

AN INVESTIGATION TO COMPARE THE ACADEMIC
PERFORMANCE OF CHILDREN WHO ATTENDED PRE-SCHOOL
WITH THOSE WHO DID NOT ATTEND PRE-SCHOOL IN AN
INFANT I CLASS AT ST. PETER'S ANGLICAN SCHOOL,
ORANGE WALK TOWN

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by

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Dedicated to

My husband - Santiago Yam
Mom - Ofelia Cawich

CHAPTER I

INTRODUCTION

St. Peter's Anglican School is the only Anglican school in *Orange Walk* Town. It is situated between St. Peter's Street and Cinderella Street. This school was established in 1968. It has a staff of seventeen teachers and a principal. Like all other primary schools in Belize, it accepts students from five years old. The school was a part of the REAP program. It has about two hundred and sixty children from a diverse range of ethnic groups. The main ethnic group is Mestizo and the others are Creole, Garifuna and Taiwanese. The school has a staff of fourteen teachers and a principal. The school caters for normal and special needs children (special education). Special education programs include children who are slow learners and who experience hearing impairment. The school also provides the needy children with a lunch each school day.

The school provides counseling service to children who need it. Teams called care team offer the service. Each team has eight members who have received basic and advanced training in counseling.

Although this school is a denominational, school it does not only cater for students who are members of the church. Approximately eighty percent of the students are Anglican.

The school does not have a preschool but there are several in the town. Most of them are privately own and operated. Many parents like to send their children to preschool because they don't need to baby sit them, so have to go to work they have to leave the children somewhere, and others belief that preschool help the students to develop physically, socially and mentally.

Background to the Study

Historically approximately one third of the students of the school have attended pre-school.

There are enough preschools in the town to accommodate children but some parents don't want to send their children to a preschool.

Attending preschool is optional parents must recognize that preschool education plays an important role in the early childhood education of their children. The researcher believes that children attendance at preschool enables a child to socialize, communicate, and develop physically and mentally. Children accomplish these through playing and working; and the teachers should have the competency to guide children to achieve these abilities.

Preschool education is intended for children between the ages of three and five years. The researcher has seen that some parents do not bother to register their children into the preschool education program. Then there are others who register their children into a preschool education program but removed them after a few months.

At St. Peter's Primary School, at the first level of primary education (Infant I), the teacher is disappointed with the stages of development certain children are at. For example, a child may not be able to hold her pencil properly. Imagine for a moment a classroom with a child who is not toilet trained next to a child who cannot settle down and yet another child running around the classroom fighting and pushing the other children. This scenario is reflective of what goes on at Infant I at St. Peter's.

The teacher had also found out that she takes a lot of time with some children who have difficulty grasping and understanding basic concepts and skills. The researcher believes that these skills should have been learnt at a preschool. However, there are a few children who are naturally brighter than others therefore can cope and work at a faster pace. The researcher became interested in this study because most children in Infant I should be

working at basically the same level but this is not the reality.

Identification of the Problem

The researcher has seen some children in Infant I who socialize, communicate and participate more than others. There are some children who are very shy and would cry for the first few days. Some children have difficulty understanding simple concepts, have very short attention span, and show anxiety and difficulty in following basic instructions. The researcher believes that most teachers who experience this problem spend a lot of time on discipline especially for the first two terms in Infant I.

As a result of the chaos very little teaching and learning takes place. This sets back the other children who are more ready for school. Therefore, a class that is comprised of children with different readiness for school is a challenge

for the class teacher. More importantly, it could retard the early childhood education of the children who are socially and mentally ready for school.

The proceeding highlights a problem for teachers and one for students. However, as educators we have to also be cognizant of the long-term effects of this situation. For example, if students develops a disliking for school because she had problem fitting in during the first two terms, he might grow to dislike school forever.

Purpose

The overall purpose of this research is to determine if students who attend preschool do better in Infant I than students who did not attend preschool. The researcher will attempt to answer the following specific questions.

1. What are the skills, knowledge and attitudes students who have attended preschool have that

those students who did not attend preschool do not have as manifest in Infant I?

2. Who are the students who have attended preschool?

Significance of the Study

After the investigation, the researcher hopes that the following can benefit from it.

1. The Government of Belize through the Ministry of Education can use the findings of this study along with those of other studies to develop policy pertaining to the offering of preschool education. The Government could use this study to help decide the extent to which it will support preschool education through funding, teacher training and provision of infrastructure.
2. Parents can use the information to decide if they will or will not be sending their children to preschool. If the results show that

children who attended preschool do better than those who did not attend preschool, parents will be excited to send their children to preschool.

3. Principals and teachers could use the findings of this research to advise parents whether or not to send their children to a preschool.
4. Other researchers doing similar research can use this study.
5. Faculty and students at Belize Teachers' College can use this study in preparation to function as teachers within a community.

Definition of Terms

Non-preschool students - students who did not attend a preschool.

Preschool students - students who attended preschool.

CHAPTER II

LITERATURE REVIEW

The general perception among primary school teachers and principals, parents and educators is that if students attend preschool they would be better able to adjust to the primary school environment better than if they had not attended a preschool. They also believe that preschool students do better academically at least in Infant I. Both of these claims are supported by research. The researcher concurs with these claims. This literature review examines the latter.

Preschool education is popular among parents because it serves a dual purpose. It is a place where parents can leave their children to be cared for while they are at work and it is a place where the children can learn something. The only reasons why parents in Belize would not send their children to preschool would be the cost and the

Some parents might not be able to pay the fees that are charged for a child to be in a preschool. In 1996 as part of the Government's austerity measures, Government-operated preschools were turned over to community groups to run. (UNICEF and NCFC, 1997). Preschools are now run by local boards or parent teachers' associations without any assistance from Government for teachers' salaries. The only assistance given to some preschools by Government is a small grant to purchase resources. Schools now have to charge students an attendance fee to cover teachers' salaries and all other expenses that the grant from Government does not cover.

Some families do not live close to a preschool so it is difficult for parents and they may choose not to take their children to preschool. In other cases due to availability of schools, there is no space in the accessible schools. Some parents however, do not bother to send their children to

preschool because they do not value the service received and sometimes they do not care whether their children succeed educationally.

Some parents feel that preschool is a place where children can be baby-sit and that not much learn take place in such a school.

History of Preschool Education

Preschool education began in Belize in the 1940s when wealthier parents looked for ways to give their children a head start in academic. (UNICEF and NCFC, 1997). "In the 1950s, many of the denominational primary schools established kindergarten classes. However, when the 1962 Education Ordinance classified compulsory school age as five to fourteen years - and the Department of Education stipulated that its provision for teachers' salaries did not include kindergarten or nursery schools - many of these classes were forced

to close their doors." (UNICEF and NCFC, 1997, p. 64)

In 1995/96 school year there were 88 preschools with an enrollment of 3,306 students and 181 teachers. This enrollment represented 22.7 percent of the total number of three and four year olds who were benefiting from preschool education. Of the 88 school seven were government-operated, 41 government-aided and the remaining 40 privately operated. Three percent of the 181 teachers had not received any formal teacher training, 79 percent had completed pre-service professional training in Early childhood Development provided by the Pre-school Unit, and 13 percent were fully trained teachers (UNICEF and NCFC, 1997).

The Ministry of Education plans to have a minimum of 113 preschools with an enrollment of 4,295 (70 percent of 3-4 year olds) by the year 2000. More communities are organizing themselves to open their own preschool center because they are

becoming more aware of the benefits of this experience. Educators and preschool advocates must educate parents and other stakeholders about the benefits of preschool education.

The Preschool Unit

A Preschool Education Unit was formed in 1979 with assistance from UNICEF. The Unit is responsible to oversee formal pre-schooling and the training of pre-school teachers. In regards to the operation of preschools, the Unit is responsible for monitoring the establishment of preschool centers and supervising the conditions under which they operate. The Unit has developed a draft policy stipulating the preceding which should become law in early 1999. The Government of Belize is decentralizing the educational system and so the running of preschools by community is in line with this new philosophy.

As a means of getting parents involved and mustering support for schools, the Unit provides parent education classes that cover discipline and behaviour modification, disabilities, child health and nutrition, the preschool programme, self-esteem, abuse and toy making.

Academic performance of children who attended preschool

Many studies show that students who attended preschool do better than those who did not at primary school. As educators, we should provide continuous stimulation during the early stage of a child development for him/her to develop optimally (Hilderbrand, (1981) in Martinez, 1998). Martinez (1998) did a study to determine the difference in performance between children who attended preschool and the ones who did not. She became interested in this topic after she spoke with a teacher. The teacher brought to her attention several

differences she observed with the two groups of students, those who attended preschool and those who did not. The teacher told Martinez that the children who did not attend preschool worked at a much slower pace, were not able to grasp concepts as quickly, and had not developed many psychomotor movements. An often overlooked situation is that because the children who attended preschool work at a much faster pace, the teacher spend more time with the slower students. As a result, the faster students get frustrated. Martinez did not draw any conclusion as to whether there was a difference in performance between children who attended preschool and those who did not. She however recommended that all children should attend preschool to have a better chance to succeed in infant one. The researcher would argue that although the benefits of attending preschool might be incremental the effort is worth the while.

August (1997) did a similar study to compare performance in infant one of students who did attend preschool and those who did not. August concluded that the children who attended preschool performed academically better than those who did not attend preschool. He also concluded that the children who attended preschool performed better socially, emotionally, physically and verbally.

Edwards (1997) concluded that preschool students perform better in infant one than children who did not attend preschool.

Conclusions

The literature shows that students who attend preschool are performing academically and socially better in infant one than students who did not attend preschool. Will this hold true at the researcher's school? This research will help to develop this generalized statement to a more generalizable statement or potentially a theory.

CHAPTER 3

RESEARCH METHODS

This research compared the academic performance of children who attended pre-school with those who did not attend preschool in an infant one class at St. Peter's Anglican School in Orange Walk Town. The overall performance of students during first and second terms in Math and English and their overall average were compared using average. The performance of students were gotten from their report cards for the first and second semesters of this school year.

Sample

All thirty-five students in infant one at St. Peter's Anglican School, Orange Walk were used in this study. Of these students, approximately ten had attended preschool and the others have not.

The students were mainly Mestizo (85%) and the others are Creole (10%) and Taiwanese (5%). Their age ranged between four and six years. Approximately seventy-five percent of the students were female. They came from a mixture of poor and middle class families and those who attended preschool were from both poor and middle class families.

Instrument

No research instrument was used to collect data because the data have been collected. This research was therefore referred to as secondary data analysis. The existing data have been collected over two terms and would be more reflective of a difference between the two groups of students than if the researcher was to collect students' performances for the purpose of the research. The data that the researcher would collect for the purpose of the research would be

evidence for a much shorter time that will make it less valid.

Data Collection

The data for this research came from the report cards of the student for the first, second and third terms. The researcher asked the principal of the school and the Infant One teacher to lend her the report cards of the students. The researcher returned the cards two days later. The grades for Math, Language Arts and the overall grade of each student were recorded by the researcher.

Data Analysis

The data were analyzed using average and a descriptive analysis to determine if there is a difference between the two sets of scores, i.e., students who have attended preschool and those who did not.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

The performance of the students who attended preschool is higher than that of students who did not attend preschool. See Tables 1 and 2 and Figure 1. The students who attended preschool performed overall at a constant level over the three terms.

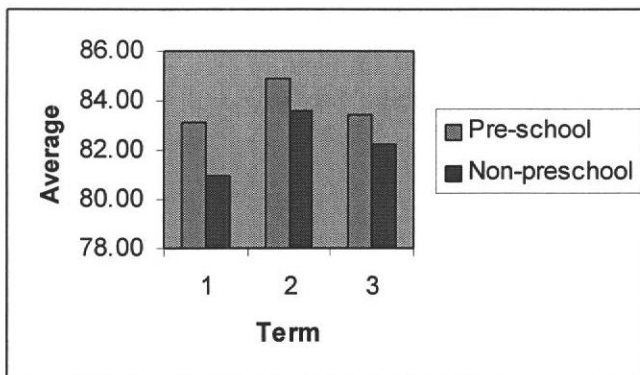
Table 1: Scores of Students who have attended preschool.

Subject	Term 1	Term 2	Term 3	Average
A	63	83	72	72.67
B	92	87	85	88.00
C	80	81	78	79.67
D	91	91	96	92.67
E	73	75	75	74.33
F	86	82	83	83.67
G	97	95	95	95.67
Total	83.14	84.86	83.43	83.81

Table 2: Scores of Students who have attended preschool.

Subject	Term 1	Term 2	Term 3	Average
A	90	88	89	79.67
B	86	86	90	87.71
C	64	73	60	73.67
D	67	79	71	83.95
E	82	87	89	79.33
F	87	89	90	85.81
G	92	88	89	93.10
H	87	86	86	84.89
I	68	67	62	65.67
J	95	95	95	95.00
K	78	79	86	81.00
L	80	86	80	82.00
M	76	84	82	80.67
Total	80.92	83.62	82.23	82.26

Figure 1: Comparison of preschool and non-preschool averages.



The difference between the two groups of students is not much numerically as can be seen in

Tables 1 and 2. The overall average for students who attended preschool was 83.81 and 82.26 for those who did not with a difference of 1.55. This small difference that is observed would make parents critically evaluate whether it is academically worthwhile for them to send their children to a preschool. What educators need to point out to these parents is that the difference could increase as the children move through school and that preschool education is not focus on academic development of children. However, it is the preparation of students for socialization and getting use to a school setting.

The non-preschool students did not do as well as the preschool students in the first semester. The overall grade for the preschool students was stable over the year while that of the non-preschool students was low in the first semester and higher in the second and third terms. This matches with the literature in that children who

attend preschool are more prepared to socially and mentally cope with school. So the students who attend preschool can adjust quicker to the school environment, therefore, perform better.

Tables 4 and 5 show the average performance for the year of students in four subject areas. The students who attended preschool did slightly better in all the four subjects considered, namely Math, Reading, Phonics, and Science. They however did more significantly better in Reading than in the other three subjects. The score for the two groups in Reading are 82 and 76 with a difference of 6 points.

**Table 3: Students who have attended preschool
subject scores.**

Subject	Math	Reading	Phonics	Science
A	81	79	71	69
B	92	91	86	95
C	82	63	79	87
D	93	92	97	98
E	89	69	86	67
F	82	83	84	87
G	97	99	100	96
Total	88.00	82.29	86.14	85.57

**Table 4: Students who did not attend preschool
subject scores.**

Subject	Math	Reading	Phonics	Science
A	88	83	98	92
B	94	91	100	79
C	56	49	60	78
D	71	71	76	78
E	93	78	76	79
F	91	81	94	89
G	90	84	94	89
H	91.3	76	86	88
I	64	62	45	71
J	97	91	99	94
K	81	81	95	82
L	85	74	89	82
M	94	76	75	81
Total	84.23	76.69	83.61	83.23

These tables also show that the children who attended preschool performed better than those who

did not in all four subjects presented. These subjects are considered the some of the major subjects in the primary school curriculum. Therefore, if attending preschool will result in students improved academic performance then parent need to know this.

Students who do not attend preschool do not perform well in reading. According to Table 4 Reading is the subject of the four presented that students who did not attend preschool performed the least in. It is also the subject that those who attended preschool did worst in but at an acceptable level (average =82).

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The common belief of teachers and parents are verified in this research. The researcher concludes that the students who attend preschool do better than those who did not in four of the primary subjects. These subjects are Math, Phonics, Reading, and Science.

The researcher concludes that students who attended preschool performed at a more or less constant level while the students who did not attend preschool performance fluctuates between terms. The non-preschoolers did not do as well in the first semester as those who attended preschool.

The researcher further concludes that it is academically beneficial to send children to preschool because the evidence show that they do perform better than their counterparts.

The researcher must point out that although the preschool children performed better than those who did not attend preschool, parents and teachers must recognize that this is for the groups. That means that not all-individual students who attended preschool will do better than those who did not. Some parents might wonder why their children did not do well as some other students who did not attend preschool.

Recommendations

The researcher recommends that parents send their children to preschool because they stand to benefit positively from the experience. To this end, the researcher recommends that the Ministry of Education find other research that looked at other research that study the effects of preschool education on children behavior and academic performance when they attend primary school. The findings of these studies should be compiled and

made available to the education community and parents who are the major stakeholders.

The researcher recommends that a research be done to see if the difference between those who attended preschool and those who did not continue through the life of the students. This would be a good research because it would help to better value preschool education more so if the difference exist throughout primary school and onto high school.

References

August, A. (1997). An investigation to compare the performance of children in Infant I who attended preschool against those who did not attend preschool in an Infant I class at Caye Caulker R. C. School. Unpublished thesis. Belize: Belize Teachers' College.

Edwards, E. (1997). A survey to determine the advantages and disadvantages of children attending preschool before entering primary school at three schools in Corozal Town. Unpublished thesis. Belize: Belize Teachers' College.

Guzman, H. (1996). A six week programme using the play-way method to develop the fine motor coordination skills in a group of twelve preschool children at the Benguche Preschool. Unpublished thesis. Belize: Belize Teachers' College.

Martinez, Z. (1998). An investigation to determine the difference in performance between children who attended preschool and the ones that

did not. Unpublished thesis. Belize: Belize Teachers' College.

SPEAR. (1991). Education in Belize Toward the Year 2000. Belize: Cubola.

Waler, J.A. (1998). Promoting Parent/Community Involvement in School. The Education Digest. Mississippi:Prakken Publications. Vol 63, 8, pg. 45.