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Dr. Rebecca M Alcuizar
Mindanao State University-
Iligan Institute of
Technology (MSU-IIT) Iligan
City, Philippines.

Determinants of low academic performance for pupils in upland barangays, Iligan City, Philippines

Dr. Rebecca M Alcuizar

Abstract

The purpose of this research work is to determine the significant factors that affect the low academic performance among pupils in upland barangays. The paper reviewed the focal literature focusing on the effect of the determinants of nutrition, family's living condition, parents' support to their children, and school related. These factors built an analytical model of determinants of pupils' low performance in their academics with a mind of gaining useful insights into the weight of these determinants. From the findings of this study, the determinants of nutrition, and living condition are the most related factors investigated that have significant effects on the low academic performance among the pupils of Rogonong, Iligan City, Philippines. Education in rural areas and upland barangays in the city has not given priority by the parents considering on their poor living condition and distance of the school from their home. Moreover, schools in rural areas have less support from local government for their instructional materials and training of teachers. Hence, the academic performance of the pupils in the area is poor as well as their National Achievement Test or NAT. Based on the findings of this paper, measures that can be taken by the school and local government are discussed and appropriate recommendations were made.

Keywords: Academic Performance, Nutrition, Living Condition, School Related factors

1. Introduction

1.1. Background of the Study

Good academic performance is important for elementary age children as a tool for successful life as an adult. Proper nutrition for our children is a construct in which the individual as an indivisible being attains a positive state of integration of mind, body, and spirit with the environmental contexts. Academic achievement for children occurs within the construct of proper nutrition, living condition of parents and parents support to their children, as there is mutual influence between academic factors and non-academic factors for a child, (Clark 2009)^[8]. Education in upland barangays in Iligan City, Philippines has not given priority by the parents considering on their living condition because of poverty and distance of the school from their home. The influence of the Department of Education (DepEd) emphasizes clearly the importance of providing good education to every child in the community, hence DepEd introduced the National Achievement Test (NAT) to spell out the community's values and perception of what Education in the community should be.

However, there are factors that affect the interest of parents to send their children to school. These factors are their living condition, the distance of the school from their home, nutritional food intake and participation of pupils in physical activities. Many pupils do consider going to school whereas others may be acting purely under duress from parents or peer group. Pupils' life involved many important factors that may hinder or improve it. In the life of the pupils there is a combination of all these factors. It has been recognized that nutrition influences more than just physical well-being of the children as well as their academic performance. Academic achievement is extremely important for the pupils, as it is a main determinant factor of their future, (Shephard 1996)^[16].

According to Vernez (1999)^[18], parents from rural areas that have not been privileged to know the benefits of having good education may not be impressed to advise their children to go to school or a child who does not know the challenges and prospects of pursuing a degree does not give importance of attending regularly on their classes.

Correspondence
Dr. Rebecca M Alcuizar
Mindanao State University-
Iligan Institute of
Technology (MSU-IIT) Iligan
City, Philippines.

It is obvious that the parents and pupils' personality are products of some factors such as poor living condition and pupils' personality are products of some factors such as poor living condition and proper nutrition.

Basil (2007)^[5] believed that these inborn traits are organic factors that first determine the person's life foundation that sustain other structures – cultural values, social influence, quality of school and participation in sports activities. Likewise, determinants of pupils' low academic performance demands that analysis of each of the perceived determinants be carried out with a view of grouping them into homogenous class of relatedness.

Recognizing that new approaches to rural economic development are essential to ensure educated, strong and healthy people in the community, the College of Education of Mindanao State University-Iligan Institute of Technology (MSU-IIT), Iligan City, Philippines and its partners, Rotary Club of Iligan, a non-government organization, and Department of Education (DepEd) of Iligan City Division, helped identify and implement programs to improve the health and academic performance of pupils in rural areas in Iligan City, Philippines.

1.2. Statement of the Problem

The orientation of this study is both positive and normative. It is a positive career interest choice determination into the homogenous groups of influence on the students' academic performance of the pupils in order to answer the question: what is? These efforts are made to provide answers to important questions such as: To what significant extent do these determinant groups affect the academic performance of the pupils? Is there any significant effect of nutrition, school, home as determinism on the pupils' academic performance? It is also normative in the sense that it is policy oriented, that is attempting to answer the question what ought to be particularly in the light of what is.

To examine the effects of determinant factors on pupils' academic performance it demands that analysis of each of the perceived determinants be carried out with a view of grouping them into homogenous class of relatedness. With this, it becomes easy to investigate the significant effects of each class of determinants of nutrition on the academic performance of pupils in rural areas in Rogongon, Iligan City, Philippines. From the above statement, this paper will propose ways of measuring the effects of proper nutrition for pupils on their academic performance. It becomes possible to establish whether nutrition, home, participation in sports activities and school related factors have significant effect on the academic performance of pupils in rural areas in Iligan City, Philippines.

To improve and sustain academic performance, it becomes a necessity to have an understanding of the predominant influencing factors of proper nutrition for children. Therefore, developing model of determinants of pupils' academic performance to gain an insight into factors that affect the academic performance of pupils will not only help us to place blame rightly but assist in addressing issues that will improve and sustain pupils' academic performance, (Growdon *et al.* 1980)^[11].

1.3. Objective of the Study

The study was conducted to find out the relationship among the determinants of Nutrition, school, home, participation in sports and academic performance of the pupils in rural areas. This is concerned on the determinants of proper nutrition, and living condition of parents in particular. The objectives of the

study relate to the nature, and magnitude of nutrition and living condition of school children; relationship between nutritional status and academic performance; parents' support to their children, and school quality (quality of teachers, instructional facilities and equipment available).

Specifically, we sought to identify the relative contribution of the quality of school, reading materials available at home and their participation in sports activities as correlates of academic performance.

The researchers tried to know the significant effect of having low academic performance of pupils living in rural areas especially in upland barangays. An attempt was made to complement the existing literature on helping pupils achieved good performance in schools as well as to develop and improve on the insights it will provide into the academic performance in rural areas. The basic question this research seeks to answer is whether nutrition, home, participation in sports activities and school related factors, have significant effect on the pupils' academic performance in upland barangays in Iligan City, Philippines.

As far as data availability permits, in answering this question special attention was drawn to the respondents and identified factors in this paper. This is in view of the crucial effects these components have on the pupils' academic performance in the rural areas. This will facilitate an understanding of why the pupils' academic performance in rural areas, is below average. Therefore this will facilitate possession of first-hand information about effect of proper nutrition, living condition, participation in sports and quality of school as determinants on pupils' academic performance.

1.4 Hypotheses of the Study

The basic hypothesis of the study can thus be stated as: That nutrition, home, school, and participation in sports determinants can determine the pupils' academic performance. The negative form of this proposition has no special significance and is chosen only for convenience. This hypothesis can be broken down into a collection of more than one easy to handle and verify proposition as follows: H01 There is no significant effect of determinant factors on nutrition, home school and participation in sports as determinants of pupils low academic performance in upland barangays. H02 There is no significant effect of parents living condition on the academic performance of the pupils. H03 There is no significant effect of the choice determinants on the pupils' low academic performance.

2. Theoretical Framework

In today's global world, higher education institutions face new challenges to provide timely and proper responses to an urgent needs for distributed learning opportunities to all. Relevant knowledge, and good health considered to be the most effective means for local empowerment and community for self-sustained development, to assure better levels of life quality, Adler *et al.* (1993)^[11].

According to Akanle, (2007)^[5] academic achievement is important for elementary age children as a tool for successful life as an adult. Academic achievement is also a crucial mandate for schools. Proper nutrition on the other hand for our children is a construct in which the individual as an indivisible being attains a positive state of integration of mind, body, and spirit with the environmental contexts. Academic achievement for children occurs within the construct of proper nutrition and wellness, as there is mutual influence between academic factors and non-academic factors for a child.

However, there are factors that influence the academic achievement of students. From the study of Murray *et al.* (2013), proper nutrition was identified as key elements that influence children's academic performance. Likewise, living condition and school related factors on instructional facilities, equipment available and training of teachers, and participation in sports identified as factors that influence pupils' academic performance. Basil (2007)^[5], identified encouragement from parents and influence of people surrounding an individual as some of the factors that can affect children's academic performance.

Pupil's life contains many important factors that may hinder or improve it. It has been recognized that nutrition and the health of an individual influences more than just their physical well-being. It also influences academic performance. Academic achievement is extremely important for the pupils, as it is a main determinant of their future, (Clark, M, Fox, M, 2009)^[8].

Similarly, Kundu and Tutoo (2000)^[12] believed, that home background is the most significant primary factor which influences and shapes children's attitudes, personality and behavior patterns that lead to good performance in schools.

Likewise, Maani (1990)^[13] observes that pupils' success in school is closely related to their home backgrounds. These include; level of education of parents, family income, parents' marital status, and attitudes of parents towards education of their children and the children's attitudes and the quality of learners admitted in school.

From the work of Omizo (1992)^[15], external factors were considered as having a kind of role to play on pupils' academic performance. Also Omizo reported that a young person's belief about pupils' academic performance is influenced by their perceptions, food intake and expectations of others such as parents and teachers.

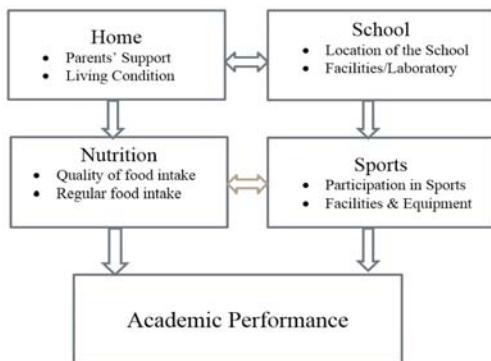


Fig 1: Analytical model of determinants of pupils' low academic performance

3. Scope and Research Method

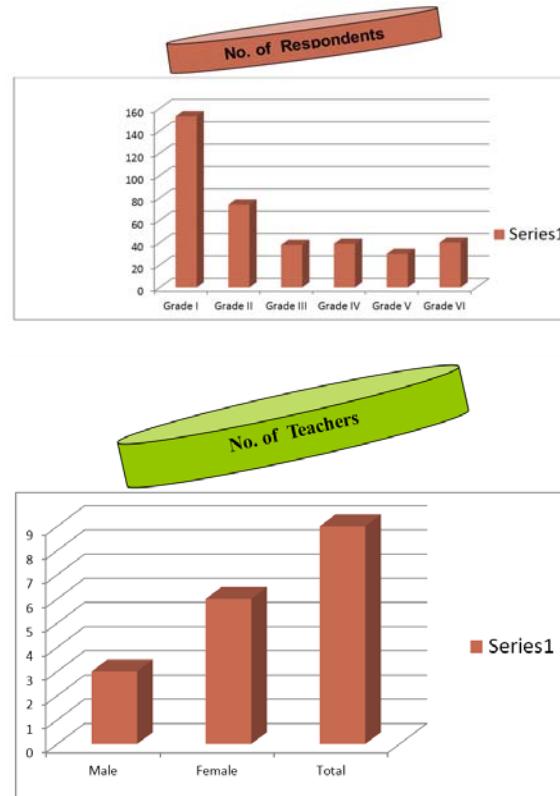
The respondents of this study were the pupils of Rogongon, Iligan City, Philippines, the farthest and the most remote place in the city. The study adopted a cross-sectional survey research design. Quantitative and qualitative approaches of data collection were employed. A descriptive-correlational method of research was also used to describe the relationship of the variables. The computation of the sample size yielded to Three Hundred Seventy Four (374) out of Three Hundred Ninety Five (395) pupils. There were three (3) sections in Grades 1 and 2, and 1 section for the rest of the year levels. Questionnaires were used to gather data from the pupils written in English, but were being interpreted by the Research Assistants on their local dialect.

Likewise, there were nine teachers including the principal (3 male and 6 female) that were interviewed regarding the status of their school, trainings of teachers and support from the local government for their instructional facilities and equipment. Mothers of the respondents were also interviewed regarding their economic status and support for the education of their children.

For the qualitative aspect of the study, guide questions were formulated by the researcher for the in-depth interview of the parents, teachers and school head. Likewise, descriptive statistics was used on mean, standard deviation, frequency and percentage distribution as well as T-test and F-test to determine the significant difference in the independent and dependent variables.

The responses on each of the variables under study were measured on linear regression from low effect to very high effect. Quality of teachers (training, attitude and teaching strategies), facilities and equipment available in the school were part of issues covered by the research instrument. Descriptive data analysis was used to describe the responses of the sampled representatives on the effect of determinant factors on living condition. We also used maximum likelihood score computed from the mean scores of the respondents' responses for the determinants weight on academic performance of the pupils.

Table 1



4. Results and Conclusion

Of the independent variables studied, nutrition, and living condition of parents turned out to be the most predominant factors, that hinders the academic performance of the pupils, followed by living condition of parents. According to Skinner's (1945) Learning Theory, achievement vary among individuals due to several reasons: level of performance and aspirations of pupils depend on factors linked to the level of

education of parents, family income and marital status of parents. The theory further emphasizes the importance of motivation, involvement in learning by learners and involvement of parents in supporting their children's education.

Further, the result of the study showed that majority of the respondents were underweight which are generally considered major factor that affect the health status of the pupils. According to the study of Clark, (2009) [8] regular nutritious food intake contribute to the academic progress of the pupils, considering that pupils cannot concentrate in their lesson because of hunger. This was found out to be one of the causes of their low academic performance and NAT result. Likewise, pupils rarely eat nutritious food because of poverty. Although the impact of diet and nutrition on school performance is difficult to assess and can be confounded by socio-economic status, school factors and other variables, there is growing and convincing evidence for a link between proper food intake and academic performance.

For the school related factor, the school had limited text books, reading materials and no proper laboratories for their science and other related classes. The school head and teachers expressed several problems related to funding from local government. Less funds provided to them for their instructional materials, facilities and equipment. Likewise, teachers can rarely participate in trainings and seminars because of limited funds and the distance of their school to the city. The government didn't have economic development in the rural areas, to attain better education for the children and training of teachers.

Finkelstein, *et al.* (2008) [10]. emphasized the importance of having qualified teachers in the field of teaching, and said that success of any program is conditioned by the ability of the teachers to teach. If there is failure at this point, the whole structure fails. Hence, the implementation, selection, preparation, and supervision of education will be affected. Moreover, Finkelstein mentioned that good teachers are constantly on the alert for methods and instructional materials that will make learning meaningful. With the wise selection and use of a variety of instructional materials or audio-visual materials, experiences may be provided to develop understanding. If teachers do not know how to catch the attention of a child, the more the pupil cannot make himself attentive to their subjects.

Another factor that affect the academic performance of pupils is their participation in sports activities. Pupils have no involvement in sports activities because of lack of physical education teachers, as well as facilities and equipment. This factor contributed to the problems of low academic performance of pupils in the rural areas as well as their health condition.

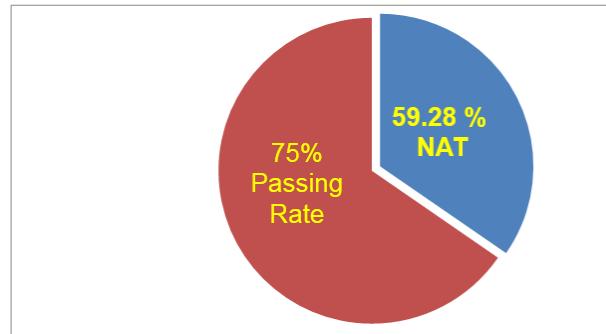
Pupils were not able to play sports because of lack of facilities and equipment, they have not tried participating sports competitions even in their own locality. According to the study of Brown in 2002, pupils participating in sports were found to have better academic achievement than those with less successful sports activities. Not surprisingly, public schools with both successful athletic teams and high academic achievement are found in areas with better financial resources. Such advantaged schools are better able to integrate excellence in sports into a broader culture that encourages achievement.

In conclusion, the determinants of nutrition, and living condition are the most related factors that have significant effect on the low academic performance among the pupils of

Rogongan, Iligan City, Philippines. Education in rural areas in the city has not given priority by the parents considering of poverty and distance of the school from their home. Likewise, pupils have less participation in sports due to lack of facilities and equipment and qualified teachers. Hence, the academic performance of the pupils in the area is poor as well as their National Achievement or NAT. Based on the findings of this study, measures that can be taken by the school are discussed and appropriate recommendations were made.

Table 3

National Achievement Test is below the passing rate



5. Recommendation

As the review of literature reveals, there are considerable and growing effects of these determinant factors which policy measures must be taken to have positive and sustained effects on academic performance of the pupils in rural areas. From the conclusion of the statistical tests that was carried out, the study indicates that: All the factors under investigation have significant effect on the academic performance of the pupils. In view of the nutritional problems affecting school children in rural areas, there is a need for the government and private institutions to provide feeding program with nutritious food and educate the parents on the importance of providing good nutrition to their children. Improving the academic status of the school children does caused by providing good nutrition on their food intake, hence, measures should be undertaken by the parents and the government. According to Clark (2009) [8], proper nutrition for our children is a construct in which the individual as an indivisible being attains a positive state of integration of mind, body, and spirit with the environmental contexts. Academic achievement for children occurs within the construct of proper nutrition, living condition of parents, and quality of school as there is mutual influence between academic factors and non-academic factors for a child. Hence, parents should provide nutritional food to their children, should know the value of proper nutrition. It is recommended also that teachers should education the parents and children on the importance of proper nutrition.

On the other hand, participation in sports activities has a significant factor that correlates on the academic performance of the pupils. It is recommended therefore that, school officials should provide sports equipment/ facilities and hire physical education teachers so children can enjoy during their physical education classes and during their free time. Children and adolescents who pursue sports activities have been shown to exhibit more active brain function, better concentration

levels, good classroom behavior and higher self-esteem than their less-active counterparts. Understandably, all of these factors seem to support better academic performance (Altobelli, 2015) [4].

Moreover, it is recommended that the government and other private institutions will provide livelihood programs for the people in the community to improve their living condition. A multi-pronged approach to the problem is definitely needed but within that comprehensive or holistic effort, it is strongly recommended also that school related problems like providing complete instructional materials, facilities and equipment be given a more prominent place and more consistent attention. It bears repeating that, before anything else, a school child is a biological organism that needs proper care from the parents and the government.

Lastly, non government organizations and other stakeholders who believed on the importance of education for every child in the community, should support for the funding of school and nutritional related needs of the pupils. The government and community as an improving human capital, should ensure economic development. Interested parties who deal with social improvement for attaining Millennium Development Goals, especially illiteracy should provide support on the programs of the school. By utilizing this study, policies can be formulated and hence implemented timely to improve academic performance of school children in rural areas.

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