EATING HABITS AND ACADEMIC PERFORMANCE OF SECONDARY STUDENTS IN SELECTED PUBLIC SCHOOLS IN THE DIVISION OF SAMAR

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Master of Arts in Home Economics

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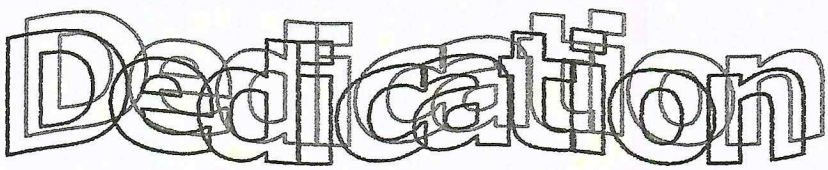

DEDICATION

TO GOD, the source of wisdom, for His divine providence…

TO MA'AM LYDIA, the source of knowledge, for her professional assistance…

TO STUDENTS, the recipients of knowledge, for their inspiration…

TO BEMBOT, the inspiration, for his unfailing support…

TO TIN^{2X}, LEN^{2X} & JUN^{2X}, the jewels, for their cheer…

TO MAMA & SIBLINGS, the anchors, for their strength…

To all of you, I humbly offer this piece of work.

LOTTIE

ABSTRACT

This study primarily determined the relationship between the eating habits of secondary students of selected public schools in the Division of Samar during the school year 2004-2005 and their academic performance. It also looked into the personal characteristics of the high school student-respondents of this study. The research utilized a descriptive type of research, using correlation analysis. The correlation analyses made between the student-respondents' level of academic performance and the different variates revealed a not significant relationship, as indicated by the computed r-values which were observed to be lesser than the critical t-values. Year level and mothers' educational attainment are the factors that influence the differences in the students' eating habits. Eating habits are not influenced by the other personal variates inherent in the students such as their age, sex, monthly family income and father's educational attainment. The secondary students' level of performance in all subject areas is not influenced by the different personal variates. The secondary students' level of performance in Technology and Livelihood Education is not influenced by their personal variates, except that of the mothers' educational attainment. Eating habits during breakfast, lunch, and supper do not influence the student-respondents' academic performance and performance in Technology and Livelihood Education (T.L.E.). Eating habits during snacks influenced their academics and T.L.E. performances.

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Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

It is country's paramount responsibility to protect the well-being of the youth through proper nutrition because they are indispensable to national development (Cruz, 1994:59). Sadly, widespread malnutrition confronts virtually every sector of the country, including the youth, as validated by the results of the 2001 survey on the nutritional status of the Filipinos by the Food and Nutrition Research Institute of the Department of Science and Technology (DOST-FNRI, 2001:3).

At the national level, 33 out of every 100 primary school-aged children are underweight and less than half is under height (National and Monitoring Division of the Food and Nutrition Research Institute, 2001:3). At the regional level, there is a prevalence of underweight children in Bicol (37.8%), and of under height in the Autonomous Region for Muslim Mindanao (ARMM) (Nutritional and Monitoring Division of the Food and Nutritional Research Institute, 2001:3).

At the provincial level, Biliran, Masbate, Northern Samar, Negros Occidental, Antique and Sorsogon are most at-

risk to underweight with 4 out of every 10 children being afflicted while Masbate, Negros Occidental, and Norhtern Samar experienced an alarmingly high rate of under height, with 5 out of every 10 children being short for their age (Nutritional Research Institute, 2001:4). By contrast, 15.5 percent of the 11-19 year-old adolescent population is underweight whereas 33.1 percent is under height (Barba, 2001:6)

The results of the 2004-2005 baseline data on nutritional status per year level of the Department of Education (DepEd), Division of Samar showed that the five public secondary schools with the most number of students per year level with below normal weight/body mass index were as follows: (a) Sto. Niño National High School (SNNHS), 32.46 percent, (b) Basey National High School BNHS), 28.62 percent, (c) San Jose de Buan National High School (SJBNHS), 30.15 percent, (d) Marabut National High School, 30.15 percent and (e) Baras National High School (BNHS), 24.11 percent.

Meantime, Ronda (2004:1) wrote that the Department of Education (DepEd) stressed that 98 percent of high school seniors failed to get 75 percent in the National Achievement Test (NAT) administered last March 18, 2004. In addition, examinees garnered an average of 44.36 percent,

interpreted as way below the "mastery Level" of 75 percent in English, Math and Science, which meant that the examinees posted a mean percentage score of 50.08 percent in English, 36.80 percent in Science and 42.20 percent in Mathematics. Benito, quoted by Ronda (2004:1), said in an interview that only 2.09 percent out of the 956,000 public high school seniors were able to get a grade of 75 percent or higher.

Amid discussions on the various causes of poor academic performance in school, authorities have failed to highlight the influence of nutrition thereby making malnutrition an invisible phenomenon in the determination of factors that may have influence or remains not only a medical issue but also as a social concern insofar as it may contribute significantly to the performance of students in school such as in instigating lack of initiative in schoolwork, absenteeism, lack of self-discipline, indecision, restlessness, mental indolence and lack of interest (Villaflor, 1983:540).

At the outset, the researcher thought that its multifaceted nature accounts for the difficulty in addressing its impact on students' performance. However, with the various programs on nutrition that the government has instituted, this should have been minimized with

improved performance of students in school. In fact, Barba et.al., (2001:1) emphasized that the government continuously gives attention to malnutrition. In fact, some of the nutrition-related programs provided by the government were creation of organizations such as the National Nutrition Council (NCC) geared towards the development and implementation of the Philippine Plan of Action for Nutrition (PPAN) and the institution of school-feeding programs such as the Food Kitchen launched last December 10, 2002 at the Nemesio I. Yabut Elementary School (NIYES).

However, despite the foregoing programs, there are still schools with low level of nutritional status. This depressing situation led the researcher to entertain the thought that there is a need to put emphasis on habits of students that may have influence on their nutritional status thereby affecting their performance in school.

Eating practices are usually based on taste and without regard to the nutritive value of the food (U.S. Children's Nutrition Research Center, 1999:15). For this reason, researches should delve into the eating habits of students insofar as they determine their nutritional status. As a teacher in Home Economics and mother of school-aged children, the researcher felt the need to

determine the relationship between the eating habits of secondary students of selected public schools in the Division of Samar and their academic performance.

Statement of the Problem

The study primarily determined the relationship between the eating habits of secondary students of selected public schools in the Division of Samar during school year 2004-2005 and their academic performance. It also looked into the personal characteristics of the high school student-respondents of this study.

Specifically, this study sought answers to the following questions:

1. What is the profile of the high school students of selected public high schools in the Division of Samar in terms of the following:

    1.1 age and sex;

    1.2 year level;

    1.3 monthly family income; and

    1.4 educational attainments of the parents?

2. What are the present eating habits of the student-respondents with respect to the following types of meal:

    2.1 breakfast;

    2.2 lunch;

2.3 supper; and

2.4 snacks?

3. Are there significant differences in the eating habits of the student-respondents by:

3.1 age;

3.2 sex;

3.3 year level;

3.4 monthly family income; and

3.4 educational attainments of the parents?

4. What is the level of performance of the student-respondents in Technology and Livelihood Education based on the average of their grades during the first and second grading periods?

5. Are there a significant relationship between the academic performance of the student-respondents and their personal variates, namely:

5.1 age and sex;

5.2 year level;

5.3 monthly family income; and

5.4 parents' educational attainments?

6. Is there a significant relationship between the student-respondents' eating habits and their performance based on the following:

6.1 average grade in T.L.E.; and

6.2 average grade in all the academic subjects?

7. What implications for educational redirection may be derived from this study?

Hypothesis

The following hypotheses were tested to shed light to the questions under consideration in this study:

1. There are no significant differences in the eating habits of the student-respondents by:

1.1 age;

1.2 sex;

1.3 year level;

1.4 monthly family income; and

1.5 educational attainments of parents.

2. There are no significant relationships between the academic performance of the student-respondents and their personal variates, namely:

2.1 age and sex;

2.2 year level;

2.3 monthly family income; and

2.4 parents' educational attainments.

3. There is no significant relationship between the student-respondents' eating habits and their performance based on the following:

3.1 average grade in T.L.E.; and

3.2 average grade in all academic subjects.

Theoretical Framework

The study found its theoretical basis on Maslow's theory on hierarchy of needs. According to Maslow (1970:196), people have certain needs which are unchanging, psychological and hierarchical in nature. This hierarchical nature of individual needs accounts for their progression from lower-order needs such as physiological needs or the need for air, food, water, and sex, and safety needs to higher-order needs such as love and belongingness need, esteem needs and need for self-actualization, which is the ultimate objective of every human being. It also implies that needs are prepotent, which means that one need has the greatest influence over individual actions.

Hence, human beings are motivated by unsatisfied needs, and that certain lower needs need to be satisfied before higher needs can be satisfied (Maslow, 1970). Along this light, human nature is basically trustworthy, self-protecting and self-governing. They only resort to violence and other evil deeds when their needs are thwarted (Maslow, 1970). Simply stated, people who are deprived of lower

needs such as the need for food may satisfy themselves by stealing food from restaurants.

As applied to education, students set goals for themselves. At the outset, students enter educational institutions to learn. Later, they aim to make newly-gained knowledge and information purposeful and meaningful so that they may be retained and used throughout their lives. As such, administrators and teachers must consider students' needs and their hierarchical order in order to maximize learning. For example, if a student has not had his breakfast before he comes to school, he will not be concentrating on his learning but will be pre-occupied with the need for food.

In support to the theory of Maslow, this study found basis on Skinner's Operant Conditioning, which is loosely considered as learning through consequences (Sevilla, et. al., 1988:171). According to Skinner (cited by Sevilla, et. al., 1988:171), learning is a function of change in overt behavior. He espoused that changes in behavior are the results of an individual's response to events (stimuli) that occur in the environment. More so, he maintained that when a particular stimulus-response is reinforced (rewarded), the individual is conditioned to respond.

From this theory, behavior that is positively reinforced will re-occur, while those that are negatively reinforced will be discarded. The basic strength of this learning theory is its ability to associate a response to the occurrence of consequences. As applied to the present study, the students' eating habits may have been formed by the occurrence of rewarding consequences that have strengthened the habits.

Conceptual Framework

The schema of the study is presented as Figure 1 on page 11.

The base frame of the diagram presents the research environment, the respondents of the study, and the time frame during which this study was conducted.

At the outset, the study was conducted among secondary students of selected public schools in the Division of Samar from August 2004 to March 2005.

A single-edged arrow connects the base frame to a bigger frame, which contains the research process. The study primarily determined the relationship, signified by the double-edged arrow connecting the two smaller frames, between academic performances of the student-respondents, shown in the smaller frame on the right of the bigger

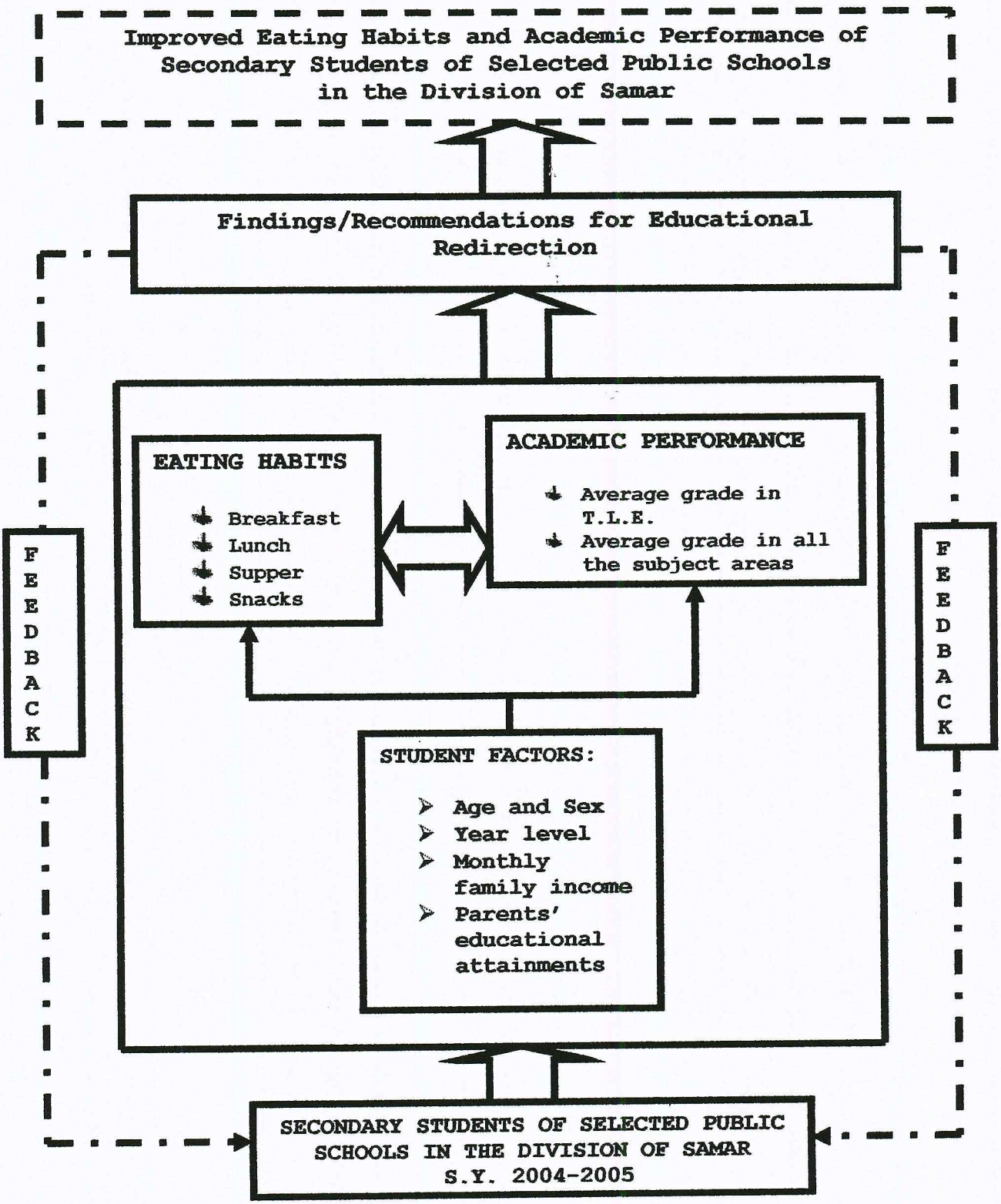


Figure 1. The Conceptual Framework of the Study

frame, and their eating habits, contained on the smaller box at the left side of the bigger frame.

The research also looked into some of the student-respondents' personal factors, shown on a box at the lower level of the bigger frame, such as age, sex, and others, and how they influence their eating habits and academic performance in Technology and Livelihood Education (T.L.E.), determined through their average grade during the first and second grading periods and in all of their academic subjects.

The results of the study would serve as bases for some educational redirection, shown in the next higher frame, in the form of a holistic nutrition program aimed at improving the eating habits of the secondary students which, in turn, would improve their academic performance, as shown by the uppermost box.

Significance of the Study

This study is deemed relevant and practical in the sense that this would contribute something beneficial to the following people:

To the Secondary Students. Since the study primarily involved secondary students, this would prove beneficial to them in that this would enable them to assess their eating

habits. By having baseline information about their eating habits, they would be able to evaluate the influence of eating habits upon their performance in school. Ultimately, this would enable them to improve their performance in school and be at par with other students.

To the Parents. The acquisition of appropriate eating practices start at home thus, parents should be at the forefront of the students' learning of good eating practices. Particularly, parents should note about their students' eating habits, especially as they may have influence on their performance in school.

As such, the results of this study would provide them with the necessary information regarding their students' eating habits and how they might influence their performance in school. Consequently, as parents, they would be able to initiate reinforcement activities appropriate to their students' eating practices.

To the Teachers. The study is especially important to Home Economics (H.E.) and Technology and Livelihood Education (T.L.E.) teachers in the sense that they are in direct contact with children. This research would give them valuable input towards the development of a holistic nutrition program that would motivate healthy eating habits among the children. In addition, this study would enable

them to integrate values toward the development of healthy eating habits.

To the School Administrators. The investigation would offer heads of the different schools in Samar baseline information regarding the eating practices of secondary students in the different secondary schools. With that knowledge, they would be able to lobby for programs that would look into this matter.

To the Health Officials. In the end, the study would enable the health officials to campaign for the improvement of the eating habits of students in school, in particular, and of the people in the community, in general.

To the Community. The study would be important for the community to note about the necessity of developing and maintaining healthy eating habits to improve the nutritional status of its constituents. This would also allow the community officers to actively participate in the information dissemination and implementation of nutrition-related programs of the government.

To the Future Researchers. The study would serve as inspiration to other researchers who may be interested in conducting studies to determine the validity of this study. In addition, this would provide impetus for future student-researchers to investigate on the effectiveness of eating

habits enhancement program in the improvement of the academic performance of the students.

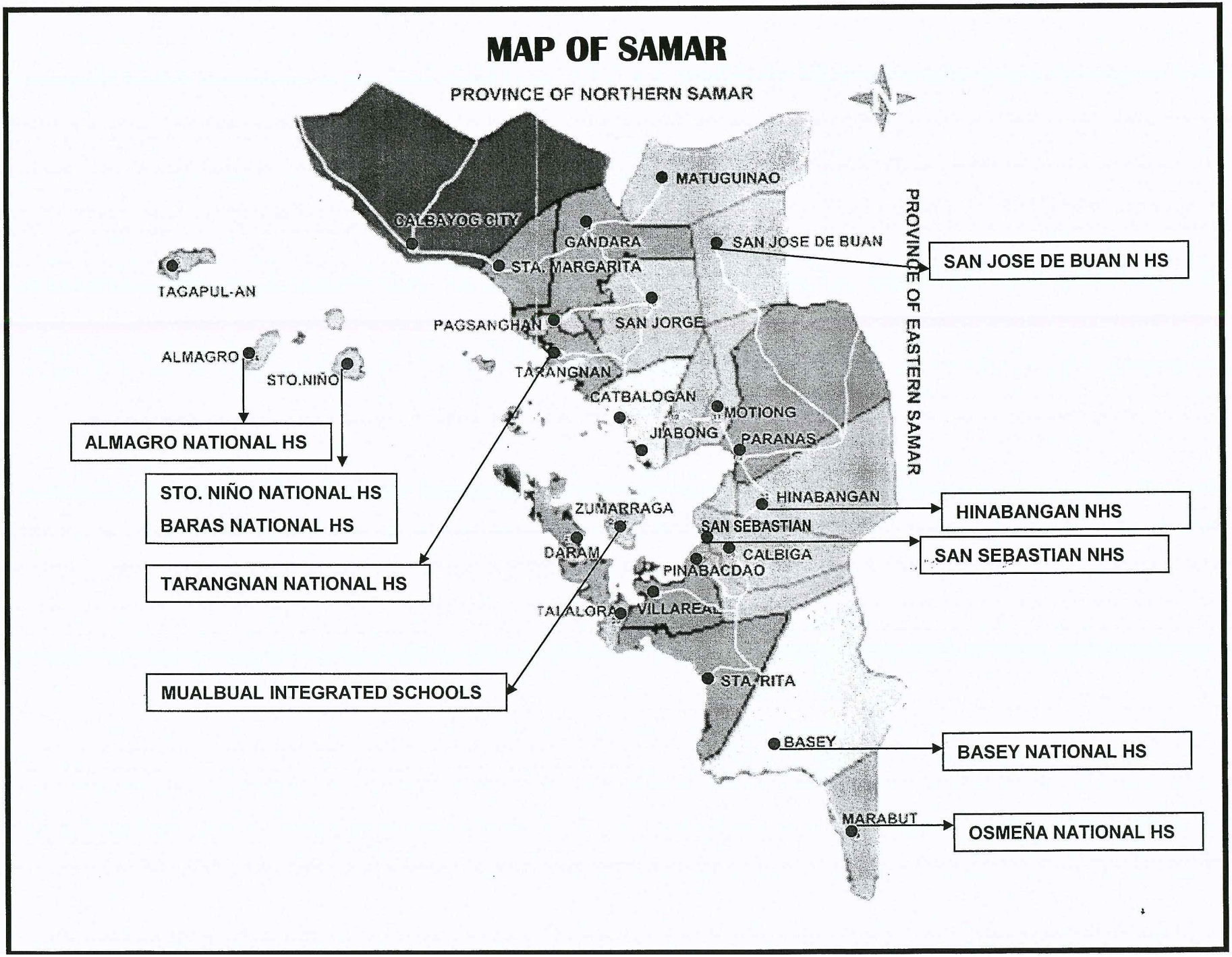
Scope and Delimitation of the Study

The study is about the relationships between the eating habits and academic performance of high school students in selected high schools in Samar Division.

The study is focused on 10 national high school with low level of nutritional status based on the consolidated secondary nutritional status record from DepEd and low level of performance based on the MPS pretest & post test in 2003-2004, these are: (a) Sto. Niño National High School (SÑNHS), (b) Basey National High School (BNHS), (c) San Jose de Buan National High School (SJBNHS), (d) Costa Rica National High School (CRNHS), (e) Baras National High School (BNHS), (f) Tarangnan National High School (TNHS), (g) San Sebastian National High School (SSNHS), (h) Osmeña National High School (ONHS), (i) Marabut National High School (MNHS) and (j) Mualbual National High School (MNHS).

The study involved 363 secondary students coming from these 10 secondary public schools in Samar Division and conducted in Catbalogan, Samar, SY 2004-2005.

MAP OF SAMAR


PROVINCE OF NORTHERN SAMAR
MATUGUINAO
CALBAYOG CITY
GANDARA
SAN JOSE DE BUAN
STA. MARGARITA
TAGAPUL-AN
PAGSANGHAN
SAN JORGE
ALMAGRO
STO.NIÑO
TARANGNAN
CATBALOGAN
MOTIONG
JIABONG
PARANAS
HINABANGAN
ZUMARRAGA
SAN SEBASTIAN
DARAM
CALBIGA
PINABACDAO
TALALORA
VILLAREAL
STA. RITA
BASEY
MARABUT
PROVINCE OF EASTERN SAMAR
SAN JOSE DE BUAN N HS
ALMAGRO NATIONAL HS
STO. NIÑO NATIONAL HS
BARAS NATIONAL HS
TARANGNAN NATIONAL HS
MUALBUAL INTEGRATED SCHOOLS
HINABANGAN NHS
SAN SEBASTIAN NHS
BASEY NATIONAL HS
OSMEÑA NATIONAL HS

Definition of Terms

To obtain a clear understanding of the study, the researcher defined the following terms that were found to be relevant and useful to this study:

Academic performance. It is defined as what a person does in school (Sevilla, et. al., 1988:88). As used in this study, the term pertained to the student-respondents' average grade in the first two grading periods of school year 2004-2005 in Technology and Livelihood Education (T.L.E.) and average grade in all the subject areas such as English, Science, Math and the like during the two grading periods of the present school year indicated in their report cards, teachers' class records and Students' Permanent Records (Form 137-A).

Average grade in Technology and Livelihood Education (T.L.E.). It was obtained by adding the grades in Technology and Livelihood Education (T.L.E.) during the first and second grading period and dividing the sum by two (2).

Average grade in all subject areas. This was obtained by adding up the grades in English, Science, Mathematics and the like and dividing the sum by the number of subject areas included in this research.

Breakfast. It refers to the first meal of the day, which is usually eaten in the morning (Encarta Dictionary, 2002). In this study it refers to the meal eaten in the morning before the students go to school.

Eating habits. They refer to acts acquired and performed regularly and automatically that relate to eating and food consumption (Microsoft Encarta, 2002). They include mannerisms such as moving the hands while eating, satisfying psychological cravings and characteristic food preferences. As used in this study, it is the practiced by which one ate or consumes food as a result of some influences.

Health. As defined by the World Health Organization's Constitution of 1948 (www. World Health Organization.com, 2003), it is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. In addition, within the context of health promotion, health has been considered less as an abstract state and more as a means to an end which can be expressed in functional terms as a resource which permits people to lead an individually, socially and economically productive life. As used in this study, this term referred to the state of complete physical, social and mental well-being of the secondary student-respondents of this study.

High school students. These are adolescents about 12-16 years old, enrolled in educational institutions and are taking up secondary curriculum (Microsoft Encarta, 2002). In this research, they are the respondents of the study enrolled in secondary schools in the Division of Samar.

Lunch. It pertains to the meal eaten in the middle of the day, especially a light meal that is not the main meal of the day (Encarta Dictionary, 2002). In this study it refers to the meal usually eaten in the middle of the day.

Malnutrition. It pertains to a condition of the body resulting from lack of one or more essential nutrients or it may be due to an excessive nutrient-supply to the point of creating toxic or harmful effect (Claudio, et. al., 1976:26). In addition, it is defined as a condition characterized by inadequate intake of protein, energy and micronutrients and by frequent infections or diseases (World Health Organization.com, 2003). As used in this study this is the deficiency brought about by inadequate or excessive intake of food (underweight and under height).

Meal. It is defined as the food served and eaten at one time (www.cogsci.princeton.edu). In this study, this term referred to breakfast, lunch, supper and snacks.

Nutrition. It is the science that deals with nutrients and other food substances and with how the body assimilates

them (Microsoft Encarta, 2003). In this study, it is simply the wise kind and amount of food.

Nutritional status. It refers to the condition of the body as a result of the utilization of the essential nutrients available to the body as measured by weight data (Oñate, Cabataje and Barba, 1966:188). It is in this light that this term was used in this study.

Selected public schools. This term refers to the 10 public high schools under Samar Divisions with reported low level of nutritional status among its students and low level of performance based on the pretest and posttest in 2003-2004. The schools included are: (a) Sto. Niño National High School (SÑNHS), (b) Basey National High School (BNHS), (c) San Jose de Buan National High School (SJBNHS), (d) Costa Rica National High School (CRNHS), (e) Baras National High School (BNHS), (f) Tarangnan National High School (TNHS), (g) San Sebastian National High School (SSNHS), (h) Osmeña National High School (ONHS), (i) Marabut National High School (MNHS) and (j) Mualbual National High School (MNHS).

Snack. This is defined as the small meal that may be eaten in between the three major meals - breakfast, lunch and supper (www.msn.encarta.com). In this study it refers to the slight meal taken in between heavy meals.

Supper. It is defined as the meal eaten in the evening, which is usually the main meal of the day (Encarta Dictionary, 2002). As used in this study it refers to the heavy meal eaten in the evening preferably.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

Related literature and studies on eating habits, academic performance and nutrition taken from books, magazines, journals and unpublished materials such as master's theses and dissertation papers both in the Philippines and in foreign countries were made available and are discussed in this chapter.

Related Literature

This section discusses readings from books, magazines and journals found to be relevant and significant to the present study.

Health is a fundamental human right because it is the cornerstone that affects and defines personality. Andhalt, (2001: 12) espoused that "health is wealth". Every person in the community should understand it. It lies on the basic assumption that a healthy member of the community is given the opportunity to grow, develop, work, play, resist diseases and aspire to realize their fullest potential. To underscore its importance, the 1987 Philippine Constitution provides that "the State shall adopt an integrated and add performance and eating habits. Enrich and add theories of academic performance as affected by eating habits.

Comprehensive approach to health development which shall endeavor to make essentials, goods, health and other social services available to all the people at affordable cost" (Cruz, 1994: 496).

The foregoing discussions imply that nutrition is an importance part of every individual's life. According to Sauder (2001: 851-861), nutrition plays a role in the development of infants, children, adolescents and adults alike. Furthermore, it can be defined as poor, adequate or good depending on the dietary intake of the individual and their access to proper nutrition.

Along this light, Brundtland (2002: 1) maintained that nutritional status is the result of the complex interaction between the food people eat, over-all state of health and the environment where people live. She further said that a good nutrition status not only promotes a feeling of well-being but also helps in the prevention against diseases. Because of the overwhelming importance of good nutritional status, there is then a question of its impact on the growth process of an individual.

Shaw (1998: 33) was quick to acknowledge that humans have different dietary needs at different stages of life, especially during late childhood and early adolescence where a person begins to develop at an accelerated pace. In

fact, in an article entitled "Knowledge, Attitudes, Behaviors and Nutrition Health Status of Adolescents" (Health Canada, 2002).

In 2002, it is said that adolescence is a period of rapid physical growth calling for adequate nutrition intake to meet growth requirements (www.safehealthschools.org).

At this time, the nutritional value of the food a person consumes becomes very crucial to his biological and intellectual development. According to Musso failure to consume an adequate diet at this time can therefore disrupt growth and pubertal development (Lifshitz, et. al. 1996: 1).

Corresponding to the adolescents' rapid physical growth is a period of emotional and psychological changes that, in turn, causes a tendency to reject conventional dietary habits. Because of this tendency, Anhalt (2001: 2) noted that parents and teachers are worrying that adolescents' eating habits may not be good enough to keep them healthy. Ideally, a healthy diet for adolescents include proper amount of protein, carbohydrates and fat. Adolescents are, however, avoiding certain foods, not eating on a regular basis or eating far too many snacks and/or junk food.

Said nutritional choices of adolescents cause alarm to parents and teachers considering that the nutritional status of an individual determines the body's ability to adjust to puberty and continued development, including his performance in school. First and foremost, the nutritional choices that the individual has, at present, will most likely be carried out into adulthood. It is therefore safe to assume that adolescence is a time of carefree eating and thus may influence the cultivation of healthy adult life.

One of the concerns in studying the nutritional status of every individual, particularly adolescents, is a person's eating habits/practices. Eating practices determine the nutritional needs of adolescents and are carried out into adult life. The development of eating habits may be enhanced by some factors which are not exclusively inherent in the individual. Croll, et. al., (2001: 193-198) enumerated practices of family and friends and societal norms as factors that influence the adolescents' eating practices.

Guthrie (1989: 2) was however ready to defend parental involvement in the development of eating practices as making positive effects on many of their dietary choices. He was quick to argue that adolescents were substantially informed about the impact of nutrition in their lives by

their parents but they are unlikely to follow them. Instead, he stressed that social pressure and time factors influenced eating habits of teens.

Among the eating styles practiced by adolescents, Bacos (2001: 614) enumerated three (3) styles which received much attention from health and nutrition experts as remarkably observable from adolescents. These were: (a) adolescents consumed more meals out of their own homes and are skipping meals, (b) breakfast is the most common missed meal by adolescents which leads to a higher probability of snacking during the day, and (c) snacking includes eating nutritious foods such as fruits and vegetables as well as junk foods which are containing high amounts of fat, sugar and sodium.

Heunneman (1974: 5) observed that eating practices are influenced by some certain variates. Among his significant observations were: (a) during adolescence, the diets of males improve while the diets of females deteriorates, (b) calcium and iron are found to be lower in females, (c) Vitamin A and ascorbic acids were found to be low in both females and males and (d) adolescents who skip meals, eat smaller amounts of food, and fewer snacks have the least adequate diets. On top of these, several studies demonstrated the relationship between a good, healthy meal

and better grades, higher test scores, quicker recall of information, reduced absence/tardiness rates, fewer psychosocial problems and lower special education costs.

The secondary students of selected public secondary schools in the Division of Samar are not exempted from the definition of adolescents with varied eating practices. It is this fact that encouraged the researcher to determine the relationship between the students' eating habits and their level of performance in school. Hence, this study which centered on determining how the student-respondents eating habits, categorized into meal types, influence their level of academic performance based on their average grade in the two (2) grading periods in Technology and Livelihood Education (T.L.E.) and in all subject areas.

Related Studies

The researcher found several studies that bore significance to the present study. The studies reviewed in the succeeding pages helped in the conceptualization of the present investigation.

Baclig (2002), in a study "Food Habits of Freshmen Students in Central Luzon State University", attempted to find out the food habits of college freshmen studying at the Cental Luzon State University (CLSU) and the variables

related to their food habits. Involving 97 students from ten randomly selected classes, the researcher used questionnaire in collecting the needed data.

The study revealed that CLSU college freshmen generally take regular meals daily but some skip breakfast, lunch or supper mainly because of lack of time. In addition, it found out that they eat sugar and sugary products, fat-rich foods, protein-rich foods such as milk, fish, meats, poultry and eggs, and fruits and vegetables more frequently. Least frequently eaten foods are legumes and nuts. Parents' occupation and residence are the most significant variables related to the students' food habits.

On the basis of the foregoing findings, the study offered the following recommendations: (a) provision of nutrition education for incoming freshmen focusing improvement of their food habits, (b) with focus on having a good breakfast, education on time management, and provision of guidance in meal planning for students living on-campus especially those in dormitories, and (c) follow-up studies may include alternative nutrition education approaches for college students with the objective of improving their eating habits, and assessment of CLSU students' knowledge about nutrition.

Understandably, both studies focused on studying habits that pertain to nutritional status of students. In addition, some variates considered by the two studies were similar, namely, (a) age, and (b) sex. They both tackled the three (3) meal types, namely, (a) breakfast, (b) lunch and (c) supper. In spite of these inherent similarities, the two studies differed in several respects.

First, the present study never considered as variates ethnicity, parents' occupation and residence. Second, the present study did not probe into the student-respondents' frequency of food eaten daily as well as the regularity of their eating meals. Third, while the respondents of the previous study were freshmen college students of Central Luzon State University (CLSU), the present study involved selected students of ten (10) secondary schools in the Division of Samar.

Bagwell (2000) conducted a study entitled "The Relationship between Breakfast and School Performance". The said research aimed to determine whether a positive relationship exists between eating breakfast before school and school performance. It involved ninety-six psychology students from Loyola University in New Orleans. They were asked to complete a brief memory test where a list of eight words was recited to them in a certain sequence. They were

also asked to rate their school performance in areas such as attention span, concentration, and participation in classes before lunch. The study attempted to test the hypothesis that eating breakfast would have a positive influence on a student's memory, as well as other aspects of school performance.

The study used a correlational research design, involving two variables. The first variable was breakfast, which consisted of any type of food or beverage eaten or drunk by the students before going to their classes. The second variable was school performance measured by alertness in class, attention span in class, mood in class, note taking in class, concentration in class, participation in class, test taking in class, and the ability to recall information in class (memory).

The results of the study showed that breakfast does show an impact on school performance, but not as much as previously expected. The independent group's t-test showed there was a significant difference between participants who ate breakfast and those that did not eat breakfast on the memory test. The mean scores of that who eat breakfast differ from those who do not eat breakfast and this mean difference is significant.

The similarity lies on the fact that both studies employed a correlation analysis. In addition, both studies attempted to determine the influence of some factors on school performance. The two studies, however, differed in several respects. Firstly, the previous study was confided on correlating eating breakfast with school performance whereas the present study involved a correlation of the eating habits of secondary students of selected public high schools in the Division of Samar and their performance in school. Secondly, the previous study cited here involved psychology students of Loyola University in New Orleans while the present study research involved high school students of public secondary schools in Samar. Thirdly, the present study was conducted here in the Philippines, as opposed to that of the previous study, which was conducted in New Orleans.

Bro, et. al., (1993) examined the effect of an in-school breakfast on ten boys, aged 14-18 years old and enrolled in a welding class at a vocational and technical high school. In the conduct of the study, a nutritious breakfast was served to all the students when they reported to class. The results of the said study revealed positive results in that the boys' time on-task more than doubled from 40% to over 90% once the breakfast began. With this,

nutrition is indeed important in the development of school-aged children.

In 1995, Bastian conducted a study on the academic performance in Elementary Science and Health of Grade IV pupils in selected schools in the Cordillera Administrative Region. The subjects of the study were 300 science teachers from Grades 1 to 4 and 1500 Grade 4 pupils in 48 selected schools in the 6 divisions of CAR. It aimed to determine the academic performance of Grade 4 pupils in Science and Health in CAR, as measured by the Regional Achievement Test in relation to teacher-related and pupil-related factors.

The study showed that the over-all academic performance of the subjects in Science and Health is fair. Academic performance of the pupils varies according to sex, age and division. Teacher-related factors and pupil-related factors have much influence on the academic performance of the pupils. The study further showed a very high correlation between academic performance and teacher-related and pupil-related factors. In addition, length of teaching experience affects the teachers' perception of the extent of influence teacher-related factors has on academic performance of the pupils.

The similarity of the two studies lay on the fact that both are assessment of academic performance. But, while the

previous study was centered on the academic performance of Grade IV pupils in selected schools in CAR, the present study went further as to assess the performance of the high school students in selected public secondary schools as it relates with their eating habits. In addition, the previous study involved grade IV pupils of selected schools in CAR whereas the present study involved high school students in selected public secondary schools in Samar. More so, the study of Bastian specifically focused on the performance of the pupil-respondents in Elementary Science and Health whereas the present study broadly covered the academic performance of the student-respondents in all the subject areas of the secondary curriculum.

In 2000, Infante conducted a study aimed at determining the relationship between household participation in nutrition and nutrition-related interventions and nutrient adequacy and nutritional status of preschoolers in Los Baños, Laguna where five pre-schoolers from each barangay were randomly selected. Two-day 24-hour food recall was employed to assess the pre-schoolers' dietary intake. Socio-demographic data such as household annual income, education and occupation of the pre-schoolers' parents were gathered. The gathered data were analyzed using descriptive statistics and correlation.

The study found out that majority of the pre-schoolers' parents who had participated in various intervention programs have reached secondary level of education. In addition, the study revealed that 1/3rd of the pre-schoolers' fathers were employed while majority of their mothers were unemployed. More than 50% of the households had an annual income of less than P 72,000.00 with an average household size of five members per family. Moreover, the study found no significant relationship between household participation in various intervention programs and the pre-schoolers' nutrient adequacy and nutritional status.

The study recommended that while individual intervention programs might have helped alleviate malnutrition, combination of the following nutrition and nutrition-related interventions may well be considered by nutrition program implementers and the respective areas for better nutritional well being of pre-schoolers. Furthermore, the study recommended the following intervention schemes such as Operation Timbang (OPT), Health Protection, Micronutrient Supplementation, Food Fortification and Food Production.

The two studies employed correlation analysis, in which case they were similar. Also, the two studies dealt

with the nutritional status of individuals. However, the previous study centered on participation in nutrition and nutrition-related interventions, nutrient adequacy and nutritional status whereas the present one tackled it on the side since the main focus is the determination of the relationship between eating habits and academic performance. In addition, the study of Infante enjoined pre-school children from Los Baños, Laguna while the present study included high school students from selected pubic secondary schools in Samar.

In 1995, Chinnamma determined the relationship between physical health and the psychological and spiritual well being of the elderly religious women of India. Moreover, it investigated the moderating effect of age on the above-mentioned correlations.

The research found out that respondents experienced moderate physical health and a high level of psychological and spiritual well-being when taken as one group. A very similar pattern of health status was observed when the respondents were divided into groups of young-old and old-old.

Furthermore, there was no significant relationship between physical health and psychological well-being. Also, there was no significant correlation between physical

health and psychological well-being when they were categorized as young-old and old-old. The study arrived at the following conclusions: (a) the psychological and spiritual well-beings of the elderly women religious were independent of their physical health; (b) the interactions of physical health with psychological and spiritual well-being of the nuns were not related to age; and (c) the SABS life style was effective in enhancing health in its three dimensions of the women religious.

Inasmuch as the study cited here dealt with the physical health of the women religious, this found significant relationship with the present study in that the latter assessed the eating habits of the respondents, which have implication on physical health. However, the present study differed with the previous one in that the former focused on the eating habits of the student-respondents as they influence their academic performance whereas the latter centered on the relationship of physical health on the psychological and spiritual well being of the elderly women religious.

Dalíling (1993), in her study entitled "Basic Nutrition Knowledge of Mothers in Three Barangays of Itogon: Its Implication to Nutrition Education", used the normative evaluative survey regarding the extent nutrition

knowledge of mothers, as affected by age, educational attainment, occupational status, barangay, and family income, help in coming up with a nutrition education program to be integrated into the adult education program of the BEC program of the Fatima Parish of Tuding.

The study found out that the mothers know much about food storage and cooking but have moderate knowledge in food preparation, serving, nutrients and their functions, and food selection. Furthermore, it revealed that this knowledge is significantly affected by barangay, occupational status, and educational attainment.

On the other hand, the study of Dalíling dealt with the nutrition knowledge of mothers in three barangays of Itogon and their implication to nutrition education. On the other hand, the present study dealt with the eating habits of students of selected public secondary schools in Samar and how they influence academic performance of same students in school. In addition, the previous investigation consisted of mothers as respondents whereas the present one involved students as participants.

Espiña (1996), in a study entitled "Correlates of Mathematics Performance of Fourth Year Students in Public and Private Secondary School in Northern Samar", sought to determine the correlates of mathematics performance of 4th

year students in public and private secondary schools in Northern Samar.

The specific questions of the study were as follows: (a) it ascertained the profile of the student-respondents in terms of mental ability, attitude towards mathematics and study habits; (b) it drew a profile of Mathematics IV teachers in terms of educational qualifications, teaching experience, trainings in math, teaching strategy and teacher behavior; (c) it looked into the facilities in teaching and teacher behavior; (d) it looked into the facilities in teaching mathematics and class schedule profile of Vocational, Barangay High and Private School to evaluate the level of mathematics performance of the student-respondents; (e) it identified the relationship between mental ability, attitude towards mathematics, study habits, educational qualification of the teachers, teaching experience, training in mathematics, teaching strategy, and teacher behavior, type of school, mathematics teaching facilities, class schedule and mathematics performance of the student-respondents; and (f) it found out the difference between the level of mathematics performance of the student-respondents in public and private schools.

The population of the study consisted of 4th year students and Math IV teachers from 12 public and private

secondary schools in Northern Samar. From this population, three hundred sixty-seven students and 12 Math IV teachers were considered the main sources of research data, selected using cluster and fish-bowl (lottery sampling) techniques. Moreover, the study employed the descriptive-correlational type of research using frequency counts, percentages, mean, ranking, standard deviation, multiple correlation, regression analysis and analysis of variance.

The study revealed that the student-respondents had a below average mental ability. Although their attitude towards mathematics was favorable, and they had good study habits, their performance in Mathematics IV proved to be below average. However, the personal attributes of the student-respondents found to be slightly related to Math IV performance were attitude towards mathematics, study habits and mental ability as the strongest. The Math IV teachers of this study, though majors in the subject, had an average of ten years teaching experience but with few trainings in Math.

Moreover, the study showed that type of school and mathematics-teaching facilities were found to be significantly related with Math IV performance while trainings in math and class schedule were not. A significant difference existed between the level of Math IV

performance of the student-respondents in private and barangay high schools and between vocational and barangay high schools. From these findings, it could be deduced that those with mental ability and good study habits performed well in Math IV.

The similarity of the two studies lay on the fact that they both aimed at assessing performance in school of the high school students. But, while the previous study aimed at finding out the correlates of mathematics performance, the present study dealt with the academic performance in general in all subject areas. In addition, the previous study specifically involved the 4th year high school students whereas the present study involved all the high school students from the 1st to the 4th year levels.

The study cited here includes students from both private and public high schools in Northern Samar. On the contrary, the present research only limited itself to the students from the public high school in Samar.

Gorpido (2003) conducted a study entitled "Performance of Fourth Year Mathematics Teachers in the Second District National High Schools, Division of Northern Samar". This research was a descriptive-evaluative research, with a questionnaire-checklist and validated Effective Mathematics

Instructional Supervision Scheme (EMISS) as instruments in gathering the needed data.

After the conduct of the study, the results revealed that most of the mathematics teachers had bachelor's degree and specialized in Mathematics. Most had no training related to mathematics and had very satisfactory performance in mathematics, particularly in classroom physical aspect, instructional aspect and instructional material management.

Inasmuch as the present study dealt with performance, the previous study was therefore of significance to the same study considering that it also dealt with performance. While the study of Gorpido centered on the performance of 4th year Mathematics teachers in the 2nd District Schools of the Division of Northern Samar, the present study dealt with the academic performance of the high school students in selected public high schools in Samar. It is in this respect that the two studies differed.

The study of Ultra (1996) focused on the determinants of the academic performance of 2nd year students in Biology in secondary schools in Northern Samar. Moreover, the respondents of this study were 330-second year students who were taking up Biology and 14 subjects in 11 secondary schools in the province. Five types of research instruments

were used to gather the data for this study, namely, the Manila Self Administering Test of Mental Ability, Attitude Survey towards Biology, Assessment of Parental Authority, Evaluation Form on Teaching Behavior and Questionnaire for Teachers. Frequency counts, percentages, mean, standard deviation and multiple regression analysis were computed.

The results of the mental ability test revealed that of the 330 student-respondents, 224 were within the normal range and had average to low entry behavior. Their attitudes toward Biology were much favorable. As to parental authority, it was found out that 207 (62.73%) had egalitarian type of authority, where both the father and mother exercised control and authority over their children.

Besides this, the study further showed the following findings: (a) on the teachers' educational qualification, only one had advanced units towards a master's degree, while all the rest, had only their basic degree, (b) 151 (45.76%) of the student-respondents indicated that their teaching behavior was very satisfactory, (c) the over-all quality of teachers' performance, as viewed by the students, was satisfactory, (d) a significant relationship existed between the academic performance of the 2nd year students and their mental ability, entry behavior related to Biology, attitudes, parental authority, teachers'

qualifications, and teaching behavior, while library facilities and physical facilities were not significantly related to the academic performance of the students, and (e) the variable which affected most the performance of the students in Biology was their entry behavior related to Biology whereas the variable that least affected their performance in Biology was teachers' qualifications.

Based on the results of this study, the research concluded that the student-respondents were females, had average mental ability and therefore had average performance, with favorable attitudes toward Biology and with both their fathers and mothers having control and authority over their children. Finally, all the student-, teacher- and school-factors were significantly related to students' performance in Biology, except laboratory facilities.

The study of Ultra is significantly related to the present study in that it dealt with determinants of academic performance of high school students. The two studies differed in several respects, however. First, Ultra's study centered solely and primarily on the determination of the academic performance of students in Biology whereas the present study determined the academic

performance of the student-respondents in all the subject areas.

Hence, Ultra's study is specific in its subject while the present study is broader in that it covered all the subject areas taken under secondary curriculum of public schools. In the second place, while the previous study focused on the 2nd year students in Biology in secondary schools in Northern Samar, the present study involved the high school students in all the year levels of selected public secondary schools in the Division of Samar. In the third place, the previous study involved both teachers and students as respondents. On the contrary, the present research involved only the students as respondents.

The studies reviewed were related to the present study insofar as they measured performance. Although they are related to the present study, they nevertheless differed in some respects. Notwithstanding said differences, they are cited here as they are found to have similarities with the problems under consideration in this study.

Chapter 3

METHODOLOGY

This chapter discusses the procedures that were applied in this study. This includes the research design, instruments used, validation of the instruments, sampling procedure used, data-gathering procedure and statistical treatment of data.

Research Design

The research utilized a descriptive type of research, using correlation analysis. Correlation analysis was employed to determine the relationship between the eating habits of the secondary students of selected public schools in the Division of Samar and their academic performance. It was also utilized to get the relationship between some personal factors such as (a) age, (b) sex, (c) year level, (d) family monthly income and (e) parents' educational attainment and the student-respondents' eating habits and performance in school.

Besides determining the relationship of the aforesaid variates, the study also tried to identify the differences in the perceptions regarding the relationship between academic performances and eating habits of the student-

respondents when grouped according to age, sex, year level, family monthly income and parents' educational attainment.

Using a questionnaire-checklist with two (2) major parts as the primary data-gathering instrument, the researcher identified the personal characteristics of the respondents such as their age, sex, year level, family monthly income and parents' educational attainment, and the extent by which they practice some eating habits. Documentary analysis of school records such as report cards, class records and Students' Permanent Records supplemented the main instrument in collecting the necessary data.

Finally, the research utilized both descriptive and inferential statistical tools in analyzing and interpreting the data gathered in this study. Among these were frequency count, mean, weighted mean, Pearson Product Moment Coefficient of Correlation, Fisher's t-test, One-way Analysis of Variance (ANOVA), and Scheffe's test.

Instrumentation

The study employed the following instruments: (a) questionnaire-checklist and (b) documentary analysis. These instruments were used to gather the needed data of this study.

Questionnaire-checklist. This was the main instrument used in gathering the necessary data for this study. This contained two major parts. A personal profile part (PART I) contained items that aimed at drawing the personal characteristics of the student-respondents such as their age, sex, year level, family monthly income and parents' educational attainment. On the contrary, the second part (Part II) included items about the student-respondents' perceptions regarding the extent by which they practice eating habits that were divided into meal types.

The eating habits were grouped into four meal types; breakfast, lunch, supper, and snacks. Part II contains 40 habits statements divided into four groups according to the meal types mentioned earlier. Also, for each meal type five (5) habit statements were considered as good and the remaining five as bad eating habits. Respondents are made to rate their eating habits using a 5-point scale where 5 means always, 4 means often, 3 means sometimes, 2 means rarely and 1 means never. For good eating habits always practicing it would indicate good habit and never practicing it would mean bad habit. For the bad eating habits always practicing it would be very bad and never practicing it would be good. Corresponding changes in scoring were provided to have more in depth interpretation.

Documentary Analysis. The research looked into pertinent school records such as report cards and the class records of the teachers to get the grades of the students during the first and second grading periods in Technology and Livelihood Education (T.L.E.) and all subject areas.

Validation of the Instruments

The questionnaire, considering that it was a researcher-made one, was validated in this manner: (a) the initial draft of the questionnaire was submitted to the research adviser and the dean of the College of Graduate Studies of Samar State University (SSU), Catbalogan, Samar, for content validation, (b) after incorporating their corrections and suggestions, the questionnaire was revised, and (c) it was piloted to secondary students of Silanga National High School, Brgy. Silanga, Catbalogan, Samar since it was one of the schools with a low level of nutritional status based on the baseline data on nutritional status of secondary students secured from the Department of Education (DepEd), Division Office, Catbalogan, Samar.

The Test-Re-Test Method was employed to (Sevilla, 1990: 51) determine the reliability and validity of the instrument. The first administration of the instrument was

done on December 14, 2004. After a week, the second administration was done. After which, the correlation coefficient was computed, and its values is .86 representing the instrument's reliability coefficient, using Ebel's (1969: 51) interpretation. This result is fairly high, adequate for individual measurement, which shows that the instrument is reliable.

Sampling Procedure

The respondents of this study were the secondary students of selected public secondary schools in the Division of Samr. In obtaining the sample public secondary schools in the Division of Samar, the researcher opted to use purposive sampling, using low level of nutritional status, indicated by the consolidated secondary nutritional status record per year level from the Department of Education (DepEd), Division of Samar, Catbalogan, Samar, and low level of performance based on the mean percentage score (MPS) in the pre-test-posttest in 2003-2004 from the same office, as the bases in choosing the respondent-schools.

The selected public secondary schools (Table 1) based on their ranking were as follows: (a) Sto. Niño National High School (SÑNHS), (b) Basey National High School (BNHS),

Table 1

Ranking of Secondary Schools in the Division of Samar Based on Low Level Nutritional Status and Low MPS in Pretest/Posttest

No.	Name of Schools	Enrol-ment	MPS in Pretest/ Posttest	Rank	Pupils weighted	Below Normal Weight		Rank	Ave. Rank
						F	%		
1	Villa Hermosa NHS	152	44.94	13	152	6	3.95	19	16
2	Costa Rica NHS	381	43.13	7	368	30	8.15	9	8
3	Casandig NHS	333	44.91	12	308	19	6.17	14	13
4	Lawaan NHS	144	44.98	14	122	8	6.56	12	13
5	Calapi NHS	328	45.02	15	327	21	6.42	13	14
6	Igot NHS	365	45.13	16	273	2	0.73	21	18.5
7	Wright Vocational School	869	45.65	18	869	40	4.60	18	18
8	Osmeña NHS	441	41.79	3	384	45	11.72	7	5
9	Calbiga NHS	1383	46.01	22	1,317	75	5.69	16	19
10	San Jose de Buan NHS	156	42.15	5	156	47	30.15	3	4
11	Baras NHS	150	42.12	4	104	25	24.11	5	4.5
12	Sto. Niño NHS	342	41.30	1	256	83	32.46	1	1
13	San Sebastian NHS	234	41.65	2	228	17	7.89	10	6
14	Zumarraga NHS	136	45.19	17	136	7	5.15	17	17
15	Tarangnan NHS	600	44.23	10	596	51	8.56	8	9
16	Baquiw NHS	215	44.87	11	113	6	0.05	23	17
17	Marabut NHS	448	43.61	8	438	138	31.51	2	5
18	Tominamos IS	516	45.84	19	494	39	7.48	11	15
19	Sta. Rita NHS	581	45.97	20	540	16	2.96	20	20
20	Guinsorongan NHS	253	45.99	21	253	15	5.93	15	18
21	Basey NHS	1245	43.78	9	999	286	28.62	4	6.5
22	Mualbual NHS	326	42.45	6	213	27	12.68	6	6
23	Silanga NHS	241	46.49	23	213	12	0.6	22	22.5
	TOTAL	9,598	-	-	8,646	999	-	-	-

(c) San Jose de Buan National High School (SJBNHS), (d) San Sebastian National High School (CNHS), (e) Baras National High School (BNHS), (f) Tarangnan National High School (TNHS), (g) Mualbual National High School (MNHS), (h) Osmeña National High School (ONHS), (i) Marabut National High School (MNHS), and (j) Costa Rica National High School (CRNHS).

The other 13 secondary schools not included in the study because they ranked from 11 to 23 were as follows: Villa Hermosa National High School, Casandig National High School, Lawaan National High School, Calapi National High School, Igot National High School, Wright Vocational School, Calbiga National High School, Zumarraga National High School, Baguiw National High School, Tominamos National High School, Sta Rita National High School, Guinsorongan National High School, and Silanga National High School. Upon choosing the sample public secondary schools, the researcher employed stratified random sampling technique to obtain the student-respondents of this study (Table 2). The researcher used year level as strata. Using the Sloven's formula below, the sample size of the study was determined (Sevilla, 1990: 45).

$$n = \frac{N}{1+Ne^2}$$

Where: n = the sample size

N = population size

e = desired margin of error

On the basis of the computation made, the sample size was posted at 363 student-respondents. Proportionate sampling was also used to get the distribution of the student-respondents per school and per year level. Table 2 shows the proportionate distribution of the student-respondents according to respondent-schools and year level.

Table 2

Sampling Distribution of Student-Respondents

High Schools	Year Level				To-tal
	1st	2nd	3rd	4th	
1. STO. NIÑO NATIONAL HS	8	10	8	6	32
2. BARAS NATIONAL HS	3	4	3	4	14
3. COSIA RICA NATIONAL HS	14	9	7	5	35
4. TARANGNAN NATIONAL HS	4	14	13	12	43
5. BASEY NATIONAL HS	7	37	38	37	119
6. MARABUT NATIONAL HS	11	11	9	10	41
7. MUALBUAL NATIONAL HS	2	6	2	3	13
8. OSMENA NATIONAL HS	5	10	10	7	32
9. SAN JOSE DE BUAN NATIONAL HS	5	3	3	3	14
10. SAN SEBASTIAN NATIONAL HS	4	8	4	4	20

When the sample size per school and per year level were computed, the researcher used these computations as baseline information in arriving at the distribution of the student-respondents as to age, sex, family monthly income and parents' educational attainment.

Data Gathering Procedure

At the outset, the researcher wrote a letter to the Officer-in-Charge of the Department of Education (DepEd), Division Office, Catbalogan, Samar, requesting the procurement from its Nutrition Health Office of consolidated secondary nutritional status record per year level and from the Educational Management Information System (EMIS), the copy of secondary enrollment for school year 2004-2005 (Form 3) and pre-test-posttest result for school year 2003-2004.

Upon the approval of the said request, the researcher proceeded with the sampling of the respondent-schools and student-respondents of the study. After determining the respondent schools and the student-respondents per school, another letter was sent to the Officer-in-Charge of the Department of Education (DepEd), Division Office, Catbalogan, Samar, requesting the approval to validate the

questionnaire among the secondary students of Silanga National High School, Brgy. Silanga, Catbalogan, Samar.

Meantime, the letter of approval to collect data was shown to the different heads/principals of the respondent-schools. Upon their approval, the researcher proceeded with the gathering of the needed data among the secondary students of Sto. Niño National High School, San Jose de Buan National High School, Basey National High School, Baras National High School, San Sebastian National High School, Tarangnan National High School, Mualbual National High School, Osmeña National High School, Marabut National High School and Costa Rica National High School.

The researcher then distributed and administered the questionnaire to the high school student-respondents. The same respondents were given enough time to supply the necessary data. After the respondents had given the necessary data, the researcher personally retrieved the questionnaire.

Before starting with the tally of the respondents' responses in the aforesaid instrument, the researcher secured pertinent documents as the Mid-year Division Achievement test results from the Division Office to get the level of academic performance of the student-respondents of this study. In the absence of the Mid-year

Division Achievement test result and the pre-test-posttest results, the researcher resorted to the report cards of the student-respondents from their respective advisers to get their average grades for the 1st and 2nd grading periods in Technology and Livelihood Education (T.L.E.) and in all subject areas to get data on their level of academic performance.

Finally, the response tallied analyzed & computed.

Statistical Treatment of Data

The study used both descriptive and inferential statistical tools in analyzing the data that were collected. This included statistical tools such as frequency, percentage, ranking, mean, weighted mean, Pearson r, Fisher's t-test, t-test for independent samples, One-way ANOVA and Scheffe's test.

Frequency. This was used in reporting the number of student-respondents of the same age, sex, year level, family monthly income and parents' educational attainment. This was also used in tallying the number of student-respondents who checked a particular statement in the eating habits checklist, with the number corresponding to the tally made by the researcher on the given habit as the frequency.

Percentage. This statistical measure was used in the analysis and interpretation of data on age, sex, year level, family monthly income, parents' educational attainment, etc.

Ranking. This was used to determine which among the eating habits was considered as "always practiced", "sometimes practiced", "often practiced" and others.

Mean. This statistical measure was used to determine the quantitative characteristics or profile of the respondents like age, sex, level of academic performance, etc.

Weighted Mean. This was used to express the collective perceptions of each group of respondents as to the extent by which the student-respondents practiced the eating habits.

Pearson r. To determine the relationships between eating habits of student-respondents and academic performance, the Pearson Product Moment Correlation Coefficient (Pearson r) was used (Broto, 2003: 127-131).

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}$$

Where:

r = the computed statistical value

X = the independent variable (factors)

Y = the predicted variable

N = Number of cases

Σ = the summation notation

Fisher's t-test. To test for the significance of the coefficient of correlation between a set of paired variables, the Fisher's t-test (Walpole, 1982:383) formula was used as follows:

$$t = r \sqrt{\frac{N - 2}{1 - r^2}}$$

The following rules provided a guide for interpreting the obtained correlation in this study (Ebel, 1965: 202):

Reliability	Degree of Reliability
± .95 to ± .99	Very high, rarely found among teachers made test
± .90 to ± .94	Highly equaled by few test
± .80 to ± .89	Fairly high, adequate for individual measurement
± .70 to ± .79	Rather low, adequate for grouped measurement but not very satisfactory for individual measurement.

t-test for independent samples. This statistical tool was used to test whether there are no significant differences in the perceptions of the student-respondents,

when grouped according to sex, with respect to the extent by which they practiced some eating habits. The following t-test formula by Bartz (1981: 382) was used:

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - 0}{\sqrt{\frac{N_1S_1^2 + N_2S_2^2}{N_1 + N_2 - 2}\left[\frac{1}{N_1} + \frac{1}{N_2}\right]}}$$

Where:

t = refers to the computed t-value

$\bar{X}_1$ = refers to the mean of the perceptions of the student-respondents with respect to extent by which they practice some eating habits

$\bar{X}_2$ = refers to the mean of the perceptions of the student-respondents with respect to the extent by which they practice some eating habits

S_1 = refers to the standard deviation of the of the perceptions of the students with respect to the extent by which they practice some eating habits

S_2 = refers to the standard deviation of the of the perceptions of the students with respect to the extent by which they practice some eating habits

N_1 = refers to the number of female student-respondents

N_2 = refers to the number of male student-respondents.

Table 3

Computational Formula for One-Way ANOVA

Sources of Variation (S.V.)	Degrees of Freedom (Df)	Sum of Squares (SS)	Mean Square (MS)	Computed F
Between Group	K-1	$SSB = \frac{\Sigma X^2}{Ng} - CF$	$MSB = \frac{SSB}{K-1}$	$F = \frac{MSB}{MSW}$
Within Group	N-k	$SSW = \Sigma X^2 - CF$	$MSW = \frac{SSW}{N-k}$	
Total	N-1	$SST = \frac{\Sigma X_{ij}^2}{N-1} - CF$		

One-Way ANOVA. This was used to statistically test whether there were significant differences in the perceptions of the students as to the relationship between the academic performance of the student-respondents and their eating habits when they were grouped according to age, year level, family monthly income and parents' educational attainment. The formula shown above was used.

Scheffe's Test. When the hypothesis tested using ANOVA was rejected, it necessarily meant further tests to find exactly where the significant difference lies when comparing the means of the groups, i.e. - perceptions of the student-respondents grouped according to age, year level, family monthly income and parents' educational

attainment. The Scheffe's method of multiple comparisons (Padua, 1976:234) was used. The formula is as follows:

$$F = \frac{(xi - xj)^2}{MSW \times [1/ni + 1/nj]}$$

Where:

F = Scheffe test ratio

MSw = Within group sum of squares

xi = Mean of the i group

xj = Mean of the j group

ni = Number of Cases of the i group

nj = number of cases of the j group

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The chapter presents the data that were collected, the analysis made on the data as well as their interpretation. This includes the following: (a) profile of the secondary student-respondents, (b) eating habits of the student-respondents according to meal type, (c) tests of hypothesis as to differences in the eating habits of student-respondents when grouped into meal types and some personal variates, (d) level of academic performance in terms of average grade in all subject areas and in Technology and Livelihood Education (T.L.E.), and (e) correlation analyses between the academic performance of the students and some personal variates and eating habits.

Profile of the Student-Respondents

Tables 3-Table 6 show the presentation of the profile of the secondary student-respondents from the ten (10) public secondary schools in the Division of Samar chosen as respondent schools of the study. These tables reveal the age and sex of the student-respondents, their year level, monthly family income and educational attainment of parents.

Age and Sex. Found in Table 4 is the distribution of the student-respondents according to age and sex.

The table shows that of the 363 total student-respondent, the oldest among them is 21 years old and the youngest are 12 years old. Majority of respondents have ages from 13 to 16 years old. The mean age is pegged at 14.74 years old. This shows that since these respondents are high school students their mean age is within the age for high school students. Moreover the distribution of their ages ranges from age 12 to age 21. The ages with the

Table 4

Distribution of the Age and Sex of the Student-Respondents

Age	SEX				Total	
	Female		Male			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
12	14	05.67	07	06.03	21	5.79
13	38	15.38	22	18.97	60	16.53
14	62	25.10	25	21.55	87	23.97
15	61	24.70	25	21.55	86	23.69
16	41	16.60	24	20.69	65	17.91
17	21	08.50	07	06.03	28	07.71
18	09	03.64	03	02.59	12	03.31
19	01	00.40	02	01.72	03	00.83
21	00	00.00	01	00.86	01	00.28
Total	247	100.00	116	100.00	363	100.00
Percent	68.04	-	31.96	-	100.00	-
Mean	14.73	-	14.75	-	14.74	-
SD	1.49	-	1.66	-	1.54	-

lowest frequencies are 21 years old, 19 years old and 18 years old. The SD obtained is 1.54 years which shows a little spread or variation in ages of the respondents.

On the other hand of the 363 respondents of the study 247 or 68.04 percent of them are females while 116 or 31.96 percent of them are males. This shows that majority of the respondents are females. This implies that there are more female high school students in the secondary schools in the Division of Samar.

Year Level. In Table 5, the distribution of the student-respondents as to year level is presented. As shown, most of them or 112 or 30.85 percent were in their

Table 5

Distribution of the Student-Respondents as to Year Level

Year Level	Frequency	Percentage
1st Year	63	17.36
2nd Year	112	30.85
3rd Year	97	26.72
4th Year	91	25.07
Total	363	100.00

second year in high school. The rest of the 363 respondents were distributed as follows: (a) 97 or 26.72 percent were in third year, (b) 91 or 25.07 percent were in fourth year, and (c) 63 or 17.36 percent in their first year.

The data means that the greater part of the research population was composed of students in their second year.

Monthly Family Income. Represented in Table 6 is the distribution of the high school student-respondents according to monthly family income.

It is revealed in the table that majority of the respondents or 212 or 58.40 percent belonged to the P3001.00-P6000.00 income bracket, 79 or 21.76 percent

Table 6

Distribution of the Student-Respondents According to Monthly Family Income

Income	Frequency	Percentage
P 3000.00 and below	79	21.76
P 3001.00- P 6000.00	212	58.40
P 6001.00- P 9000.00	36	9.92
P 9001.00- P12000.00	4	1.10
P12001.00- P15000.00	7	1.93
P15001.00- P18000.00	8	2.20
P18001.00- P21000.00	9	2.48
P21001.00- P24000.00	2	0.55
P24001.00- P27000.00	2	0.55
P27001.00- P30000.00	4	1.10
Total	363	100.00
Mean	P 5692.64	-
SD	P 4848.84	-

belonged to P3000.00 and below income group and 36 or 9.92 percent were in the P6001.00-P9000.00 income group. Some of them belong to families with high income others belong to low income bracket families.

The highest income range is P27000.00-P30000.00 whereas the lowest income was P3000.00 and lower than P3000.00.

The mean income was posted at P5692.64, which was interpreted as below the poverty threshold for Region VIII in 2005 which is P10802.00 (Source: 2003 and 2005 Regional Poverty Estimates, NSCB, posted January 25, 2005). The SD obtained is P4848.84, which shows that the respondents vary in their income.

Parents' Educational Attainment. Table 7 reveals the distribution of the high school students taken as samples of this study according to their parents' educational attainment.

For the fathers' educational attainment, as shown in the table, majority of the student-respondents or 134 or 36.91 percent indicated that their fathers reached elementary level, followed by 90 or 24.79 percent who graduated from elementary. Only 2 student-respondents responded that their fathers had pursued graduate and/or post-graduate studies.

For the mothers' educational attainment, out of the 363 student-respondents of the study, 91 or 25.07 percent indicated that their mothers reached high school level. Elementary level and elementary graduate each posted 85 student-respondents or 23.42 percent.

There were no student-respondents who indicated that their mothers pursued graduate and/or post-graduate studies. This means that majority of the student-respondents' parents never pursued further studies.

Table 7

Distribution of the Student-Respondents as to their Parents' Educational Attainments

Educational Attainment	Father		Mother	
	Frequency	Percentage	Frequency	Percentage
Elementary Level	134	36.91	85	23.42
Elementary Graduate	090	24.79	85	23.42
High School Level	047	12.95	91	25.07
High School Graduate	043	11.85	40	11.02
College Level	026	07.16	33	09.09
College Graduate	021	05.79	29	07.79
Graduate/Post-Graduate	002	00.55	-	-
Total	363	100.00	363	100.00

Student-Respondents' Perceptions of their Eating Habits when Grouped as to Meal Types

Table 8-Table 11 shows the perceptions of the student-respondents with respect to their eating habits grouped according to meal types, namely; (a) breakfast, (b) lunch, (c) supper and (d) snacks.

Breakfast Eating Habits. As to their breakfast eating habits, Table 8 shows five habits were considered good breakfast habits and five habits were considered as bad breakfast habits.

For the good breakfast eating habits, the respondents rated them all as "sometimes practiced" only based on the computed weighted mean rating. These includes: 1) I observed proper table manners when having breakfast-3.19, 2) I decide where and when to buy food for breakfast- 2.91, and 3) I make a regular menu for breakfast consisting of fruit such as banana, protein dish such as fried fish, rice, and milk. The mean obtained for good breakfast habits is 2.92 interpreted as sometimes practiced. This only shows that the respondents do not have good breakfast eating habits since, they do not consider it as a meal that need careful planning and so much preparation that it would affect their school performance.

Table 8

Student-Respondents' Perceptions Regarding their Breakfast Eating Habits

EATING HABITS	RESPONSES					Total	Wt. $\bar{X}$	I
	A (5)	O (4)	S (3)	R (2)	N (1)			
GOOD EATING HABITS								
1. I don't go to school without having breakfast.	110	35	118	46	52	363	3.27	S
2. I give much attention to what I eat for breakfast.	43	57	136	66	61	363	2.88	S
3. I make a regular menu for breakfast consisting of fruit such as banana, protein dish such as fried fish, rice and milk.	32	43	141	68	79	363	2.67	S
4. I decide where and when to buy food for breakfast.	52	55	133	55	68	363	2.91	S
5. I observe proper table manners when having breakfast.	88	60	109	46	60	363	3.19	S
Total	-	-	-	-	-	-	19.75	
Mean	-	-	-	-	-	-	2.82	S
BAD EATING HABITS								
6. I have coffee and bread for my breakfast.	85	59	96	54	69	363	3.10	S
7. I eat breakfast while preparing for school.	74	76	141	49	23	363	3.36	S
8.I skip eating breakfast and goes directly to school.	27	36	97	45	158	363	2.25	S
9. I eat breakfast when I want to.	63	43	103	60	94	363	2.78	S
10. I do other task such as answering assignments for the subject in the morning while having breakfast.	28	45	113	42	135	363	2.42	R
Total	-	-	-	-	-	-	13.91	
Mean	-	-	-	-	-	-	2.78	S

Legend: 4.51 -5.00 Always (A)
3.51 -4.50 Often (O)
2.51 -3.50 Sometimes (S)
1.51 -2.50 Rarely (R)
1.00 -1.50 Never (N)

For breakfast habits which the researchers has classified as bad breakfast habits, the respondents rated them as sometimes practiced. This are as follows based on the obtained weighted mean: 1) My breakfast is coffee and bread-3.36, 2) I give less attention to what I eat for breakfast-3.12, 3) I eat breakfast while preparing for school-3.10, 4) I eat breakfast when I want to-2.78, and 5) I can go to school without eating breakfast 2.72. On the whole, the weighted mean obtained for the extent by which student-respondents practiced their bad breakfast eating habits was posted at 2.85, interpreted as "sometimes" practiced.

The table also reveals that the student-respondents have higher mean rating for their good breakfast habits than for their bad breakfast eating habits but these mean values have the same descriptive interpretation as "sometimes" practiced only.

Lunch Eating Habits. Table 9 presents the respondents eating habits during lunch. Of the ten habits during lunch, five habit statements were considered good lunch eating habits, while the remaining five habits statements were considered bad.

For their good lunch eating habits, the five statements were rated as follows: two (2) statements were

rated as "often practiced" while three (3) statements were rated as "sometimes" practiced.

The good lunch habits, which are "often" practiced: 1) I give special attention to where I eat such as its cleanliness and neatness, and 2) I follow a strict time schedule for lunch at 12:00 noon.

The good lunch habits which are sometimes practiced only are: 1) I make sure that I eat the food recommended by the health authorities and taught in school, 2) I eat a heavy lunch composed of protein dish, mostly meat, vegetable dish such as "pakbet", rice and dessert for lunch, and 3) I list the food in the order in which they are to be served for lunch.

The mean obtained for their good lunch eating habits is "3.24" interpreted as "sometimes" practiced. This implies that the student-respondents do not practiced good lunch habits since they sometimes practiced only these good lunch eating habits.

For the bad lunch eating habits all the five statements were rated as "sometimes" practiced only by the student-respondents. The five statements arranged in the order of the value of the obtained weighted mean rating are as follows: 1) I eat my lunch at 10:00 o'clock in the

morning because I don't eat breakfast-3.08, 2) I exclude vegetables in my menu for lunch-2.95, 3) I take lunch in between school work such as doing projects and assignments and studying for quizzes and recitation for classes in the afternoon-2.64, 4) I eat lunch very late in the afternoon-2.48, and 5) I don't eat food containing right food nutrients needed by my body for my lunch-2.40. This implies that the lunch habits of the respondents are not bad at all, since they practiced these bad lunch habits sometimes only. The table also reveals that the student-respondents have higher mean rating for their "good" lunch eating habits than for their "bad" lunch eating habits but these mean values have the same descriptive interpretation as "sometimes" practiced only.

The mean obtained for their bad lunch habit is 2.61 interpreted as "sometimes" practiced by the respondents. The table shows that the mean rating of the good lunch eating habits is higher compared to the mean rating of their bad lunch eating habits but the equivalent descriptive rating for both is "sometimes" practiced.

Table 9

Student-Respondents' Perceptions regarding their Lunch Eating Habits

Eating Habits	Responses					Total	Wt. $\bar{X}$	I
	A (5)	O (4)	S (3)	R (2)	N (1)			
GOOD EATING HABITS								
1. I follow a strict time schedule for lunch at 12:00 noon.	80	87	151	28	17	363	3.51	O
2. I list the food in the order in which they are to be served for lunch.	30	59	102	71	101	363	2.58	S
3. I eat a heavy lunch composed of protein dish, mostly meat, vegetable dish such as "pakwet", rice and dessert for lunch.	47	72	149	53	42	363	3.08	S
4. I give special attention to where I eat lunch such as its cleanliness and neatness.	158	75	81	26	23	363	3.88	O
5. I make sure that I eat the food recommended by the health authorities and taught in school.	52	77	143	54	37	363	3.15	S
Total	-	-	-	-	-	-	16.20	
Mean	-	-	-	-	-	-	3.24	S
BAD EATING HABITS								
6. I eat my lunch at 10:00 o'clock in the morning because I don't eat breakfast.	61	55	148	49	50	363	3.08	S
7.I don't eat food containing right food nutrients needed by my body for my lunch.	25	53	98	54	133	363	2.40	S
8. I take lunch in between school work such as doing projects and assignments and studying for quizzes and recitation for classes in the afternoon.	42	54	112	43	112	363	2.64	S
9. I exclude vegetables in my menu for lunch.	46	60	145	53	59	363	2.95	S
10. I eat lunch very late in the afternoon.	34	30	119	72	108	363	2.48	S
Total	-	-	-	-	-	-	13.55	
Mean	-	-	-	-	-	-	2.61	S

Legend: 4.51 -5.00 Always (A)
3.51 -4.50 Often (O)
2.51 -3.50 Sometimes (S)
1.51 -2.50 Rarely (R)
1.00 -1.50 Never (N)

Supper Eating Habits. Table 10 presents the respondent-eating habits during supper. Of the ten supper eating habits, five eating habits were considered good supper eating habits, while the remaining five habits were considered bad supper eating habits.

For the good supper eating habits, four of the five (5) statements pertaining to supper habits were rated as "sometimes practiced" only by the respondents and one statement was rated as "often" practiced by the respondent.

The supper habit, which was "often" practiced by the respondents are "I eat supper with my family". This supper eating habit also obtained the highest weighted mean rating under this classification by the respondents. The good supper eating habit which obtained the lowest mean rating is "I avoid fatty food at night".

The three other supper eating habits which were rated as "sometimes practiced" are: 1) I give enough time for supper-3.40, 2) I eat fish/pork vegetables, rice, fruits, and drink water for supper-3.29, and 3) I eat whatever is left from the previous meal for supper-2.80.

The obtained mean for the good supper eating habits is 3.19 interpreted as "sometimes practiced" only by the respondents. This implies that the student-respondents do

Table 10

Student-Respondents' Perceptions Regarding their Supper Eating Habits

Eating Habits	Responses					Total	Wt. $\bar{X}$	I
	A (5)	O (4)	S (3)	R (2)	N (1)			
GOOD EATING HABITS								
1. I avoid fatty food at night.	38	43	151	63	58	363	2.78	S
2. I eat whatever is left from the previous meal.	34	39	167	67	56	363	2.80	S
3. I eat supper together with my family.	200	66	68	16	13	363	4.17	S
4. I give enough time for supper.	99	63	124	40	37	363	3.40	S
5. I eat fish/pork, vegetables, rice, and drink water for supper.	76	53	153	51	24	363	3.29	S
Total	-	-	-	-	-	-	16.44	
Mean	-	-	-	-	-	-	3.29	S
BAD EATING HABITS								
6. I skip eating supper because I just want to sleep immediately after school.	21	24	97	58	163	363	2.12	S
7. I eat supper as late as 9:00 o'clock in the evening because I do my assignments and projects first.	42	31	126	57	107	363	2.57	S
8. I eat what my parents tell me to eat during supper.	101	63	139	27	33	363	3.47	S
9. I eat lightly during supper such as crackers and juice.	23	37	98	50	155	363	2.24	S
10. I just drink milk for supper.	35	31	94	50	153	363	2.30	S
Total	-	-	-	-	-	-	12.70	
Mean	-	-	-	-	-	-	2.54	S

Legend: 4.51 -5.00 Always (A)
3.51 -4.50 Often (O)
2.51 -3.50 Sometimes (S)
1.51 -2.50 Rarely (R)
1.00 -1.50 Never (N)

not possess good supper eating habits because they only practice these good habits "sometimes".

For the bad supper eating habits, all the five habits were rated as sometimes practiced only by the respondents, which means that the respondents have good supper eating habits or their supper eating habits are not bad at all. The obtained mean for their bad supper habits is 2.54 interpreted as "sometimes" practiced. This mean value is lesser than the mean value obtained for their good supper eating habits.

Snacks Eating Habits. Table 11 presents the respondents snacks eating habits. Out of the 10 habits pertaining to eating snacks, five habits were classified as good breakfast habits while the remaining five habits statements were considered as bad snacks eating habits of the student-respondents.

Of the good snacks eating habits, one statement was rarely practiced while four snack habits were rated as sometimes practiced by the respondents.

The good snacks habit, which is rarely practice, is "I have rice and fish for snacks-2.03".

The good snacks habits, which were sometimes practiced only by the student-respondents are: 1) I eat snacks if I have vacant time in school-3.17, 2) I have flexible time

for snacks-3.09, 3) I only take snacks when my friends take snacks and when I am hungry -2.72, and 4) I take snacks depending on the school work given to us-2.70.

The mean rating for the good snacks habits is 2.60 interpreted as sometimes practiced only. This indicated that the student-respondents do not have good snacks habits since they sometimes practiced only these good habits.

The five bad snacks habits were rated as: one (1) as "rarely" practiced and four bad snacks eating habits as "sometimes" practiced.

The bad snacks eating habits which are sometimes practiced by the student-respondents arranged in the order of decreasing weighted mean are: 1) I eat my snacks from unsafe stalls near our school-2.83, 2) I eat junk foods and soft drink for snacks-2.77, 3) I eat my snacks very close to eating my lunch in the morning and supper in the afternoon-2.66, 4) I take snacks three times a day, one in the morning, in the afternoon and in the evening -2.46, and 5) I eat my snacks while having a class-2.28.

The obtained mean for their bad snacks eating habit was registered at 2.74, interpreted as "sometimes" practiced. This means that the student-respondents "sometimes" practiced bad snacks eating habits indicated in the checklist. Also, the mean obtained for the good snacks

Table 11

Student-Respondents' Perceptions regarding their Snacks Eating Habits

Eating Habits	Responses					Total	Wt. $\bar{X}$	I
	A (5)	O (4)	S (3)	R (2)	N (1)			
GOOD EATING HABITS								
1. I have rice and fish for snacks.	12	28	87	67	169	363	2.03	R
2. I take snacks depending on the school work given to us.	37	47	127	73	79	363	2.70	S
3. I observed time for taking my snacks.	47	57	177	44	38	363	3.09	S
4. I only take snacks when my friends have snacks and when I feel hungry.	57	37	123	38	108	363	2.72	S
5. I eat snacks if I have vacant time in school.	75	46	149	52	41	363	3.17	S
Total	-	-	-	-	-	-	13.71	
Mean	-	-	-	-	-	-	2.74	S
BAD EATING HABITS								
6. I eat my snacks very close to eating my lunch in the morning and supper in the afternoon.	26	45	147	71	74	363	2.66	S
7. I eat my snacks from unsafe stalls near our school.	50	31	160	50	72	363	2.83	S
8. I eat my snacks while having a class.	19	27	120	67	130	363	2.28	S
9. I take snacks three times a day, one in the morning, in the afternoon and in the evening.	42	36	89	77	119	363	2.46	S
10. I eat junk foods and soft drink for snacks.	30	46	151	81	55	363	2.77	S
Total	-	-	-	-	-	-	13.00	
Mean	-	-	-	-	-	-	2.60	S

Legend:

4.51 -5.00 Always (A)
3.51 -4.50 Often (O)
2.51 -3.50 Sometimes (S)
1.51 -2.50 Rarely (R)
1.00 -1.50 Never (N)

eating habit is higher that the mean for the bad snacks eating habits.

Differences in Eating Habits of the Respondents with Respect to Some Personal Variates

One-way analysis of variance (ANOVA) was utilized to test the hypothesis of no significant differences in the eating habits of the student-respondents with respect to their personal variates, namely, (a) age, (b) year level, (c) monthly family income, and (d) parents' educational attainment. The t-test was used to compare eating habits as to sex of the respondents with respect to the different meal types.

Eating Habits Pertaining to Meal Types and Age. Tables 12-15 present the results of the computation using the One-way ANOVA in comparing the student-respondents' eating habits during breakfast, lunch, supper and snacks with respect to age.

For comparing breakfast eating habits with respect to the age of the respondents, Table 12 shows this. As revealed in the summary table, the respondents sometimes practice this habits indicated in the checklist, this indicated that the respondents from 12 to 20 up old have bad habits since they only sometimes practiced the good

breakfast eating habits and they have good breakfast eating habits since they only sometimes practiced the bad breakfast habits. So considering their ages the respondents breakfast eating habits do not differ and it can be implied that these breakfast habits is true to the various ages. This further implies that the respondents have good and bad breakfast eating habits.

The result of the One-way ANOVA the computed F-value was 0.819, which was observed to be lesser than the critical F-value of 1.96. This led to the acceptance of the hypothesis that there is no significant difference in the eating habits pertaining to breakfast of the student-respondents and their age.

This means that the eating habits of the student-respondents pertaining to breakfast did not differ significantly with respect to their age.

This can be explained that while the older students can prepare their own breakfast compared to the much younger ones, still breakfast is a family affair and the breakfast is not considered as a very important meal for most of the respondents and the family budget will dictate the kind of breakfast that the respondents will have and thus their breakfast eating habits will be dictated by the family income so the breakfast eating habits of the

respondents will not differ with respect to the age of the respondents.

With respect to the student-respondents' eating habits pertaining to lunch and their age, as revealed in the summary table, the respondents lunch eating habits revealed that they sometimes practice the habits indicated in the

Table 12

Summary and Comparison of Student- Respondents Eating Habits during Breakfast with Respect to Age

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
12 years old	21	058.1	2.77	S	0.55
13 years old	60	170.7	2.85	S	0.30
14 years old	87	245.0	2.82	S	0.45
15 years old	86	241.0	2.80	S	0.38
16 years old	65	196.7	3.27	S	0.37
17 years old	28	080.0	2.86	S	0.33
18 years old	12	034.7	2.90	S	0.25
19 years old	03	008.3	2.77	S	0.04
20 years -up	01	002.7	2.70	S	-

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.506	8	0.313	0.819	1.96
Within Groups	135.342	354	0.038		
Total	137.848	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

checklist, this indicated that the respondents from 12 to 20 up old have bad habits since they only sometimes practiced the good lunch eating habits and they have good lunch eating habits since they only sometimes practiced the bad lunch habits. So considering their ages the respondents lunch eating habits do not differ and it can be implied that these lunch habits is practiced by the respondents of various ages. This data further revealed that the respondents possess both good and bad lunch eating habits.

Table 13

Summary and Comparison of Student-Respondents Eating Habits during Lunch with Respect to Age

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
12 years old	21	059.0	2.81	S	0.53
13 years old	60	177.3	2.96	S	0.44
14 years old	87	266.5	3.06	S	0.44
15 years old	86	249.7	2.90	S	0.36
16 years old	65	196.3	3.02	S	0.38
17 years old	28	083.0	2.96	S	0.44
18 years old	12	034.6	2.88	S	0.28
19 years old	03	008.6	2.87	S	1.33
20-up	01	002.8	2.80	S	-

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.005	8	0.251	0.601	1.96
Within Groups	147.550	354	0.417		
Total	149.554	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

The computed F-value was 0.601, with a critical F-value of 1.96. The hypothesis that "There are no significant differences in the eating habits during lunch of the student-respondents when grouped according to their age" was accepted since the computed F-value was lesser than the critical F-value.

This means further that the student-respondents do not differ significantly in their eating habits during lunch with respect to their age. This just indicated that the lunch eating habits of the respondents is just the same regardless of their ages because the lunch habit is dictated by the income of the family of the respondents and also sometimes by their schedule of classes and some school work.

For the eating habits during supper, Table 14 shows the summary table of the eating habits practiced by ages with the computation of the One-way ANOVA for the comparison of the student-respondents supper eating habits and their age.

The supper eating habits rating of the respondents ranges from 2.51-3.50 interpreted as "sometimes" practiced. This means that the student-respondents sometimes practiced the supper eating habits indicated in the checklist. Since, the student respondents sometimes practiced only the good

supper eating habits we can conclude that the respondents have bad supper eating habits and on the other hand they also sometimes practiced only the bad supper eating habits this indicated that the student -respondents have good supper eating habits.

This just implies that the respondents have both good and bad supper eating habits. It is clear from the same table that the computed F-value was 0.745, which was observed to be lesser than the critical F-value of 1.96.

Table 14

Summary and Comparison of Student-Respondents Eating Habits during Supper with Respect to Age

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
12 years old	21	058.5	2.79	S	0.21
13 years old	60	175.5	2.93	S	0.21
14 years old	87	250.1	2.87	S	0.41
15 years old	86	244.7	2.85	S	0.30
16 years old	65	194.0	2.98	S	0.42
17 years old	28	084.2	3.01	S	0.25
18 years old	12	036.5	3.04	S	0.42
19 years old	03	009.7	3.23	S	0.52
20-up	01	003.0	3.00	S	-

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.962	8	0.245	0.745	1.96
Within Groups	116.455	354	0.329		
Total	118.416	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Thus, the hypothesis of no significant differences in the eating habits practiced during supper of the student respondents when respondents are compared considering their age was accepted.

This implied that regardless of the age of the student-respondent, they did not differ in terms of their eating habits during supper.

For eating habits practiced during snacks, Table 15 shows the summary table of the eating habits practiced during snacks by ages with the computation of the One-way ANOVA for the comparison of the student-respondents snacks eating habits by age.

The snacks eating habits obtained a mean rating which ranges from 2.51-3.50 interpreted as "sometimes" practiced. This means that the student-respondents sometimes practiced the snacks eating habits indicated in the checklist. This indicated that the students possess both good and bad snacks eating habits.

The computed F-value was registered to be 0.944, with a critical F-value of 1.96. The critical F-value was observed to be greater than the computed F-value thereby leading to the acceptance of the hypothesis that "there are no significant differences in the eating habits with respect to snacks and the student-respondents' age". This

Table 15

Summary and Comparison of Student-Respondents Eating Habits during Snacks with Respect to Age

SUMMARY

Groups	N	Total	Average	Interpret - ation	Variance
12 years old	21	055.1	2.62	S	0.36
13 years old	60	154.2	2.57	S	0.33
14 years old	87	233.8	2.69	S	0.45
15 years old	86	229.9	2.67	S	0.37
16 years old	65	176.3	2.71	S	0.39
17 years old	28	076.5	2.73	S	0.33
18 years old	12	030.9	2.58	S	0.44
19 years old	03	010.4	3.47	S	1.01
20-up	01	002.5	2.50	S	-

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.937	8	0.367	0.944	1.96
Within Groups	137.729	354	0.389		
Total	140.666	362			

Legend:
4.51-5.00 Always (A)
3.51-4.50 Often (O)
2.51-3.50 Sometimes (S)
1.51-2.50 Rarely (R)
1.00-1.50 Never (N)

means that the student-respondents did not differ in their eating habits during snacks regardless of their age.

Eating Habits Pertaining to Meal Types and Year Level.

The four succeeding tables show the one-way ANOVA computation of the differences in the eating habits of the student-respondents during breakfast, lunch, supper, snacks and their year level.

Table 16

Summary and Comparison of Student-Respondents Eating Habits during Breakfast with Respect to Year Level

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
First Year	063	179.2	2.84	S	0.17
Second Year	112	332.3	2.97	S	0.39
Third Year	097	271.2	2.80	S	0.30
Fourth Year	091	267.0	2.93	S	0.24

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.829	3	0.610	2.100	2.63
Within Groups	104.226	359	0.290		
Total	106.055	362			

Legend:
4.51-5.00 Always (A)
3.51-4.50 Often (O)
2.51-3.50 Sometimes (S)
1.51-2.50 Rarely (R)
1.00-1.50 Never (N)

For the differences in their breakfast eating habits considering their year level, Table 16 shows in the summary table that the respondents breakfast eating habits posted a mean rating of 2.84 for the first year respondents, 2.97 for the second year, 2.80 for the third year and 2.93 for the fourth year. These mean ratings are interpreted as "sometimes" practiced. This means that when the respondents are grouped into year level they sometimes practiced only the breakfast eating habits indicated in the checklist. This indicated that the breakfast eating habits

of the respondents who are first, second, third and fourth year is comprised of good and bad eating habits.

For comparing if the difference is significant, the computed F-value of 2.100 was lesser than the critical F-value of 2.63. This led to the acceptance of the hypothesis that "there are no significant differences in the eating habits during breakfast of the student-respondents with respect to their year level.

Table 17

Summary and Comparison of Student-Respondents Eating Habits during Lunch with Respect to Year Level

SUMMARY

Groups	N	Total	Average	Interpr et- ation	Varianc e
First Year	063	183.0	2.90	S	0.47
Second Year	112	354.4	3.16	S	0.41
Third Year	097	282.5	2.91	S	0.37
Fourth Year	091	258.5	2.84	S	0.38

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	6.340	3	2.113	5.251	2.63
Within Groups	144.490	359	0.402		
Total	150.831	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

For comparing the student-respondents' eating habits during lunch with respect to their year level, Table 17 reflects this.

It is shown in the summary table, the respondents from the four different year levels (first to fourth year) have lunch eating habits with mean rating of 2.90, 3.16, 2.91, and 2.84 respectively interpreted as "sometimes practiced" the lunch eating habits indicated in the checklist. This denoted that the first, second, third and fourth year high school students practiced both good and bad lunch eating habits or all the year levels practiced the same lunch eating habits.

It is shown in the same table that the computed F-value is 5.251, which is observed to be greater than the critical F-value of 2.63. As such, the hypothesis of no significant differences in the eating habits of the student-respondents during lunch as to their year level was rejected. This means that the eating habits of the student-respondents during lunch vary as they progress to higher year levels. This can be explained that as a student advances to a higher level, he/she has grown in body and mind and his/her needs could be different. Consequently his eating habits will change.

Table 18

Result of Scheffe's Test for Differences in the Eating Habits during Lunch Practiced by the Student-Respondents and their Year Level

Groups Paired (Year Level)	Mean Difference	F-value		Interpretation
		Computed	Tabular	
1st and 2nd Year	0.2595	6.7473	2.68	S
1st and 3rd Year	0.0076	0.0055	2.68	NS
1st and 4th Year	0.0641	0.3801	2.68	NS
2nd and 3rd Year	0.2519	8.1961	2.68	S
2nd and 4th Year	0.3236	13.1649	2.68	S
3rd and 4th Year	0.0717	0.5999	2.68	NS

Since the above mentioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences of the eating habits of the student-respondents practiced during lunch and their year level.

Table 18 presents the results of the Scheffe's test to determine the differences of the eating habits practiced during lunch of the student-respondents' by year level.

With respect to the eating habits during lunch of the student-respondents and their year levels, six (6) group pairs were compared. Pair 1 - first and second year students' lunch eating habits, the table showed a significant difference in the eating habits during lunch of the student-respondents since the computed F-value of 6.7473, which was observed to be greater than the critical F-value of 2.68. Pair 2 - first and third year students'

lunch eating habits, the table showed a not significant difference since the computed F-value of 0.0055 was lesser than the critical F-value of 2.68. Pair 3 - first and fourth year student-respondents lunch eating habits showed a not significant difference because the computed F-value of 0.3801 was lesser than the critical F-value of 2.68. Pair 4 - second and third year student-respondents lunch eating habits revealed a significant difference since the computed F-value of 8.1961 was greater than the critical F-value of 2.68. Pair 5 - second and fourth year student-respondents lunch eating habits was also found to be significantly different since the computed F-value of 13.0649 was observed to be greater than the critical F-value of 2.68. Pair 6 - third and fourth year student-respondents lunch eating habits was found to be not significantly different given that the computed F-value of 0.5999 was lesser than the critical F-value of 2.68.

With respect to the student-respondents eating habits during supper and their year level, Table 19 presents the summary table and result of the One-way ANOVA for comparing differences between means of the supper eating habits of the student -respondents in the four year levels. The table revealed a significant difference since the computed F-value of 2.66 was greater than the critical F-value of

Table 19

Summary and Comparison of Student-Respondents Eating Habits during Supper with Respect to Year Level

SUMMARY

Groups	N	Total	Average	Inter-pret-ation	Variance
First Year	063	174.3	2.77	S	0.21
Second Year	112	336.4	3.00	S	0.31
Third Year	097	278.6	2.87	S	0.37
Fourth Year	091	268.0	2.94	S	0.33

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.523	3	0.841	2.66	2.63
Within Groups	113.398	359	0.316		
Total	115.922	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

2.63. This result led to the rejection of the hypothesis of no significant differences in the eating habits during supper of the student-respondents by year levels. This means that the student-respondents supper eating habits differ when they are grouped by year level. This must be because as the respondents progress to the next year level they mature and also they acquired and try to modify their eating habits from what they learn in school and their growing number of friends and peers.

Table 20

Result of Scheffe's Test for Differences in the Eating Habits Practiced during Supper by the Student-Respondents and their Year Level

Groups Paired (Year Level)	Mean Difference	F-value		Interpret-ation
		Computed	Tabular	
1st and 2nd Year	0.2369	7.1639	2.68	S
1st and 3rd Year	0.1055	1.3458	2.68	NS
1st and 4th Year	0.1784	3.7504	2.68	S
2nd and 3rd Year	0.1314	2.8416	2.68	S
2nd and 4th Year	0.0585	0.5443	2.68	NS
3rd and 4th Year	0.0729	0.7897	2.68	NS

Table 20 presents the computation of Scheffe's test to determine where the significant difference lies of the eating habits during supper of the student-respondents with respect to their year level.

With respect to the eating habits during supper of the student-respondents and their year levels, six (6) pairs were compared. Pair 1 - first and second year students supper eating habits, the table showed a significant difference since the computed F-value of 7.1639, which was observed to be greater than the critical F-value of 2.68. Pair 2 - first and third year students' supper eating habits, the table showed a not significant difference since the computed F-value of 1.3458 was lesser than the critical F-value of 2.68. Pair 3 - first and fourth year students' supper eating habits showed a significant difference

because the computed F-value of 3.7504 was greater than the critical F-value of 2.68. Pair 4 - second and third year student-respondents supper eating habits revealed a significant difference since the computed F-value of 2.8416 was greater than the critical F-value of 2.68. Pair 5 - second and fourth year student supper eating habits was also found to be not significant since the computed F-value of 0.5443 was observed to be lesser than the critical F-value of 2.68.

Table 21

Summary and Comparison of Student-Respondents Eating Habits during Snacks with Respect to Year Level

SUMMARY

Groups	N	Total	Average	Interpretation	Variance
First Year	063	162.5	2.58	S	0.30
Second Year	112	304.8	2.72	S	0.44
Third Year	097	253.6	2.61	S	0.46
Fourth Year	091	249.9	2.75	S	0.33

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.634	3	0.545	1.392	2.63
Within Groups	140.478	359	0.391		
Total	142.112	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Pair 6 - third and fourth was found to be not significant given that the computed F-value of 0.7897 was lesser than the critical F-value of 2.68.

With respect to the eating practices during snacks and the student-respondents' year level, Table 21 shows that a computed F-value of 1.3919 was lesser than the critical F-value of 2.63, which led to the acceptance of the hypothesis that "there are no significant differences in the eating habits of the student-respondents during snacks and their year level".

Eating Habits Pertaining to Meal Types and Monthly Family Income. Tables 22-25 present the differences in the eating habits pertaining to meal types with respect to student-respondents family monthly income.

As to the breakfast eating habits and family monthly income, Table 22 reveals that the computed F-value of 0.873 was lesser than the critical F-value of 1.91. This led to the acceptance of the hypothesis of no significant differences in the eating habits practiced by the student-respondents during breakfast and their monthly family income.

As to the lunch eating habits and family monthly income Table 23 reveals the computation for their responses. As revealed in the summary table, two category

Table 22

Summary and Comparison of Student-Respondents Eating Habits during Breakfast with Respect to Monthly Family Income

SUMMARY

Monthly Family Income	N	Total	Average	Interpret=ation	Variance
Less than-P 3000	079	225.2	2.85	S	0.205
P 3001 -P 6000	212	616.2	2.91	S	0.239
P 6001 -P 9000	036	100.5	2.79	S	0.272
P 9001 -P 12000	004	011.3	2.83	S	0.223
P 12001 -P 15000	007	021.3	3.04	S	0.130
P 15001 -P 18000	008	022.7	2.84	S	0.117
P 18001 -P 21000	009	024.3	2.70	S	0.185
P 21001 -P 24000	002	006.9	3.45	S	0.045
P 24001 -P 27000	002	006.2	3.10	R	0.020
P 27001 -P 30000	004	012.0	3.00	R	0.407

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.803	98	0.200	0.873	1.91
Within Groups	81.004	353	0.229		
Total	82.807	362			

Legend:

4.51-5.00	Always (A)
3.51-4.51	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

of income; income of P21001-P24000 and P24001-P27000 often practiced the lunch eating habits indicated in the checklist while the rest of the respondents categorized to the remaining income brackets only sometimes practiced the lunch eating habits. The result of the computation of One-way ANOVA was posted at 0.606, which was found to be lesser than the critical F-value of 1.91. As such, the hypothesis

Table 23

Summary and Comparison of Student-Respondents Eating Habits during Lunch with Respect to Monthly Family Income

SUMMARY

Monthly Family Income	N	Total	Average	Interpret-ation	Variance
Less than- P 3000	079	231.7	2.93	S	0.463
P 3001 - P 6000	212	629.3	2.97	S	0.429
P 6001 - P 9000	036	107.4	2.98	S	0.364
P 9001 - P 12000	004	011.9	2.98	S	0.283
P 12001 - P 15000	007	021.8	3.11	S	0.321
P 15001 - P 18000	008	021.7	2.71	S	0.221
P 18001 - P 21000	009	026.9	2.99	S	0.476
P 21001 - P 24000	002	007.1	3.55	O	0.125
P 24001 - P 27000	002	007.2	3.60	O	0.320
P 27001 - P 30000	004	012.3	3.08	S	0.409

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.304	9	0.256	0.606	1.91
Within Groups	149.109	353	0.422		
Total	151.413	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

that "there are no significant differences in the eating habits practiced during lunch by the student-respondents and their monthly family income" was accepted.

The differences in the eating habits of the student-respondents' practiced during supper with respect to their monthly family income are presented in Table 24.

It shows the computed F-value of 0.613 which is lesser than the critical F-value of 1.91. This led to the acceptance of the hypothesis of no significant differences in the eating habits practiced during supper and the student-respondents' monthly family income.

Table 24

Summary and Comparison of Student-Respondents Eating Habits during Supper with Respect to Monthly Family Income

SUMMARY

Monthly Family Income	N	Total	Average	Interpret-ation	Variance
Less than-P 3000	079	229.2	2.90	S	0.396
P 3001 -P 6000	212	623.3	2.94	S	0.301
P 6001 -P 9000	036	102.9	2.86	S	0.248
P 9001 -P12000	004	012.2	3.05	S	0.277
P 12001 -P15000	007	019.6	2.80	S	0.253
P 15001 -P18000	008	022.4	2.80	S	0.137
P 18001 -P21000	009	027.3	3.03	S	0.725
P 21001 -P24000	002	005.9	2.95	S	0.405
P 24001 -P27000	002	004.9	2.45	R	0.605
P 27001 -P30000	004	010.0	2.50	R	0.333

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.785	9	0.198	0.613	1.91
Within Groups	114.227	353	0.324		
Total	116.011	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Table 25 shows the differences in the eating habits practiced by the student-respondents during snacks with respect to their monthly family income. As gleaned in same table, the computed F-value of 0.613 was observed to be lesser than the critical F-value of 1.91, which led the researcher to conclude that there are no significant differences in the eating habits of the student-respondents practiced during snacks with respect to their monthly family income.

Table 25

Summary and Comparison of Student-Respondents Eating Habits during Snacks with Respect to Monthly Family Income

SUMMARY

Monthly Family Income	N	Total	Average	Interpret-ation	Variance
Less than - P 3000	079	207.5	2.63	S	0.437
P 3001 - P 6000	212	567.5	2.68	S	0.339
P 6001 - P 9000	036	095.9	2.66	S	0.369
P 9001 - P 12000	004	012.7	3.18	S	0.229
P 12001 - P 15000	007	022.0	3.14	S	0.553
P 15001 - P 18000	008	020.4	2.55	S	0.377
P 18001 - P 21000	009	025.1	2.79	S	0.879
P 21001 - P 24000	002	006.5	3.25	S	0.125
P 24001 - P 27000	002	005.0	2.50	R	0.020
P 27001 - P 30000	004	007.9	1.98	R	0.749

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	5.65	9	0.627	1.634	1.91
Within Groups	135.54	353	0.384		
Total	141.19	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Eating Habits Pertaining to Meal Types and Father's Educational Attainment. Found in Tables 26-29 are the results of the computation of one-way ANOVA to test the hypothesis of no significant differences in the eating habits of the student-respondents pertaining to meal types with respect to their fathers' educational attainment.

As shown in Table 26, the mean rating obtained for the student-respondents' eating habits practiced during

Table 26

Summary and Comparison of Student-Respondents Eating Habits during Breakfast with Respect to Father's Educational Attainment

SUMMARY

Father Educational Background	N	Total	Average	Interpret-ation	Variance
Elem. Level	134	390.1	2.911	S	0.228
Elem. Grad	090	256.6	2.851	S	0.227
HS Level	048	142.7	2.973	S	0.227
HS Grad	043	124.4	2.893	S	0.252
College Level	025	067.2	2.688	S	0.230
College Grad	021	059.4	2.829	S	0.154
Grad & Post Grad	002	006.3	3.150	S	0.245

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	1.745	6	0.290	1.285	2.12
Within Groups	80.635	356	0.227		
Total	82.380	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

breakfast and their fathers' educational attainment posted a computed F-value of 1.285, which was said to be lesser than the critical F-value of 2.12. Consequently, the hypothesis that there are no significant differences in the eating habits of the student-respondents practiced during breakfast with respect to their fathers' educational attainment was accepted.

Table 27

Summary and Comparison of Student-Respondents Eating Habits during Lunch with Respect to Father's Educational Attainment

SUMMARY

Father Educational Background	N	Total	Average	Interpret-ation	Variance
Elem. Level	134	413.0	3.08	S	0.397
Elem. Grad	090	254.0	2.82	S	0.412
HS Level	048	141.0	3.07	S	0.430
HS Grad	043	124.0	2.89	S	0.476
College Level	025	071.9	2.88	S	0.387
College Grad	021	063.9	3.04	S	0.361
Grad & Post Grad	002	005.4	2.70	S	0.180

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	4.876	6	0.813	1.978	2.12
Within Groups	145.429	356	0.411		
Total	150.305	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

For their lunch, shown in Table 27, a not significant difference between the eating habits of the student-respondents practiced during lunch and their fathers' educational attainment was observed given that the computed F-value of 1.978 was less than the critical F-value of 2.12.

Table 28 reveals that there was a not significant difference between the eating habits practiced during

Table 28

Summary and Comparison of Student-Respondents Eating Habits during Supper with Respect to Father's Educational Attainment

SUMMARY

Father Educational Background	N	Total	Average	Interpret-ation	Variance
Elem. Level	134	400.4	2.99	S	0.319
Elem. Grad	090	252.3	2.80	S	0.321
HS Level	048	137.2	2.98	S	0.409
HS Grad	043	124.0	2.88	S	0.299
College Level	025	071.9	2.88	S	0.330
College Grad	021	060.1	2.86	S	0.152
Grad & Post Grad	002	006.2	3.10	S	0.500

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.255	6	0.376	1.173	2.12
Within Groups	113.470	356	0.321		
Total	115.730	362			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

supper by the student-respondents and their fathers' educational attainment since the computed F-value was posted at 1.173 which was observed to be lesser than the critical F-value of 2.12.

Table 29 shows the not significant difference between the eating habits practiced by the student-respondents during snacks and their fathers' educational attainment given that the computed F-value was 1.3155, compared to the critical F-value of 2.12.

Table 29

Summary and Comparison of Student-Respondents Eating Habits during Snacks with Respect to Father's Educational Attainment

SUMMARY

Father Educational Background	N	Total	Average	Interpret-ation	Variance
Elem. Level	134	366.3	2.73	S	0.395
Elem. Grad	090	239.9	2.67	S	0.282
HS Level	048	121.9	2.65	S	0.537
HS Grad	043	107.8	2.51	S	0.354
College Level	025	067.4	2.70	S	0.510
College Grad	021	056.4	2.69	S	0.453
Grad & Post Grad	002	007.0	3.50	S	0.180

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	3.082	6	0.514	1.315	2.12
Within Groups	138.240	356	0.390		
Total	141.323	360			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Eating Habits Pertaining to Meal Types and Mother's Educational Attainment. Presented in the next five tables are the results of the computation of the One-way ANOVA with respect to the differences in the eating habits of the student-respondents pertaining to meal types and their mothers' educational attainment.

Table 30 shows the student-respondents' eating habits practiced during breakfast and their mothers' educational attainment. The table reveals that the computed F-value was

Table 30

Summary and Comparison of Student-Respondents Eating Habits during Breakfast with Respect to Mother's Educational Attainment

SUMMARY

Mother Education	N	Total	Average	Interpret-ation	Variance
Elem. Level	85	245.1	2.88	S	0.243
Elem. Grad	86	247.9	2.92	S	0.225
HS Level	91	262.6	2.89	S	0.271
HS Grad	40	114.5	2.86	S	0.169
College Level	33	087.4	2.73	S	0.233
College Grad	29	084.8	2.92	S	0.106

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	0.894	5	0.178	0.791	2.12
Within Groups	80.441	356	0.226		
Total	81.335	361			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

posted at 1.4978, which was observed to be lesser than the critical F-value of 2.24. This led to the acceptance of the hypothesis that "there are no significant differences in the eating habits of the student-respondents practiced during breakfast and their mothers' educational attainment.

There was a significant difference between the student-respondents' eating habits practiced during lunch

Table 31

Summary and Comparison of Student-Respondents Eating Habits during Lunch with Respect to Mother's Educational Attainment

SUMMARY

Mother Education	N	Total	Average	Interpret-ation	Variance
Elem. Level	85	231.3	2.72	S	0.385
Elem. Grad	85	232.3	2.73	S	0.460
HS Level	91	238.5	2.62	S	0.289
HS Grad	40	106.2	2.66	S	0.437
College Level	32	077.1	2.41	S	0.302
College Grad	29	083.9	2.89	S	0.463

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	4.384	6	0.877	2.289	2.239
Within Groups	136.345	356	0.383		
Total	140.729	361			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

and their mothers' educational attainment, as shown in Table 31.

A significant difference was concluded since the computed F-value was posted at 2.2893, as compared to the critical F-value of 2.2393.

Since the hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences. It is shown in Table 32.

Table 32

Result of Scheffe's Test for Differences in the Eating Habits during Lunch Practiced by the Student-Respondents and their Mothers' Educational Attainment

No.	Groups Paired (Year Level)	Mean Difference	F-value		Inter-pret-ation
			Computed	Tabular	
1	Elem. Level & Elem. Grad.	0.01	0.011	2.24	NS
2	Elem. Level & HS Level	0.10	1.147	2.24	NS
3	Elem. Level & HS Grad.	0.06	0.256	2.24	NS
4	Elem. Level & Col. Level	0.31	5.633	2.24	S
5	Elem. Level & Col. Grad.	0.17	1.632	2.24	NS
6	Elem. Grad. & HS Level	0.11	1.388	2.24	NS
7	Elem. Grad. & HS Grad.	0.07	0.348	2.24	NS
8	Elem. Grad. & Col. Level	0.32	6.216	2.24	S
9	Elem. Grad. & Col. Grad.	0.16	1.445	2.24	NS
10	HS Level & HS Grad.	0.04	0.116	2.24	NS
11	HS Level & Col. Level	0.21	2.726	2.24	S
12	HS Level & Col. Grad.	0.27	4.186	2.24	S
13	HS Grad. & Col. Level	0.25	2.901	2.24	S
14	HS Grad. & Col. Grad.	0.23	2.322	2.24	S
15	Col. Level & Col. Grad.	0.48	8.405	2.24	S

Based on the same test, 15 pairs were compared. Pair 1 - elementary level and elementary graduate, the table showed no significant difference since the computed F-value of 0.011 was observed to be lesser than the critical F-value of 2.24. Pair 2 - elementary level and high school level, the table showed a not significant difference since the computed F-value of 1.147 was lesser than the critical F-value of 2.24.

Pair 3 - elementary level and high school graduate showed a not significant difference because the computed F-value of 0.256 was lesser than the critical F-value of 2.24. Pair 4 - elementary level and college level revealed significant differences since the computed F-value of 5.633 was greater than the critical F-value of 2.24. Pair 5 - elementary level and college graduate was also found to be not significant since the computed F-value of 1.632 was observed to be lesser than the critical F-value of 2.24.

Pair 6 - elementary graduate and high school level was found to be not significant given that the computed F-value of 1.388 was lesser than the critical F-value of 2.24. Pair 7 - elementary graduate and high school graduate was found to be not significant since the computed F-value of 0.348 was lesser than the critical F-value of 2.24. Pair 8 - elementary graduate and college level registered a not

significant difference since the computed F-value of 6.216 was greater than the critical F-value of 2.96. Pair 9 - elementary graduate and college graduate had a not significant difference because the computed F-value of 1.445 was lesser than the critical F-value of 2.96. Pair 10 - high school level and high school graduate was found to have a not significant difference since the computed F-value of 0.116 was less than the critical F-value of 2.96.

Pair 11 - high school level and college level revealed a significant difference since the computed F-value of 2.726 was greater than the computed F-value of 2.24. Pair 12 - high school level and college graduate was significant because the computed F-value was posted at 4.186 which was observed to be greater than the critical F-value of 2.24. Pair 13 high school graduate and college level was said to be significant given that the computed F-value of 2.901 was greater than the critical F-value of 2.24. Pair 14 - high school graduate and college graduate was also significant considering that the result of the computation of Scheffe's test was 2.322 was greater than the critical F-value of 2.24. Pair 15 - college level and college graduate, which was described as significant difference considering that the computed F-value of 8.405 was greater than the critical F-value of 2.24.

In Table 33, the data show that there was not significant difference between the student-respondents' eating habits practiced during supper and mothers' educational attainment, as indicated by a computed F-value of 0.3416, which was observed to be lesser than the critical F-value of 2.23. This result led to the acceptance of the hypothesis that "there are no significant differences in the eating habits of the students during supper and their mothers' educational attainment.

Table 33

Summary and Comparison of Student-Respondents Eating Habits during Supper with Respect to Mother's Educational Attainment

SUMMARY

Mother Education	N	Total	Average	Interpret-ation	Variance
Elem. Level	85	255.3	3.00	S	0.402
Elem. Grad	85	253.0	2.98	S	0.420
HS Level	91	273.1	3.00	S	0.418
HS Grad	40	117.1	2.93	S	0.595
College Level	32	91.2	2.85	S	0.376
College Grad	29	86.0	2.97	S	0.303

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	0.720	6	0.144	0.342	2.24
Within Groups	150.037	356	0.421		
Total	150.757	361			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

A computed F-value of 1.498 was obtained between the student-respondents' eating habits practiced during snacks and their mothers' educational attainment. This value was observed to be less than the critical F-value of 2.23. Thus, the hypothesis of no significant differences in the eating habits of the student-respondents practiced during snacks and their mothers' educational attainment was accepted.

Table 34

Summary and Comparison of Student-Respondents Eating Habits during Snacks with Respect to Mother's Educational Attainment

SUMMARY

Mother Education	N	Total	Average	Interpret-ation	Variance
Elem. Level	85	253.3	2.98	S	0.339
Elem. Grad	85	253.4	2.98	S	0.307
HS Level	91	256.2	2.81	S	0.345
HS Grad	40	118.2	2.98	S	0.365
College Level	32	088.3	2.79	S	0.281
College Grad	29	082.0	2.86	S	0.189

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	2.388	5	0.478	1.498	2.24
Within Groups	113.526	356	0.319		
Total	115.914	361			

Legend:

4.51-5.00	Always (A)
3.51-4.50	Often (O)
2.51-3.50	Sometimes (S)
1.51-2.50	Rarely (R)
1.00-1.50	Never (N)

Eating Habits Pertaining to Meal Types and Sex.

Presented in Table 35-Table 38 are the results of the computations of the t-test for independent samples to test the hypothesis that "There are no significant differences in the eating habits of the student-respondents' grouped according to their sex", male and female.

Insofar as sex is concerned, for comparing breakfast eating habits of the sexes, the female group has a higher mean score compared to the male group. The mean of the female for their breakfast eating habits is 2.99, which is interpreted as "sometimes" practiced while the male students have a mean of 2.91 interpreted as sometimes practiced. The mean difference is 0.08. To test if this mean difference is significant, the computed t-value of 0.457 was obtained. The computed t-value was observed to be lesser than the critical t-value, which is 1.97 at .05 level of significance, two tail and df = 361. Thus, the hypothesis of no significant difference in the eating habits practiced during breakfast of the male and female student-respondents was accepted. This means further that the eating practices of the respondents during breakfast are not significantly different between a male and a female.

Table 35

t-test for Comparing Student-Respondents Eating Habits During Breakfast with Respect to Sex

Statistics	SEX	
	Female	Male
Mean	2.99	2.92
No. of Cases	247	116
Variance	2.790	0.208
Mean Difference	.07	
Df	361	
t Stat	0.457	
t Critical two-tail, α = .05	1.967	
Interpretation	Not Significant	

For the difference between the student-respondents' eating habits practiced during lunch and their sex. As shown in Table 36, the female group has a higher mean score compared to the male group. The mean of the female for their lunch eating habits is 2.98, which is interpreted as "sometimes" practiced while the male students have a mean of 2.96 interpreted as "sometimes" practiced. The mean difference is 0.02 in favor of the females. To test if this mean difference is significant, the computed t-value of 0.293 was obtained. This computed t-value was observed to be lesser than the critical t-value, which is 1.97 at .05 level of significance, two tail and df = 361. Thus, the hypothesis of no significant difference in the eating

Table 36

t-test for Comparing Student-Respondents Eating Habits During Lunch with Respect to Sex

Statistics	SEX	
	Female	Male
Mean	2.98	2.96
No. of Cases	247	116
Variance	0.421	0.411
Mean Difference	.02	
Df	361	
t Stat	0.293	
t Critical two-tail, α = .05	1.967	
Interpretation	Not Significant	

habits practiced during lunch of the male and female student-respondents was accepted. This means further that the eating practices of the respondents during lunch are not significantly different between a male and a female.

For the supper eating habits of the male and female students -respondents, Table 37 shows that the mean obtained for the male respondents supper eating habits is higher compared to the females but the descriptive interpretation of this mean values are the same, "sometimes" practiced. The difference in their mean values of .02 is not significant based on the t-test result. The obtained t-value is -0.380, which is less than the critical t-value which is 1.967, at .05 level of significance, two

Table 39

Student-Respondents' Level of Performance in Technology and Livelihood Education (T.L.E.)

Grade in T.L.E.	Frequency	Percentage
94-96	001	00.28
91-93	008	02.20
88-90	038	10.24
85-87	068	18.73
82-84	119	32.78
79-81	087	23.97
76-78	038	10.47
73-75	004	01.10
Total	363	100.00
Mean	82.88	-
Interpretation	Satisfactory	-

lowest grade was posted at 73. The mean grade was posted at 82.88, which is interpreted as "satisfactory".

Performance in Academic Subjects. As to academic performance of the students, Table 40 shows that 119 student-respondents or 32.78 percent had from 84-86 average grades in all subject areas, followed by 108 or 29.75 percent who had 78-80 average grades. Only one student or 0.28 percent earned an average grade from 90-92. Two (2) students earned an average grade from 69-71.

In the meantime, the highest grade was observed to be 91 while the lowest grade was observed to be 70. The mean grade was 81.61, interpreted as "satisfactory". This result

Table 40

Student-Respondents' Level of Performance in Academic Subjects

Average Grade in All Subjects	Frequency	Percentage
90-92	001	00.28
87-89	021	05.79
84-86	119	32.78
81-83	081	22.31
78-90	108	29.75
75-77	020	05.51
72-74	011	03.03
69-71	002	00.55
Total	363	100.00
Mean	81.61	
Interpretation	Satisfactory	

implied that the student-respondents had satisfactory performance in all the subject areas offered in the secondary curriculum.

Relationship between Student-Respondents Academic and T.L.E. Performance and Personal Variates

This section presents the following: 1) relationship between the academic performance of the student-respondents and personal variates, and 2) relationship between the T.L.E. performance of the student-respondents and personal variates.

Academic Performance and Personal Variates. Table 41 presents the result of the correlation done between the academic performance (average grade in all subjects) and personal variates of the student-respondents.

For academic performance and age, Table 41 shows the result of the correlation analysis made between the student-respondents' academic performance and age was posted at 0.0204, with a Fisher's t-value of 0.3875. The computed t-value was observed to be lesser than the critical t-value of 1.96. Thus, at 0.05 level of significance, the hypothesis of no significant relationship between the student-respondents' academic performance and their age was accepted. This implies that the level of academic performance of the student-respondents of this study is not influenced by their age.

Table 41

Relationship between Academic Performance and Personal Variates of the Student-Respondents

Personal Variates	r-value	t-value	Interpretation
Age	0.0204	0.3875	NS
Sex	0.0060	0.1137	NS
Year Level	-0.0383	-0.7276	NS
Monthly Family Income	-0.0419	-0.7972	NS
Parents' Educational Attainment			
Father	-0.0494	-0.9400	NS
Mother	-0.0916	-1.7479	NS

t_{crit} = 1.96, 0.05 level of significance

For academic performance and sex, the correlation analysis made between the academic performance of the student-respondents of this study and their sex was pegged at 0.0059, with a Fisher's t-value of 0.1137. This value was observed to be lesser than the critical t-value of 1.96, level of significance at .05. This led to the acceptance of the hypothesis that "There is no significant relationship between the student-respondents' academic performance and their sex", which means that the latter did not influence the academic performance of the student-respondents.

For academic performance and year level, the obtained r is -0.0383 (coefficient of correlation), with a Fisher's t-value of -0.7276 was revealed between the academic performance and the student-respondents' year level. The computed t-value of -0.7276 was observed to be lesser than the critical t-value of 1.96. This led to the acceptance of the hypothesis that "there is no significant relationship between the student-respondents' level of academic performance and their year level". This implies that the respondents' year level had no influence on their performance based on the average grade obtained in all the subject areas in the secondary curriculum.

For academic performance and monthly family income, as gleaned in Table 41, a -0.016 correlation coefficient, with a Fisher's t-value of -0.307, was observed between the academic performance and the monthly family income of the student-respondents. At 0.05 level of significance, the hypothesis of no significant relationship between the academic performance and the student-respondents' family monthly income was accepted.

For academic performance and parents' educational attainment, for the relationships between fathers' educational attainment and academic performance, a -0.0494 coefficient of correlation and computed t-value of -0.9400 was observed in Table 41. These results revealed a not significant relationship between the academic performance of the student-respondents and their fathers' educational attainment since the computed t-value of -0.9399 was observed to be lesser than the critical t-value of 1.96.

Also, Table 41 reveals a correlation of -0.0916, with a Fisher's t-value of -1.7479 was observed for the relationships between academic performance and educational attainments of the mothers. Hence, the hypothesis that "there is no significant relationship between the academic performance and the student-respondents' mothers' educational attainment" was accepted at level of

significance set at 0.05. This means that the educational attainment of the respondents' mothers did not influence their academic performance since the computed t-value of -1.7479 was lesser than the critical t-value of 1.96.

Relationship between T.L.E. Performance and Personal Variates. Table 42 shows the relationship between the level of academic performance in Technology and Livelihood Education and some personal variates of the student-respondents of this study.

Performance in T.L.E. and Age. As shown in Table 42, the computation of the coefficient of correlation revealed a value posted at 0.0902, with a Fisher's t-value of 1.7211, which is observed to be lesser than the critical t-value of 1.96. This result led to the acceptance of the hypothesis that "there is no significant relationship between the level of academic performance in Technology and Livelihood Education (T.L.E.) and the student-respondents' age". As such, age is said not to influence the level of academic performance in T.L.E. of the student-respondents.

Performance in T.L.E. and Sex. A 0.00009 coefficient of correlation was posted after the correlation analysis was had. With a Fisher's t-value of 0.0018 and at 0.05 level of significance, the hypothesis of no significant relationship between the level of academic performance in

Table 42

Relationship between T.L.E. Performance and Personal Variates of the Student-Respondents

Personal Variates	r-value	t-value	Interpretation
Age	0.0902	1.7211	NS
Sex	0.0001	0.0018	NS
Year Level	0.0654	1.2458	NS
Monthly Family Income	0.0259	0.4925	NS
Parents' Educational Attainment			
Father	-0.0534	-1.0163	NS
Mother	-0.1082	-2.0675	S

t_{crit} = 1.96, 0.05 level of significance

Technology and Livelihood Education (T.L.E.) and the student-respondents' sex was accepted since the computed t-value was lesser than the critical t-value.

Performance in T.L.E. and Year Level. A no significant relationship was concluded between the level of academic performance in Technology and Livelihood Education (T.L.E.) and the student-respondents' year level since the coefficient of correlation was 0.0654, with a Fisher's t-value of 1.2458, which was observed to be lesser than the critical t-value of 1.96. Hence, the acceptance of the hypothesis that "there is no significant relationship between the level of academic performance in T.L.E. and the student-respondents' year level.

Performance in T.L.E. and Family Monthly Income. As revealed in Table 12, the result of the correlation analysis was posted at 0.0259, with a Fisher's t-value of -0.4925. This value was observed to be lesser than the critical t-value of 1.96. Thus, this led to the acceptance of the hypothesis that "there is no significant relationship between the level of academic performance in T.L.E. and the student-respondents' family monthly income.

Performance in T.L.E. and Parents' Educational Attainment. Found in Table 12 is the computation of the correlation between the level of academic performance in Technology and Livelihood Education (T.L.E.) and the parents' educational attainment.

A correlation coefficient of -0.0534, with a Fisher's t-value of -1.0163 was posted between the level of academic performance in T.L.E. and the student-respondents' fathers' educational attainments. The computed t-value was found to be lesser than the critical t-value of 1.96. This led to the acceptance of the hypothesis that there is no significant relationship between the level of academic performance in T.L.E. and the educational attainment of the student-respondents' fathers.

By contrast, a -0.1082 correlation of coefficient was obtained between the level of academic performance in

T.L.E. and the student-respondents' mothers educational attainment. With a Fisher's t-value of -2.0675, which was observed to be greater than the critical t-value of 1.96, the hypothesis of no significant relationship between the level of academic performance in T.L.E. and the educational attainment of the student-respondents' mothers was rejected. Thus, there was a significant relationship between the two variates which further implies that the educational attainment of the mothers influence their students' performance in school.

Relationship between the Student-Respondents Eating Habits and Academic and T.L.E. Performance

This section presents the correlation analyses made between: 1) the student-respondents academic performance and their eating habits as to the four meal types (Table 43) and 2) the student-respondents T.L.E. performance and their eating habits as to the four meal types (Table 44).

Academic Performance and Eating Habits as to Meal Types. Represented in Table 43 are the results of the correlation analyses made between the level of academic performance of the student-respondents' and their eating habits grouped according to meal types.

As to level of academic performance and breakfast, the computed r-value was 0.1000, with a Fisher's t-value of 1.9099, which was observed to be lesser than the critical t-value of 1.96. This result led to the acceptance of the hypothesis that "there is no significant relationship between the level of academic performance and the student-respondents' eating habits during breakfast".

A correlation coefficient of 0.0066, with a Fisher's t-value of 0.1260 was obtained between the student-respondents' academic performance and the student-respondents' practice of eating habits during lunch.

It is clear from the table above that the computed correlation of 0.0235, with a Fisher's t-value of 0.4460 was obtained. This resulted to the acceptance of the hypothesis of no significant relationship between the respondents' level of academic performance and their eating habits during supper.

Snacks received a correlation coefficient of 0.1325, with a Fisher's t-value of 2.5396. This latter value was observed to be greater than the critical t-value of 1.96 which led to the rejection of the hypothesis of no significant relationship between the student-respondents' level of academic performance and their snacks eating habits.

Table 43

Relationship between Student-Respondents Academic Performance and Eating Habits as to Meal Types

Eating Habits	r-value	t-value	Interpretation
Breakfast	0.1000	1.9099	NS
Lunch	0.0066	0.1260	NS
Supper	0.0235	0.4460	NS
Snacks	0.1325	2.5396	S

t_{crit} = 1.96, 0.05 level of significance

This implies that snacks play an important part in the academic performance of the students.

T.L.E. Performance and Eating Habits as to Meal Types.

In Table 44, the relationship between the level of performance in Technology and Livelihood Education (T.L.E.) and the student-respondents' eating habits grouped according to meal types was presented.

It is clear from the same table that the obtained correlation coefficient between the level of performance in T.L.E. and the eating habits of the student-respondents during breakfast was posted at -0.0828, with a Fisher's t-value of -1.5786. The said computed t-value was observed to be lesser than the critical t-value of 1.96. Hence, the hypothesis of no relationship between the student-respondents' level of performance in T.L.E. and their eating habits during breakfast was accepted. This, in turn,

led to the conclusion that eating habits during breakfast did not have impact on the student-respondents' level of performance in T.L.E.

For eating habits practiced during lunch and the level of performance in T.L.E., a correlation coefficient of -0.0433, with a Fisher's t-value of -0.8232 was observed. Since the computed t-value was lesser than the critical t-value of 1.96, the hypothesis that "there is no significant relationship between the student-respondents' level of academic performance in T.L.E. and their eating practices during lunch" was accepted.

For supper eating habits and level of academic performance in T.L.E., Table 44 shows a correlation coefficient of 0.0572 and a Fisher's t-value of -0.0878, with a critical t-value of 1.96, the hypothesis showing a no significant relationship between the level of academic performance in T.L.E. and supper eating habits was accepted because the computed t-value of -0.0878 was observed to be lesser than said critical t-value.

The computed r-value of 0.1669 was obtained between the student-respondents' level of performance in T.L.E. and their eating practices when having snacks. A computed t-value of 3.2160 was observed to be greater than the critical t-value of 1.96, level of significance at .05. As

Table 44

Relationship between Student-Respondents T.L.E. Performance and Eating Habits as to Meal Types

Eating Habits	r-value	t-value	Interpretation
Breakfast	-0.0828	-1.5786	NS
Lunch	-0.0433	-0.8232	NS
Supper	-0.0572	-1.0878	NS
Snacks	0.1669	3.2160	S

t_{crit} = 1.96, 0.05 level of significance

such, the hypothesis of no significant relationship between the level of academic performance in T.L.E. and the student-respondents' eating practices during snacks was rejected. This means that the student-respondents' performance in T.L.E. is influenced by their eating practices during snacks, this must be because, majority of the student-respondents do not eat breakfasts.

Implications

The following implications were drawn out from the study:

1. The stakeholders in education should augment their campaign in improving eating habits per year level in the secondary curriculum as it was revealed that there were differences in the eating habits of the student-respondents as to meal types and their year level.

2. The mothers of the student-respondents should be educated as to the good eating habits and should lead as a good example when it comes to the development of healthy eating habits to enhance their students' eating habits as it was revealed that there were differences in the eating habits of the student-respondents as to mother educational attainment.

2. Intensive information campaign and close monitoring of the student-respondents eating habits by the stakeholders in education, the teachers and their parents to develop good eating habits especially during snacks, identified as only "sometimes" practiced since it was found out that it is related to student performance in T.L.E.

3. Public secondary school canteen and other school rooms, more particularly, the Technology and Livelihood Education (T.L.E.) rooms should be more conducive to the enhancement of the student-respondents' practice of good eating habits.

4. The teachers in all subject areas and in Technology and Livelihood (T.L.E.) and stakeholders in education need to be more sensitive to the nutritional needs of the students especially their snacks in school to enhance their academic and T.L.E. performance which is just satisfactory.

6. Stakeholders and teachers in education, parents and students themselves need to look closely into other factors that may have influence in their eating habits, other than those that have already been considered here.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the findings derived from the data of the study, the conclusions made on the bases of these findings as well as the recommendations.

Summary of Findings

The following were the major findings of the study:

1. The student-respondents have a mean age 14.74 years old, majority belonged to the female sex, in their second year in high school, have a mean income of P 5,692.64 or belonged to the low income bracket, with majority of their fathers who reached elementary level and mothers who reached high school level and both parents have not pursued graduate studies.

2. The student-respondents practiced both good and bad eating habits as to this four meal types; breakfast, lunch, supper and snacks. The good eating habits as to the four meal types are sometimes practiced by them so with the bad eating habits as to these four meal types were also sometimes practiced.

3. There were no significant differences between the student-respondents eating habits as to meal types and

their age, sex, monthly family income, and fathers' educational background.

4. Based on the computation of one-way ANOVA, there were significant differences in the eating habits of the student-respondents with respect to year level, specifically with respect to lunch and year level and supper and year level.

5. The computation of the one-way ANOVA also revealed significant differences in the eating habits of the student-respondents with respect to mothers' educational attainment specifically with respect to lunch.

6. The academic performance by the student-respondents in all subject areas obtained a mean of 81.61, interpreted as "satisfactory".

7. The level of academic performance of the student-respondents in Technology and Livelihood Education (T.L.E.) was posted at 82.88, which is interpreted as "satisfactory".

8. The correlation analyses made between the student-respondents' level of academic performance and the different variates revealed a not significant relationship, as indicated by the computed r-values which were observed to be lesser than the critical t-values.

9. The correlation analyses made between the student-respondents' level of performance in Technology and Livelihood Education (T.L.E.) and the different variates revealed a not significant relationship as proven by the computed r-values which were lesser than the critical t-values. Except for the relationship between the level of academic performance in T.L.E. and the mothers' educational attainment which was considered significant given that a -0.1082 correlation of coefficient was obtained with a Fisher's t-value of -2.0675, which was observed to be greater than the critical t-value of 1.96, the hypothesis of no significant relationship between the level of academic performance in T.L.E. and the educational attainment of the student-respondents' mothers was rejected.

10. The correlation analyses made between the student-respondents' level of performance in Technology and Livelihood Education (T.L.E.) and their eating habits revealed a not significant relationship as proven by the computed r-values which were lesser than the critical t-values. As to level of academic performance and breakfast, the computed r-value was 0.1000, with a Fisher's t-value of 1.9099, which was observed to be lesser than the critical t-value of 1.96. This result led to the acceptance of the

hypothesis that "there is no significant relationship between the level of academic performance in all subject areas and the student-respondents' eating habits during breakfast.

A correlation coefficient of 0.0066, with a Fisher's t-value of 0.1260 was obtained between the student-respondents' level of academic performance and the student-respondents' practice of eating habits during lunch.

The computed correlation of 0.0235, with a Fisher's t-value of 0.4460 was obtained. This resulted to the acceptance of the hypothesis of no significant relationship between the respondents' level of academic performance and their eating habits during supper.

Snacks received a correlation coefficient of 0.1325, with a Fisher's t-value of 2.5396. This latter value was observed to be greater than the critical t-value of 1.96 which led to the rejection of the hypothesis of no significant relationship between the student-respondents' level of academic performance and their eating habits practiced during snacks.

11. The obtained correlation coefficient between the level of performance in T.L.E. and the eating habits of the student-respondents during breakfast was posted at -0.0828, with a Fisher's t-value of 1.5786. The said computed t-

value was observed to be lesser than the critical t-value of 1.96. Hence, the hypothesis of no relationship between the student-respondents' level of performance in T.L.E. and their eating habits during breakfast was accepted.

For eating habits practiced during lunch and the level of academic performance in T.L.E., a correlation coefficient of -0.0433, with a Fisher's t-value of -0.8232 was observed. Since the computed t-value was lesser than the critical t-value of 1.96, the hypothesis that "there is no significant relationship between the student-respondents' level of academic performance in T.L.E. and their eating practices during lunch" was accepted.

For supper eating habits and level of academic performance in T.L.E., a correlation coefficient of -0.0572 and a Fisher's t-value of -1.0878 were obtained. With a critical t-value of 1.96, the hypothesis showing a no significant relationship between the level of performance in T.L.E. and supper eating habits was accepted because the computed t-value of -1.0878 was observed to be lesser than said critical t-value.

The computed r-value of 0.1669 was obtained between the student-respondents' level of T.H.E. performance and their eating practices when having snacks. A computed t-value of 3.2160 was observed to be greater than the

critical t-value of 1.96, level of significance at .05. As such, the hypothesis of no significant relationship between the level of academic performance in T.L.E. and the student-respondents' practices during snacks was rejected. This means that the student-respondents' performance in T.L.E. is influenced by their eating practices during snacks.

Conclusions

On the bases of the findings given in the preceding section, the following conclusions were derived:

1. Year level and mothers' educational attainment are the factors that influence the differences in the students' eating habits.

2. Eating habits are not influenced by the other personal variates inherent in the students such as their age, sex, monthly family income and father's educational attainment.

3. The secondary students' level of performance in all subject areas is not influenced by the different personal variates.

4. The secondary students' level of performance in Technology and Livelihood Education is not influenced by

their personal variates, except that of the mothers' educational attainment.

5. Eating habits during breakfast, lunch, and supper do not influence the student-respondents' academic performance and performance in Technology and Livelihood Education (T.L.E.).

5. Eating habits during snacks influenced their academic and T.L.E. performances.

Recommendations

The following recommendations were given:

1. The public secondary school teachers should work closely with their students' parents to encourage the development of healthy eating habits of the students to improve their performance in school.

2. The stakeholders in education need to develop a holistic secondary education curriculum that should incorporate healthy eating habits.

3. A periodic monitoring of the students' nutritional status should be strictly implemented especially in school districts where access to healthy food and non-food basic needs are not readily available.

4. The school cafeteria should serve healthy snacks for improved health of the students and consequently enhanced performance.

5. Similar studies should be conducted taking the findings of this study as bases. Future researches should focus on the effectiveness of a school-based eating habits enhancement program among secondary students of public schools with low level of nutritional status and low level of academic performance.

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A P P E N D I C E S

APPENDIX A

LETTER OF APPROVAL OF RESEARCH TITLE

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

April 2, 2004

Dr. MARILYN D. CARDOSO
Dean, College of Graduate Studies
SSPC, Catbalogan, Samar

Madam:

May I have the honor to submit the following titles for thesis, for your perusal, to wit:

1. Eating Habits of Students in Selected Public High School in Catbalogan, Samar: Its Relation to their Nutritional Condition;
2. Relationship of Lifestyle to Nutrition of Students in Selected Public High School in Catbalogan, Samar.
3. The Effects of Nutrition on the Academic Performance of High School Students of Selected Public Schools in Catbalogan, Samar.

If, on the proposed titles merits your favorable consideration, may I please request, preferably a full-time employee/faculty member of the College to guide me in the conduct of the thesis.

Very truly yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

APPENDIX B

LETTER REQUESTING THE EVALUATION OF THESIS TITLES

CGS

Form 12

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

April 13, 2004
Date

TO:
(Sgd.) JOSE S. LABRO, Ph.D. **(Sgd.) Prof. LYDIA P. BABALCON**
(Sgd.) Prof. RIZALINA F. VISTA

May I ask you to be a member of the Committee to evaluate the attached Thesis/Dissertation title?

Please give your comments and suggestions which you will discuss with the proponents.

Thank you for your cooperation.

Very truly yours,

(Sgd.) MARILYN D. CARDOSO, Ph.D.
Dean

EVALUATION/RECOMMENDATIONS

Title #3 is suggested with little modification: The Effects of Nutrition on the Academic Performance of High School Students of Samar State Polytechnic College: An Assessment.

Final Title:

Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar.

APPENDIX C

ASSIGNMENT OF ADVISER

CGS

Form 13

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

April 13, 2004
Date

Dear: **Prof. LYDIA A. BABALCON**

Please be informed that you have been designated as adviser of **CARLOTA C. BERMEJO** candidate for the degree in **M.A. in H.E.** who proposes to write a thesis on **"Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar"**.

Thank you for your cooperation.

Very truly yours,

(Sgd.) MARILYN D. CARDOSO, Ph.D.
Dean

CONFORME:

(Sgd.) Prof. LYDIA P. BABALCON
Adviser

APPENDIX D

Letter Requesting Permission from Division Office to Validate Questionnaire in SNHS

REPUBLIC OF THE PHILIPPINES
SAMAR STATE UNIVERSITY
Catbalogan, Samar

December 10, 2004

TEOTIMO M. ORBESO, LlB., CESO VI
Assistant Schools Division Superintendent
Officer-in-Charge, Division Office
Catbalogan, Samar

Sir:

The undersigned is a bonafide student of the College of Graduate Studies of the Samar State University (SSU), Catbalogan, Samar, and is presently conducting a study entitled **"Eating Habits and Academic Performance of Secondary Students in Selected Public Schools in the Division of Samar"**, in partial fulfillment of the requirements for the degree Master of Arts in Home Economics.

In view of this, the undersigned would like to ask permission from your good office to validate the questionnaire-checklist of the study among the secondary students of Calbiga National High School, Calbiga, Samar.

The undersigned hopes for your immediate and favorable action on this matter. Thank you very much and Godspeed.

Respectfully yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

Noted:

(Sgd.) MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

Approved:

(Sgd.) TEOTIMO M. ORBESO, LlB., CESO VI
Assistant Schools Division Superintendent, OIC

APPENDIX E

Letter Requesting Permission from Principal of SNHS to Validate Questionnaire among Students in SNHS

REPUBLIC OF THE PHILIPPINES
SAMAR STATE UNIVERSITY
Catbalogan, Samar

December 13, 2004

Dr. LUZ C. MACAIRAN
Principal
Silanga National High School
Silanga, Catbalogan, Samar

Madam:

The undersigned is a bonafide student of the College of Graduate Studies of the Samar State University (SSU), Catbalogan, Samar, and is presently conducting a study entitled **"Eating Habits and Academic Performance of Secondary Students in Selected Public Schools in the Division of Samar"**, in partial fulfillment of the requirements for the degree Master of Arts in Home Economics.

In this respect, the undersigned would like to ask permission from your good office to validate the questionnaire-checklist of this study among the secondary students of your school.

The undersigned hopes for your favorable action on this matter. Thank you very much and more power.

Very truly yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

Noted:

(Sgd.) MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

Approved:

(Sgd.) LUZ C. MACAIRAN, Ed.D.
Principal, Silanga National High School

APPENDIX F

Letter Requesting Documents from the Medical Section of the Division Office

REPUBLIC OF THE PHILIPPINES
SAMAR STATE UNIVERSITY
Catbalogan, Samar

December 9, 2004

ANGELICA C. RODRIGUEZ, M.D.
Head, Medical Section
Division Office
Catbalogan, Samar

Madam:

Greetings!

The undersigned would like to request from your good office the following documents which are pertinent to the study entitled **"Eating Habits and Academic Performance of Secondary Students in Selected Public Schools in the Division of Samar"**:

- List of public secondary schools with lower level of nutritional status; and
- Ranking of public secondary schools with respect to their level of nutritional status.

Thank you very much for your cooperation.

Sincerely yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

APPENDIX G

Letter Requesting Documents from the Health and Nutrition Office of the Division Office

REPUBLIC OF THE PHILIPPINES
SAMAR STATE UNIVERSITY
Catbalogan, Samar

December 9, 2004

MONETTE MIJARES
Head, Health and Nutrition Center
Division Office
Catbalogan, Samar

Madam:

Greetings!

The undersigned is presently conducting a study entitled **"Eating Habits and Academic Performance of Secondary Students in Selected Public Schools in the Division of Samar"**, in partial fulfillment of the requirements for the degree of Master of Arts in Home Economics. In view of this, she would like to request the procurement of necessary documents from your good office. These are as follows:

- Summary of the nutritional status of the students of different public schools in the Division of Samar;
- Ranking of the public secondary schools with respect to their nutritional status; and
- Report on the relationship between nutritional status of students and their achievement test results.

Thank you very much and Godspeed!

Respectfully yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

Approved:

(Sgd.) MONETTE MIJARES
Head, Health and Nutrition Center

APPENDIX H

LETTER REQUESTING APPROVAL FOR THE CONDUCT OF STUDY AMONG SELECTED PUBLIC HIGH SCHOOLS IN THE DIVISION OF SAMAR

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

August 30, 2004

THE SCHOOLS DIVISION SUPERINTENDENT
Division of Samar
Catbalogan, Samar

Madam:

The undersigned is a bonafide student of the Samar State Polytechnic College Graduate School taking up Master of Arts in Home Economics. At present, she is conducting a study entitled **"Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar"**, in partial fulfillment of her requirements for the degree Master of Arts in Home Economics.

In view of this, the undersigned would like to request permission from your good office to allow her the conduct of this study in the different public secondary schools in the Division of Samar, as they are considered the research environments of this research.

The undersigned hopes for your kind consideration on this matter.

Thank you very much.

Sincerely yours,

CARLOTA C. BERMEJO
Researcher

APPENDIX I

Letter Requesting Approval from the Heads/Principals of Respondent-Schools to Conduct the Study

REPUBLIC OF THE PHILIPPINES
SAMAR STATE UNIVERSITY
Catbalogan, Samar

January 3, 2005

_____

_____

_____

Sir/Madam:

The undersigned is a bonafide student of Samar State University (SSU), Catbalogan, Samar, taking up Master of Arts in Home Economics. She is presently conducting a study entitled **"Eating Habits and Academic Performance of Secondary Students in Selected Public Schools in the Division of Samar".**

In view of this, she would like to ask permission from your good office to allow her the administration of the questionnaire to the students because they are the respondents of this study.

Attached herewith is the letter allowing her the conduct of this study from the Officer-in-Charge of the Department of Education (DepEd), Division Office, Catbalogan, Samar.

Thank you very much for your cooperation.

Sincerely yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

Approved:

_____

_____

_____

APPENDIX J

LETTER REQUESTING LIST OF PUBLIC SECONDARY SCHOOLS OF THE DIVISION OF SAMAR FROM THE RECORDS OFFICER

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

September 6, 2004

THE RECORDS OFFICER
Division Office
Catbalogan, Samar

Sir/Madam:

The undersigned would like to request the list of public secondary schools in the Division of Samar as they are needed in the conduct of the study.

Attached herewith is the letter from the Schools Division Superintendent of Samar allowing the conduct of the study entitled **"Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar".**

Thank you very much.

Sincerely yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

APPENDIX K

LETTER REQUESTING PERMISSION TO TAKE A LEAVE OF ABSENCE FROM WORK TO CONDUCT THE STUDY

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

September 6, 2004

Dr. SIMON P. BABALCON
The President
Samar State Polytechnic College
Catbalogan, Samar

Sir:

I am presently enrolled in Thesis Writing in the Graduate Studies Department of this College and is currently conducting a study entitled "Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar", in partial fulfillment of the degree Master of Arts in Home Economics.

In the conduct of the aforesaid study, I have to go to select public high schools in the Division of Samar to gather the needed data from the high schools students selected as samples of this study. In this respect, may I have the honor to request permission from your good office to take a leave of absence from work for the duration of gathering the necessary data.

I hope for your favorable action on this request.

Thank you very much.

Very truly yours,

CARLOTA C. BERMEJO
Researcher

APPENDIX L

LETTER REQUESTING PERMISSION FROM THE PRINCIPALS/HEADS OF SCHOOLS TO ADMINISTER THE SURVEY QUESTIONNAIRE AND EATING HABITS CHECKLIST TO THE HIGH SCHOOL STUDENT-RESPONDENTS OF THE STUDY

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

September 13, 2004

_____
_____
_____

Sir/Madam:

The undersigned is a bonafide student of Samar State Polytechnic College (SSPC), Catbalogan, Samar, taking up Master of Arts in Home Economics. She is presently conducting a study entitled **"Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar".**

In view of this, she would like to ask permission from your good office to allow her the administration of the survey questionnaire and the Eating Habits Checklist to the students, as they are the respondents of this study.

Attached herewith is the letter allowing her the conduct of this study from the Schools Division Superintendent.

Thank you very much.

Sincerely yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

APPENDIX M

COVER LETTER OF THE SURVEY QUESTIONNAIRE

REPUBLIC OF THE PHILIPPINES
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

September 20, 2004

Dear Respondents,

Greetings!

I am presently conducting a study entitled **"Eating Habits and Academic Performance of High School Students of Selected Public Schools in Samar"**, in partial fulfillment of the requirements for the degree of Master of Arts in Home Economics. In this connection, you are chosen as one of the respondents of this study.

Rest assured that your answers would be kept with utmost confidentiality.

Thank you very much.

Very truly yours,

(Sgd.) CARLOTA C. BERMEJO
Researcher

APPENDIX N

Questionnaire -Checklist for the Student-Respondents

Respondent No. _____

DIRECTIONS:

The questionnaire has two parts, namely, (a) Personal Profile Part (PART I) and (b) Perceptions of Student-Respondents Regarding the Relationship between Eating Habits and Academic Performance and others (PART II). Read each item carefully.

I. PERSONAL PROFILE

Name: _____
(Optional)

Age: _____
( ) 10-12
( ) 13-15
( ) 16-18
( ) 19-21

Sex ( ) Female
( ) Male

Year Level ( ) 1st Year
( ) 2nd Year
( ) 3rd Year
( ) 4th Year

Family Monthly Income: _____
( ) less than P 5,000
( ) P 5,001 - P 10,000
( ) P 10,001 - P 15,000
( ) P 15,001 - P 20,000
( ) more than P 20,001

Parents' Educational Attainment

Father		Mother
( )	Elementary Level	( )
( )	Elementary Graduate	( )
( )	High School Level	( )
( )	High School Graduate	( )
( )	College Level	( )
( )	College Graduate	( )
( )	Graduate/Post-Graduate	( )

II. STUDENT-RESPONDENTS' PERCEPTIONS REGARDING THE EXTENT BY WHICH THEY PRACTICE SOME CERTAIN EATING HABITS, RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND PERSONAL FACTORS, RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND EATING HABITS AND EXTENT BY WHICH EATING HABITS INFLUENCE ACADEMIC PERFORMANCE

1. Are you aware of some factors that influence your performance in school?

( ) Yes ( ) No

1.1 If yes, what are these? Check as many as possible from the given choices.

( ) Personal factors such as age, sex
( ) Parents' educational qualifications
( ) School factors such as facilities
( ) Work values of teachers
( ) Leadership styles of teachers
( ) Eating habits
( ) Organizational membership in school
( ) Others, please specify _____
_____
_____

1.2 If no, why are you not interested in knowing some factors that influence your performance?

_____
_____
_____
_____
_____
_____
_____
_____
_____

2. Are you aware of certain habits that you practice when eating?

( ) Yes ( ) No

2.1 If yes, to what extent do they influence how you fare in school? Check the box that represents your answer.

( ) To a great extent

( ) To a moderate extent

( ) To a minimal extent

( ) Not at all

2.2 If no, why do you think not?

_____

_____

_____

_____

_____

_____

_____

_____

3. Below are personal factors that may have influence on your academic performance, rank them using the scale below:

5 - Most Influential

4 - Moderately Influential

3 - Slightly Influential

2 - Fairly Influential

1 - Not Influential

( ) Age

( ) Parents' educational attainment

( ) Sex

( ) Year level

( ) Monthly family income

4. To what extent does your eating habits influence your performance in school?

( ) To a great extent

( ) To a moderate extent

( ) To a minimal extent

( ) Not at all

5. In what way do the eating habits that you practice influence your performance in school? Check as many ways as possible from the given.

( ) They influence your study habits.

( ) They add more interest to study.

( ) They inspire me to do well in class.

( ) They make me realize the need to eat properly, especially when attending major subjects.

( ) They allow me to freely decide on whatever practical application of the concepts or activity will I engage in school because I feel physically fit.

( ) Others, please specify _____

_____

_____

_____

6. Below are words and phrases that may describe your eating habits. In between these words and phrases are numbers. Encircle the number which you think appropriately describes them. The closer the encircled number to the word or phrase, the more you agree that the indicated word or phrase describes your eating habits

Nutritive	5	4	3	2	1	Not-Nutritive
Diverse	5	4	3	2	1	Uniform
Based on emotion	5	4	3	2	1	Based on Rational choices
Stable	5	4	3	2	1	Relatively Stable
Independent from parental supervision	5	4	3	2	1	Dependent
Weak						Strong

7. Beside each of the statements presented below, please indicate whether you strongly agree (SA), agree (A), undecided (U), disagree (D), and strongly disagree (SD).

Indicators	SCALE				
	SA (5)	A (4)	U (3)	D (2)	SD (1)
1. The teachers influence how I eat during recess or snack time in school.					
2. The teachers' inherent qualities such as being emotional, achievement-oriented and logical influence my performance in school.					
3. The teachers' role has been limited to teaching us how to practice eating habits we learned at home such as washing our hands before eating.					
4. Our parents complain that our teachers do not teach us appropriate study habits.					
5. T.H.E. teachers play significant role in inculcating in the minds of the students the need to adopt healthy eating habits.					

Thank you!

APPENDIX O

Eating Habits Checklist

Respondent No. _____

Directions: Please rate your eating habits by using the scale below:

5 - Always Practiced (A)

4 - Often Practiced (O)

3 - Sometimes Practiced (S)

2 - Rarely Practiced (R)

1 - Not Practiced at All (N)

A. BREAKFAST EATING HABITS	RESPONSES				
	A (5)	O (4)	S (3)	R (2)	N (1)
1. I don't go to school without having breakfast.					
2. I give much attention to what I eat for breakfast.					
3. I make a regular menu for breakfast consisting of fruit such as banana, protein dish such as fried fish, rice and milk.					
4. I decide where and when to buy food for breakfast.					
5. I observe proper table manners when having breakfast					
6. I have coffee and bread for my breakfast.					
7. I eat breakfast while preparing for school.					
8.I skip eating breakfast and goes directly to school.					
9. I eat breakfast when I want to.					
10. I do other task such as answering assignments for the					

subject in the morning while having breakfast.					
B. LUNCH EATING HABITS 1. I follow a strict time schedule for lunch at 12:00 noon.					
2. I list the food in the order in which they are to be served for lunch.					
3. I eat a heavy lunch composed of protein dish, mostly meat, vegetable dish such as "pakbet", rice and dessert for lunch.					
4. I give special attention to where I eat lunch such as its cleanliness and neatness.					
5. I make sure that I eat the food recommended by the health authorities and taught in school.					
6. I eat my lunch at 10:00 o'clock in the morning because I don't eat breakfast.					
7.I don't eat food containing right food nutrients needed by my body for my lunch.					
8. I take lunch in between school work such as doing projects and assignments and studying for quizzes and recitation for classes in the afternoon.					
9. I exclude vegetables in my menu for lunch.					
10. I eat lunch very late in the afternoon.					
C. SUPPER EATING HABITS 1. I avoid fatty food at night.					
2. I eat whatever is left from the previous meal.					
3. I eat supper together with my family.					
4. I give enough time for supper.					

5. I eat fish/pork, vegetables, rice, and drink water for supper.					
6. I skip eating supper because I just want to sleep immediately after school.					
7. I eat supper as late as 9:00 o'clock in the evening because I do my assignments and projects first.					
8. I eat what my parents tell me to eat during supper.					
9. I eat lightly during supper such as crackers and juice.					
10. I just drink milk for supper.					
D. SNACKS EATING HABITS 1. I have rice and fish for snacks.					
2. I take snacks depending on the school work given to us.					
3. I observed time for taking my snacks.					
4. I only take snacks when my friends have snacks and when I feel hungry.					
5. I eat snacks if I have vacant time in school.					
6. I eat my snacks very close to eating my lunch in the morning and supper in the afternoon.					
7. I eat my snacks from unsafe stalls near our school.					
8. I eat my snacks while having a class.					
9. I take snacks three times a day, one in the morning, in the afternoon and in the evening.					
10. I eat junk foods and soft drink for snacks.					

Thank You!

CURRICULUM VITAE

Personal Information

Name	:	Carlota C. Bermejo
Age	:	47
Sex	:	Female
Civil Status	:	Married
Parents	:	
Mother	:	Villa Rosa P. Cabonce
Father	:	Carter B. Cabonce
Husband	:	Beethoven M. Bermejo
Children	:	Kristine May C. Bermejo Kathleen May C. Bermejo Beethoven C. Bermejo, Jr.

Educational Background

Elementary	:	Catbalogan I Central Elementary School Catbalogan, Samar S.Y. 1964-1970
Secondary	:	Samar Regional School of Fisheries Catbalogan, Samar S.Y. 1970-1974
Tertiary	:	
Course	:	Bachelor of Science in Foods and Nutrition University of the East Manila, Philippines S.Y. 1974-1979

Training/Seminars Attended

Teaching on Research and Development
August 28-29, 2000
SSPC, Catbalogan, Samar

Regional Symposium on Research and Development
September 12-14, 2000
SSPC, Catbalogan, Samar

Seminar Workshop on Homeroom Guidance
February 9-10, 2001
SSPC, Catbalogan, Samar

Eligibilities

Passed - Career Civil Service Sub-Professional Examination
1978
Manila

Passed - Professional Board Examination for Teachers (PBET)
1992
Catbalogan, Samar

First Grade Eligibility as Per R.A. 7630

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