpler and will take less time to answer.	5	4	3	2	1

SURVEY QUESTIONNAIRE

Dear Respondents:

The undersigned is currently conducting a study entitled *“Parental Involvement as Correlates to Students’ Achievement and Attitude towards Science”*, as one of the requirements for the degree of Master of Arts in Science Education at Philippine Normal University.

The home/school partnership is one of the essential components of an effective school. Enclosed herewith is a questionnaire designed to gather the needed data for her study. This survey is designed to help us better understand the level of parental involvement both at school and at home, and help guide us in school improvement specifically in Science curriculum. Please take a few minutes to complete the survey and help us gather information on how we as a team can enhance your child’s school experience in Science subject, and become more interesting and motivating. Rest assured that all the responses will be treated with utmost confidentiality and will be used for research purposes only.

Your untiring support is highly appreciated.

Thank you very much for your cooperation.

Respectfully yours,

Ms. Zoraida A. Balderama
Researcher

Noted by:

DR. RABIN R. RABE
Adviser

PROF. ABEL F. OLE
Adviser

GENERAL INFORMATION SHEET

Put a check before each item.

Age of Parents

_____ 20 – 30 years old

_____ 41 – 50 years old

_____ 31 – 40 years old

_____ 51 and older

Age of Students

_____ 12 – 13 years old

_____ 14 – 15 years old

_____ 16 – 17 years old

_____ 18 and older

Civil Status

_____ Single

_____ Married

_____ Separated

Relationship of the respondent to the student

_____ Father

_____ Mother

_____ Guardian

Highest Educational Attainment

_____ Elementary graduate

_____ Post-graduate degree holder

_____ High School graduate

_____ Others, please specify _____

_____ College graduate

Number of Children in the Family

PARENTS INVOLVEMENT SURVEY

Please encircle the answer that best describes your involvement on the following activities by using the following scale:

5 – Always	4 - Often	3 – Sometimes	2 – Seldom	1 – Never
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<u>School Participation</u> <i>(The school recognizes the inputs of parents and encourage the development of parent leaders and representatives. School participation is more on the involvement of parents in school, through school council, parent clubs and/or by directly participating in school related-activities. Parents play an active role in the academic growth of their children).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents attend general assembly, participate in the election of officers and support all the school policies	5	4	3	2	1
2. the parents support the use of effective forms of school-to-home- and home-to-school communications (<i>circular letters and parentline</i>) and visit the school website for an updates	5	4	3	2	1
3. the parents attend parent-teacher conferences to know more about the achievement of the learner	5	4	3	2	1
4. the parents attend special events of the school (performances of the student, faculty and staff projects, parent's recollection and others...)	5	4	3	2	1
5. the parents help organize, volunteer school wide activities and encourage the learner to engage in co-curricular activities of the school	5	4	3	2	1
6. <i>other related concerns (please specify)</i> 					

<u>Home Supervision</u> <i>(Home supervision includes monitoring or looking after the child's activities when at home. Parents can directly oversee the academic requirements of the child, help in the completion of school works, follow-up school activities and impose wise use of time once at home).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents supervise the activities of the learner when at home and make sure that the learner has time to study	5	4	3	2	1
2. the parents follow-up the learner about the lessons she learned for the day	5	4	3	2	1
3. the parents set limit on the amount of time spends watching television, texting, using social media and surfing the net for researches and other related matters	5	4	3	2	1
4. the parents give enough time and energy to supervise learner's homework and school requirements	5	4	3	2	1
5. the parents check the homeworks / requirements of the learner after it was completed	5	4	3	2	1
6. <i>other related concerns (please specify)</i> _____					

<u>Material and Financial Supports</u> <i>(Providing resources, such as food, clothing, shelter and financial needs for children is one of the most basic, yet important, roles of parents. In one way or another, parents are responsible in financing the education of their children. They are held liable in supporting all the expenses of the child in school).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents are responsible on the financial expenses of the learner in school	5	4	3	2	1
2. the parents allot a sufficient amount for the school fees of the learner, which include the complete set of books, supplementary materials to aid learning, uniform, tutorials and other related requirements/materials of the learner	5	4	3	2	1
3. the parents provide the learner with daily school allowance and give rewards when the learner performs well in school	5	4	3	2	1
4. the parents has a ready cash for financial contributions and support unexpected expenses of the learner	5	4	3	2	1

5. the parents look for ways and means for the continuity of financial and material supports to learner's education	5	4	3	2	1
6. other related concerns (please specify) _____					

<u>Behavioral Support</u> <i>(Behavioral support is more on the affection and emotional aspect given by parents to their children. It emphasizes the importance of strong family involvement in the education of the child. Parents can show their expression of love, instil discipline and enforce behavioural standards on the child).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents understand learner's shortcomings and encourage the learner not to give up when things get hard	5	4	3	2	1
2. the parents help raise learner's confidence about school performance	5	4	3	2	1
3. the parents boost the self-esteem of the learner through academic support and parental involvement	5	4	3	2	1
4. the parents encourage the learner to stay focus at her own pace while doing schoolwork	5	4	3	2	1
5. the parents support the rules and regulations of the school particularly the policies stated in the student's handbook on behavior (bringing of cellular phone and others...)	5	4	3	2	1
6. other related concerns (please specify) _____					

<u>Spiritual Development/Formation</u> <i>(Parents can guide their children through spiritual formation. Spirituality gives families a sense of belonging, meaning and purpose in times of difficulty. It is the spiritual dimension of everything, religious beliefs and practices that the family does to be united as one. It can be a powerful and important source of strength of the family).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents celebrate/attend religious or worship activities with the family	5	4	3	2	1

2. the parents practice faith formation at home and allow/permit the learner to join recollection/retreats	5	4	3	2	1
3. the parents motivate the learner to be a part of any religious activities of the school and the church	5	4	3	2	1
4. the parents allow the learner to participate in the social-action program of the school and support fund-raising projects of the school and church	5	4	3	2	1
5. the parents instil the value of trusting God in times of difficulties and achievements in learner's studies	5	4	3	2	1
6. other related concerns (please specify) _____					

<u>Provision for Recreational Activities</u> <i>(Parents must give importance to play and recreation in the life of their children. Recreational activities can promote the development of creativity, self-confidence, physical, social and cognitive skills of the child. It can contribute to all aspects of learning and can help the child performs well in school).</i>	Always	Often	Sometimes	Seldom	Never
	(5)	(4)	(3)	(2)	(1)
1. the parents allow the learner to use their leisure time productively	5	4	3	2	1
2. the parents permit the learner to engage with their peers in their community and allow the learner to join recreational activities with their friends	5	4	3	2	1
3. the parents give importance on the quality time of the family	5	4	3	2	1
4. the parents participate in school sports – related activities	5	4	3	2	1
5. the parents support the learner in their co-curricular involvement in the school	5	4	3	2	1
6. other related concerns (please specify) _____					

Attitude toward Science Inventory (ATSI)

Express how you feel in each statement by ticking the appropriate box.

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Science teachers show little interest in their students.					
2	Science teachers present materials in a way that I understand.					
3	Science teachers do not seem to enjoy teaching science.					
4	Science teachers are willing to give me individual help.					
5	Science teachers do not like students to ask questions.					
6	No matter how hard I try, I cannot understand science.					
7	I feel tense or upset when someone talks to me about science.					
8	I often think "I cannot do this" when science assignment seems hard.					
9	Working with science upsets me					
10	It makes me nervous to even think about doing science.					
11	It scares me to have to take a science class.					
12	If I do not see how to do a science assignment right away, I never get it.					
13	Science is something I enjoy very much.					
14	I do not do very well in science.					
15	I feel at ease in a science class.					
16	I would like to do some extra or unassigned reading in science.					
17	When I hear the word "science," I have a feeling of dislike.					
18	I would like to spend less time in school studying science.					
19	Sometimes I read ahead in our science book.					
20	It does not disturb or upset me to do science assignments.					
21	I would like a job that does not use any science.					
22	I enjoy talking to other people about science.					
23	I enjoy watching a science program on television.					
24	I like the challenge of science assignments.					
26	The only reason I am taking science is because I have to.					
27	I have a good feeling toward science.					
28	Science is one of my favorite subjects.					
29	I have a real desire to learn science.					
30	Science is useful for solving the problem of everyday life.					

31	There is little need for science in most of today's job.					
32	Most people should study some science.					
33	Science is of great importance to a country's development.					
34	It is important to know science in order to get a good job.					
35	You can get along perfectly well in everyday life without science.					
36	Most of the ideas in science are not very useful.					

INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION

1. How can parental involvement positively affect student achievement, specially in science-related activities/subjects?
2. In what ways can parental involvement act as a reliable indicator in determining possible student outcomes such as attitude towards science?
3. Are parents accountable for their children's ability to perform well in school, specifically in science subjects? Why?
4. What is your general view towards parents' roles in: school participation; home supervision; material, financial and behavioral support; spiritual formation; and provision for recreational activities, specifically in science subjects?

Academic Performance of Students

<i>Nazareth</i>		
1 st Quarter Grade	2 nd Quarter Grade	Ave.
93.50	92.90	93.20
87.35	85.50	86.43
86.00	87.75	86.88
93.40	95.55	94.48
92.75	91.60	92.18
95.30	93.50	94.40
82.20	84.95	83.58
94.20	94.40	94.30
83.75	86.90	85.33
84.45	83.35	83.90
87.05	88.80	87.93
82.60	83.65	83.13
82.30	82.75	82.53
83.70	84.25	83.98
90.25	90.90	90.58
92.65	95.80	94.23
80.55	79.30	79.93
79.75	80.55	80.15
82.35	83.45	82.90
85.05	84.55	84.80
88.60	89.20	88.90
90.60	89.55	90.08
91.40	92.10	91.75
87.60	88.95	88.28
79.50	79.10	79.30
88.85	88.95	88.90
92.05	93.80	92.93
85.80	82.00	83.90
81.95	82.25	82.10
82.20	81.40	81.80
85.25	87.15	86.20
83.55	85.65	84.60
86.15	85.00	85.58
88.15	88.90	88.53
88.75	89.80	89.28
82.75	79.65	81.20
85.40	88.45	86.93

<i>Sagrada Familia</i>		
1 st Quarter Grade	2 nd Quarter Grade	Ave.
90.25	90.20	90.23
82.15	81.80	81.98
81.90	78.15	80.03
79.75	80.30	80.03
86.95	87.80	87.38
87.65	86.65	87.15
87.45	87.50	87.48
87.75	85.00	86.38
85.95	84.10	85.03
89.90	87.65	88.78
85.80	84.00	84.90
79.20	79.65	79.43
91.50	88.40	89.95
82.95	84.90	83.93
85.00	84.90	84.95
83.70	83.05	83.38
81.00	78.05	79.53
86.70	85.20	85.95
82.25	82.75	82.50
95.50	96.15	95.83
82.70	82.95	82.83
91.55	90.45	91.00
90.45	88.00	89.23
86.20	85.55	85.88
94.65	94.45	94.55
90.45	91.75	91.10
85.15	86.80	85.98
80.90	79.05	79.98
84.75	82.50	83.63
89.30	88.00	88.65
84.70	84.35	84.53
83.25	82.65	82.95
86.70	83.95	85.33
91.15	93.20	92.18
85.95	86.05	86.00

<i>San Jose</i>		
1 st Quarter Grade	2 nd Quarter Grade	Ave.
86.10	85.40	85.75
83.00	84.45	83.73
86.85	88.35	87.60
86.40	87.65	87.03
79.75	75.95	77.85
90.25	90.25	90.25
86.65	87.75	87.20
90.90	89.55	90.23
85.75	84.65	85.20
78.30	78.35	78.33
89.20	88.45	88.83
88.30	88.75	88.53
87.05	88.40	87.73
82.10	83.80	82.95
88.55	89.75	89.15
88.75	88.60	88.68
82.90	80.60	81.75
80.05	81.15	80.60
90.75	89.05	89.90
95.00	94.45	94.73
87.15	89.25	88.20
85.45	83.55	84.50
86.95	85.05	86.00
80.85	81.50	81.18
89.30	84.95	87.13
85.50	81.05	83.28
79.10	80.95	80.03
80.35	82.80	81.58
85.35	84.20	84.78
91.60	91.10	91.35
85.80	85.50	85.65
86.00	85.10	85.55
89.80	89.50	89.65
84.20	86.90	85.55
88.95	85.50	87.23
76.25	78.95	77.60
93.05	94.05	93.55

Relationship between Parental Involvement and Academic Achievement

<i>Nazareth</i>		<i>Sagrada Familia</i>		<i>San Jose</i>	
Parental Involvement	Academic Achievement	Parental Involvement	Academic Achievement	Parental Involvement	Academic Achievement
137.00	93.00	138.00	90.00	132.00	86.00
121.00	86.00	108.00	82.00	141.00	84.00
129.00	87.00	133.00	80.00	131.00	88.00
144.00	94.00	111.00	80.00	111.00	87.00
132.00	92.00	142.00	87.00	125.00	78.00
134.00	94.00	128.00	87.00	136.00	90.00
113.00	84.00	136.00	87.00	143.00	87.00
137.00	94.00	126.00	86.00	128.00	90.00
130.00	85.00	127.00	85.00	137.00	85.00
134.00	84.00	123.00	89.00	103.00	78.00
121.00	88.00	143.00	85.00	126.00	89.00
115.00	83.00	132.00	79.00	128.00	89.00
125.00	83.00	125.00	90.00	130.00	88.00
109.00	84.00	76.00	84.00	103.00	83.00
132.00	91.00	114.00	85.00	108.00	89.00
121.00	94.00	122.00	83.00	118.00	89.00
63.00	80.00	59.00	80.00	113.00	82.00
99.00	80.00	115.00	86.00	130.00	81.00
132.00	83.00	96.00	83.00	110.00	90.00
127.00	85.00	117.00	96.00	115.00	95.00
140.00	89.00	121.00	83.00	131.00	88.00
117.00	90.00	126.00	91.00	125.00	85.00
142.00	92.00	110.00	89.00	132.00	86.00
127.00	88.00	95.00	86.00	139.00	81.00

111.00	79.00
144.00	89.00
124.00	93.00
123.00	84.00
128.00	82.00
94.00	82.00
132.00	86.00
114.00	85.00
114.00	86.00
126.00	89.00
139.00	89.00
112.00	81.00
129.00	87.00

128.00	95.00
134.00	91.00
136.00	86.00
137.00	80.00
143.00	84.00
110.00	89.00
136.00	85.00
140.00	83.00
69.00	85.00
113.00	92.00
141.00	86.00

121.00	87.00
104.00	83.00
105.00	80.00
97.00	82.00
140.00	85.00
144.00	91.00
108.00	86.00
100.00	86.00
135.00	90.00
121.00	86.00
132.00	87.00
134.00	78.00
88.00	94.00

Relationship between Parental Involvement and ATSI

<i>Nazareth</i>		<i>Sagrada Familia</i>		<i>San Jose</i>	
Parental Involvement	ATSI	Parental Involvement	ATSI	Parental Involvement	ATSI
137.00	89.00	138.00	111.00	132.00	99.00
121.00	96.00	108.00	103.00	141.00	100.00
129.00	103.00	133.00	103.00	131.00	108.00
144.00	110.00	111.00	122.00	111.00	95.00
132.00	112.00	142.00	99.00	125.00	102.00
134.00	99.00	128.00	89.00	136.00	103.00
113.00	94.00	136.00	117.00	143.00	86.00
137.00	100.00	126.00	103.00	128.00	106.00
130.00	113.00	127.00	91.00	137.00	89.00
134.00	105.00	123.00	103.00	103.00	92.00
121.00	106.00	143.00	106.00	126.00	96.00
115.00	93.00	132.00	95.00	128.00	91.00
125.00	100.00	125.00	101.00	130.00	83.00
109.00	96.00	76.00	94.00	103.00	98.00
132.00	82.00	114.00	105.00	108.00	94.00
121.00	114.00	122.00	91.00	118.00	104.00
63.00	76.00	59.00	104.00	113.00	106.00
99.00	106.00	115.00	105.00	130.00	100.00
132.00	103.00	96.00	123.00	110.00	110.00
127.00	99.00	117.00	104.00	115.00	98.00

140.00	94.00
117.00	103.00
142.00	94.00
127.00	100.00
111.00	99.00
144.00	102.00
124.00	107.00
123.00	101.00
128.00	87.00
94.00	114.00
132.00	107.00
114.00	115.00
114.00	118.00
126.00	99.00
139.00	105.00
112.00	124.00
129.00	104.00

121.00	108.00
126.00	93.00
110.00	95.00
95.00	106.00
128.00	117.00
134.00	114.00
136.00	93.00
137.00	100.00
143.00	100.00
110.00	96.00
136.00	93.00
140.00	111.00
69.00	110.00
113.00	112.00
141.00	101.00

131.00	101.00
125.00	83.00
132.00	104.00
139.00	97.00
121.00	101.00
104.00	101.00
105.00	108.00
97.00	102.00
140.00	89.00
144.00	98.00
108.00	104.00
100.00	107.00
135.00	108.00
121.00	103.00
132.00	102.00
134.00	98.00
88.00	100.00

Z - Score

Parental Involvement and Academic Achievement of the Students

Parental Involvement		Academic Achievement	
59	-3.72366	80	-1.4959
63	-3.48748	80	-1.4959
69	-3.1332	85	-0.3092
76	-2.71989	84	-0.54654
88	-2.01134	94	1.826869
94	-1.65707	82	-1.02122
95	-1.59802	86	-0.07185
96	-1.53897	83	-0.78388
97	-1.47993	82	-1.02122
99	-1.36184	80	-1.4959
100	-1.30279	86	-0.07185
103	-1.12566	78	-1.97058
103	-1.12566	83	-0.78388
104	-1.06661	83	-0.78388
105	-1.00756	80	-1.4959
108	-0.83043	82	-1.02122
108	-0.83043	89	0.640166
108	-0.83043	86	-0.07185
109	-0.77138	84	-0.54654
110	-0.71234	89	0.640166
110	-0.71234	89	0.640166
110	-0.71234	90	0.877507
111	-0.65329	79	-1.73324
111	-0.65329	80	-1.4959
111	-0.65329	87	0.165486
112	-0.59425	81	-1.25856
113	-0.5352	84	-0.54654
113	-0.5352	92	1.352188
113	-0.5352	82	-1.02122
114	-0.47616	85	-0.3092
114	-0.47616	86	-0.07185

114	-0.47616	85	-0.3092
115	-0.41711	83	-0.78388
115	-0.41711	86	-0.07185
115	-0.41711	95	2.064209
117	-0.29902	90	0.877507
117	-0.29902	96	2.30155
118	-0.23997	89	0.640166
121	-0.06284	86	-0.07185
121	-0.06284	88	0.402826
121	-0.06284	94	1.826869
121	-0.06284	83	-0.78388
121	-0.06284	87	0.165486
121	-0.06284	86	-0.07185
122	-0.00379	83	-0.78388
123	0.055255	84	-0.54654
123	0.055255	89	0.640166
124	0.1143	93	1.589528
125	0.173346	83	-0.78388
125	0.173346	90	0.877507
125	0.173346	78	-1.97058
125	0.173346	85	-0.3092
126	0.232391	89	0.640166
126	0.232391	86	-0.07185
126	0.232391	91	1.114847
126	0.232391	89	0.640166
127	0.291437	85	-0.3092
127	0.291437	88	0.402826
127	0.291437	85	-0.3092
128	0.350483	82	-1.02122
128	0.350483	87	0.165486
128	0.350483	95	2.064209
128	0.350483	90	0.877507
128	0.350483	89	0.640166
129	0.409528	87	0.165486
129	0.409528	87	0.165486
130	0.468574	85	-0.3092
130	0.468574	88	0.402826
130	0.468574	81	-1.25856

131	0.527619	88	0.402826
131	0.527619	88	0.402826
132	0.586665	92	1.352188
132	0.586665	91	1.114847
132	0.586665	83	-0.78388
132	0.586665	86	-0.07185
132	0.586665	79	-1.73324
132	0.586665	86	-0.07185
132	0.586665	86	-0.07185
132	0.586665	87	0.165486
133	0.64571	80	-1.4959
134	0.704756	94	1.826869
134	0.704756	84	-0.54654
134	0.704756	91	1.114847
134	0.704756	78	-1.97058
135	0.763801	90	0.877507
136	0.822847	87	0.165486
136	0.822847	86	-0.07185
136	0.822847	85	-0.3092
136	0.822847	90	0.877507
137	0.881892	93	1.589528
137	0.881892	94	1.826869
137	0.881892	80	-1.4959
137	0.881892	85	-0.3092
138	0.940938	90	0.877507
139	0.999983	89	0.640166
139	0.999983	81	-1.25856
140	1.059029	89	0.640166
140	1.059029	83	-0.78388
140	1.059029	85	-0.3092
141	1.118075	86	-0.07185
141	1.118075	84	-0.54654
142	1.17712	92	1.352188
142	1.17712	87	0.165486
143	1.236166	85	-0.3092
143	1.236166	84	-0.54654
143	1.236166	87	0.165486
144	1.295211	94	1.826869

144	1.295211	89	0.640166
144	1.295211	91	1.114847
122.0642202		86.30275	
16.936078		4.213357	

CORR ***0.277048***

Z-Score

Parental Involvement and Attitude of the Students towards Science

Parental Involvement		Attitude of the Students	
59	-3.72366	104	0.299589
63	-3.48748	76	-2.93135
69	-3.1332	110	0.991934
76	-2.71989	94	-0.85432
88	-2.01134	100	-0.16197
94	-1.65707	114	1.453497
95	-1.59802	106	0.530371
96	-1.53897	123	2.492014
97	-1.47993	102	0.068808
99	-1.36184	106	0.530371
100	-1.30279	107	0.645761
103	-1.12566	92	-1.0851
103	-1.12566	98	-0.39276
104	-1.06661	101	-0.04658
105	-1.00756	108	0.761152
108	-0.83043	103	0.184198
108	-0.83043	94	-0.85432
108	-0.83043	104	0.299589
109	-0.77138	96	-0.62354
110	-0.71234	95	-0.73893
110	-0.71234	96	-0.62354
110	-0.71234	110	0.991934
111	-0.65329	99	-0.27736
111	-0.65329	122	2.376623
111	-0.65329	95	-0.73893
112	-0.59425	124	2.607404
113	-0.5352	94	-0.85432
113	-0.5352	112	1.222715
113	-0.5352	106	0.530371
114	-0.47616	115	1.568887
114	-0.47616	118	1.91506

114	-0.47616	105	0.41498
115	-0.41711	93	-0.96971
115	-0.41711	105	0.41498
115	-0.41711	98	-0.39276
117	-0.29902	103	0.184198
117	-0.29902	104	0.299589
118	-0.23997	104	0.299589
121	-0.06284	96	-0.62354
121	-0.06284	106	0.530371
121	-0.06284	114	1.453497
121	-0.06284	108	0.761152
121	-0.06284	101	-0.04658
121	-0.06284	103	0.184198
122	-0.00379	91	-1.20049
123	0.055255	101	-0.04658
123	0.055255	103	0.184198
124	0.1143	107	0.645761
125	0.173346	100	-0.16197
125	0.173346	101	-0.04658
125	0.173346	102	0.068808
125	0.173346	83	-2.12362
126	0.232391	99	-0.27736
126	0.232391	103	0.184198
126	0.232391	93	-0.96971
126	0.232391	96	-0.62354
127	0.291437	99	-0.27736
127	0.291437	100	-0.16197
127	0.291437	91	-1.20049
128	0.350483	87	-1.66205
128	0.350483	89	-1.43127
128	0.350483	117	1.799669
128	0.350483	106	0.530371
128	0.350483	91	-1.20049
129	0.409528	103	0.184198
129	0.409528	104	0.299589
130	0.468574	113	1.338106
130	0.468574	83	-2.12362
130	0.468574	100	-0.16197

131	0.527619	108	0.761152
131	0.527619	101	-0.04658
132	0.586665	112	1.222715
132	0.586665	82	-2.23901
132	0.586665	103	0.184198
132	0.586665	107	0.645761
132	0.586665	95	-0.73893
132	0.586665	99	-0.27736
132	0.586665	104	0.299589
132	0.586665	102	0.068808
133	0.64571	103	0.184198
134	0.704756	99	-0.27736
134	0.704756	105	0.41498
134	0.704756	114	1.453497
134	0.704756	98	-0.39276
135	0.763801	108	0.761152
136	0.822847	117	1.799669
136	0.822847	93	-0.96971
136	0.822847	93	-0.96971
136	0.822847	103	0.184198
137	0.881892	89	-1.43127
137	0.881892	100	-0.16197
137	0.881892	100	-0.16197
137	0.881892	89	-1.43127
138	0.940938	111	1.107324
139	0.999983	105	0.41498
139	0.999983	97	-0.50815
140	1.059029	94	-0.85432
140	1.059029	111	1.107324
140	1.059029	89	-1.43127
141	1.118075	101	-0.04658
141	1.118075	100	-0.16197
142	1.17712	94	-0.85432
142	1.17712	99	-0.27736
143	1.236166	106	0.530371
143	1.236166	100	-0.16197
143	1.236166	86	-1.77744
144	1.295211	110	0.991934

144	1.295211	102	0.068808
144	1.295211	98	-0.39276
122.0642202		101.4037	-3.5E-06
16.936078		8.666205	

CORR ***- 0.08294***

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Civil Status	:	Single
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Educational Attainment

Tertiary	:	Course:	AB / BS – BSE Major in Biology Bicol University College of Education Daraga, Albay
Secondary	:		Sto. Domingo National High School Sto. Domingo, Albay
Elementary	:		San Fernando Elementary School San Fernando, Sto. Domingo, Albay

Work Experience

2004 – 2005

Teacher
St. Andrew Academy
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High School Faculty
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CERTIFICATION

This is to certify that the thesis of ZORAIDA A. BALDERAMA entitled "*Parental Involvement: Its Effects on the Achievement and Attitudes of the Students Towards Science*" passed the authenticity test performed by the Center on January 21, 2014, using the Anti-Plagiarism software of the university.


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Director

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APPROVAL SHEET

In partial fulfillment of the requirements for the degree of Master of Arts in Education with specialization in General Science, this thesis entitled "**PARENTAL INVOLVEMENT AS CORRELATES TO STUDENTS' ACHIEVEMENT AND ATTITUDE TOWARDS SCIENCE**" prepared and submitted by **MS. ZORAIDA A. BALDERAMA**, is hereby recommended for approval and acceptance.


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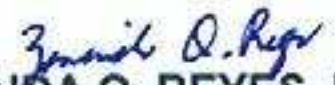

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