

## Effects of Pre-Schools on Performance of Grade 1 Pupils: A Case Study of Gweru Urban Primary Schools in Zimbabwe

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**ABSTRACT** This study was set to investigate the opinions of grade one teachers and teachers-in-charge (TICs) on the performance of grade one children pre-school and those who did not attend pre-schools. The sample constituted 5 schools from which 5 teachers – in – charge and 30 teachers were taken, making a total of 35 respondents. To collect the data, 2 instruments were used for teachers and teachers-in-charge. These were labeled appendices 1 and 11 respectively. An interview schedule was also employed to complement the questionnaires. It was revealed through this study that children who have been exposed to pre-schools perform better than their counterparts during the first six weeks. The findings have also clearly shown that children from pre-schools are socially and emotionally adjusted and therefore are a step ahead than their counterparts.

### INTRODUCTION

#### Effects of Pre-school

Some theorists have observed that pre-schools have an everlasting effect on education (Spodec et al. 1987; Garces et al 2002). Barnett (2011) also emphasises the point and asserts that, “Early childhood programmes can provide long term educational benefits and that programmes have produced significant increases in I.Q and achievement in early grades.” As such performance consistency with pre-school children does not match the performance of those children who will have been exposed to pre-school. Lazar and Darlinton (1992) and Wood (1985) in their research findings on pre-schools assert that pre-school attendance can lead to lasting improvements in school performance, job prospects and self esteem. This self esteem is a good foundation for effective learning performance. These children are likely to be motivated towards school work and are likely to perform better than those children who did not pass through pre-schools.

Paulton and James (1999) also talk of pre-school as offering such skills as language, sensory discrimination and problem solving, visual, auditory and tactile discrimination which are also special components of school programmes.

Such are used as a springboard for effective learning. Therefore, it might be difficult for pupils who have not been to pre-schools to have these skills. They also went further to elaborate that pre-schools also provide with colour concept, positional concept, shape and verbal skills. Thus there are always some gains in attending pre-schools and children exposed to pre-schools therefore are likely to perform better than their counterparts. Attendance at nursery schools for even a relatively small part of the day can have an impact on children which can be measured not only during their first term at school but also six months later (Sylva et al. 1990; Heckman 2011). If this is what is obtaining in Zimbabwe then children who have been exposed to pre-schools are likely to perform better than their counterparts at grade one level.

#### Free Play

Paulton and James (1999) also talk of pre-schools as providing a notion of free play which creates an environment which encourages children’s activities such as exploration, investigation, assimilation and reflection. Cohen and Cohen (1988) also support this view and assert that play affords children to make discoveries that are related to the physical world which can help to build positive attitudes in learning such subjects as mathematics. They go on to say that children learn pre-maths activities through play. If pre-schools provide such a solid foundation in mathematics then children from pre-schools may perform better in mathematics than their counterparts. Osborn et al. (1994) also report

that, “When the nursery children are engaged in play activities they are likely to do it in a purposeful or creative way which is a pre-requisite to effective learning.” Thus children who have not been exposed to pre-schools may not engage in purposeful play or imaginative activity particularly when they are alone (Angrist and Lavy 2012). This therefore suggests that the performance of those children who have been exposed to pre-schools may show a marked difference from the performance of those who will have not been exposed to pre-schools.

### METHODOLOGY

Descriptive research is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the “what” question (What are the characteristics of the population or situation being studied?) The characteristics used to describe the situation or population are usually some kind of categorical scheme also known as descriptive categories (Patricia and Nandhini 2013). The descriptive survey was considered to be the best and most appropriate because of its investigative nature. Through this design, the researchers hoped to get information directly from the sampled subjects on what they think and feel about the performance of children who attended pre-schools and those who did not. The descriptive survey therefore has been found to be the most appropriate method, since the approach uses interviews and questionnaires which have high chances of getting the information directly from the people in the sample. The study was conducted in Gweru Urban Primary schools in Zimbabwe which consists of 12 primary schools. The sample constituted five primary schools from which 5 TICs and 30 teachers were selected randomly. Data collection was done during the first term of 2013 school calendar. Two instruments used for data collection were an open ended questionnaire and a structured interview schedule. Respondents were asked to complete a consent form and they were informed that they were free to withdraw at any stage of the data collection process.

### RESULTS

As shown in the Table 1, most of the grade one teachers were females. They constituted 96.7% as opposed to 3.3% who were males. Since

most teachers were lady teachers, they were likely to give children the motherly love and treatment. As such children who did not attend pre-schools are likely to be the same after a few weeks of adjustment into the formal school situation.

It was also noted that 100% of the TICs were females. These also assist teachers in giving the motherly love and treatment to children in order to enhance social emotional adjustment which will bridge the gap between those exposed to pre-school education and those not exposed. Thus children from pre-schools were likely not to continue performing better due to the caliber of staff in grade one classes.

**Table 1: Gender**

<i>Sex</i>	<i>Trs (N=30)</i>		<i>TICs (N=5)</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Male	1	3.3	-	-
Female	29	96.7	5	100
Total	30	100.0	5	100

Table 2 shows that most of the teachers and teachers – in charge had ‘O’ level qualifications. Thus 76.7% of the teachers had ‘O’ level and only 16.7% were below ‘O’ level. Such high qualifications help to enhance effective teaching among teachers. The 16.7% of the teachers who were below ‘O’ level, also had a lot of teaching experience since qualifications lower than ‘O’ level were qualifications accepted long back. Such good qualifications and long experience are likely to come up with teachers who help children to equally adjust to the formal school situation. Therefore, children are likely to socially relate well with their peers and teachers. Those who failed to attend pre-schools are likely to get good assistance from highly qualified and experienced staff. The teachers – in – charge also have ‘O’ level and ‘A’ level qualifications which are high too. This suggests that they too effectively assist the grade one children to effectively learn.

**Table 2: Academic qualifications**

<i>Academic qualifications</i>	<i>Teachers (Trs) (N=30)</i>		<i>Teachers-In-Charge (TICs) (N=5)</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Less than “O” level	5	16.7	-	-
“O” Level / Grade 11	23	76.7	3	60
“A” Level Degree	2	6.6	2	40
Total	30	100.0	5	100

Most of the teachers according to Table 3 had Certificate in Education (CE). Thus 60% of the teachers-in-charge and teachers held Certificate in Education qualification which is a higher qualification. Their methods will effectively assist children even if they were not exposed to pre-school concepts. It is most likely that even if there was a difference at the beginning of the term children are likely to perform equally well at the end of the year. PTL and T 3 teachers were those with long standing experiences. They can assist children effectively. If there was any difference in these children's performance at the beginning of the year, the poor performers are likely to catch up with those from pre-schools. Thus teachers and teachers – in charge with such high qualifications and long standing experience are likely to be effective which bridges the gap between those who went to pre-schools and those who did not.

**Table 3: Professional qualifications**

Academic qualifications	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
PT1	3	10	1	20
T4	4	13.4	-	-
PTH	1	3.3	-	-
T3	1	3.3	1	20
T2	-	-	-	-
Certificate in Education	13	60	3	60
Dip.In Education Degree	3	10	-	-
	-	-	-	-
Total	30	100.0	50	100

Table 4 shows that the majority of the teachers and teachers – in – charge were highly experienced in teaching grade ones. As reflected in Table 4, 83.3% of the teachers had 5 + years of teaching experience. Due to this long experience they should know how to handle grade ones. As such, children are likely to socially and emotionally adjust quickly. This experience is also likely to enable teachers to teach effectively. Therefore, children are likely to catch up at the end of the year.

**Table 4: Teaching experience**

Academic qualifications	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Less than 1 year	1	3.3	-	-
1-2 years	2	6.7	-	-
3-4 years	2	6.7	2	40
5 + years	25	83.3	3	60
Total	30	100	5	100

Tables 5 and 6 were concurrently analyzed and interpreted. Most of the teachers were of the opinion that children should be sent to pre-schools. Thus 93.3% of the teachers were of this opinion and were supported by 100% of the TICs who expressed the same opinion. This is so may be because they realize the benefits offered by pre-schools. Teachers and teachers –in – charge advocated that children should attend pre-schools. They hold this opinion may be because children from pre-schools perform better than their counterparts. They may also socially and emotionally relate well with their peers and teachers.

**Table 5: Necessity to attend pre-school**

Necessity to attend pre-schools	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Yes	28	93.3	5	100
No	2	6.7	-	-
Total	30	100.0	100	100

**Table 6: Reasons**

Reasons	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Emotional and social adjustment	18	60	3	60
Content form the basis for formal learning	8	20	1	20
Communication skills	6	20	1	20
Wrongly introduced concepts	3	10	-	-

The majority of the teachers were also of the opinion that children should be sent to pre-schools for social and emotional adjustment. Therefore, children from pre-schools are likely to perform better because they are socially adjusted. This was also confirmed by the interview carried out where most teachers and TICs felt pre-schools help children to socially and emotionally adjust to the school environment. The teachers and teachers – in – charge further felt that children from pre-schools also acquire communication skills as evidenced by 10% of the teachers and 20% of the teachers – in – charge in Table 6. Thus pupils from preschools are likely to perform better because communication skills are important and are central to the child's learning. Also 20% of the teachers and

teachers – in – charge felt that the content offered at pre-schools form the basis for formal learning. As such children from pre-schools are likely to be a step higher than those who did not attend pre-schools.

A small number of 10% of the teachers felt that children should not attend pre-schools because some concepts will be introduced wrongly by pre-school teachers. This however does not dismiss the fact that children will be emotionally and socially adjusted and that they will have acquired the basis for formal learning. They also will have acquired communication skills and as such are likely to perform better than those who did not attend pre-schools.

In Table 7, 19% of teachers and 80% of TICs felt that pre-schools were very useful at grade one level. Thus 19 teachers, 63.3% felt that they were useful while 80% of the teachers – in – charge also shared the same sentiments. This is so many because of the same positive reasons given in Table 6. It is therefore likely that children from pre-schools will perform better than their counterparts as evidenced by a big number of teachers who felt that pre-schools were either very useful or just useful to grade one children.

**Table 7: Usefulness of pre-schools**

Usefulness	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Very useful	19	63.3	4	80
Useful	9	30	1	20
Not useful	2	6.7	-	-
Total	30	100.0	5	100

The statistics in Table 8 portrayed that 93.3% teachers agreed that children from pre-schools performed better than their counterparts during the first six weeks. This was also confirmed by 60% of the TICs. This seems to suggest that after six weeks children who had not been to pre-schools catch up with their counterparts from pre-schools. Children from pre-schools therefore, perform better during the first six weeks of pre-learning activities. This may be due to the reason that what is learnt during pre-learning activities mostly constitute what is covered by the pre-school content (syllabus). The interview carried out also helped to confirm that pre-schools are crucial only during the first few weeks of formal learning. As such, there is a possibility

of those pupils who did not attend pre-schools to catch up with their counterparts who were exposed to pre-school learning.

**Table 8: Better performance in the first 6 weeks**

Performance in the first 6 weeks	Trs (N=30)		TICs (N=5)	
	No	%	No	%
Agree	28	93.3	3	60
Disagree	2	6.7	2	40
Total	30	100.0	5	100

The majority of the teachers and the TICs felt that there was no difference in performance at the end of the year. Also 73.3% of the teachers and 60% of TICs agreed that there is no difference at the end of the year. Statistics seem to signify that pre-schools are most useful during the first six weeks as evidenced in Table 9. Therefore, according to the views of teachers and TICs children from pre-schools perform better during the first few weeks of the child's formal learning. The teachers and TICs were therefore of the opinion that the performance of grade one pupils who attend pre-schools is only better during the first few weeks of the team as confirmed the interviews conducted.

**Table 9: Difference in performance at the end of the year**

No difference	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Agree	22	73.3	3	60
Disagree	8	26.7	2	40
Total	30	100.0	5	100

Table 10 showed that 56.7% of the teachers and 60% of the TICs felt that children from pre-schools performed better than those who did not attend pre-schools. These statistics constitute the majority of respondents. This addresses the research problem that pupils from pre-schools perform better than those who did attend pre-schools.

**Table 10: Opinions of participants**

Opinions	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Yes	17	56.7	3	60
No	13	43.3	2	40
Total	30	100.0	5	100

A number of reasons for sending children to pre-schools were advanced as shown in Table 11. The reasons were that children from pre-schools emotionally and socially adjust as was observed by 50% of the teachers. This seems to suggest that pre-school learning is important during the first six weeks where children will be adjusting to their new environment. Also 23.3% of the teachers and 20% of the TICs felt that pre-school content offers children the basis for formal learning. Furthermore 16.7% of teachers and 20% of TICs were also of the opinion that children from pre-schools would have gained communication skills. Only 10% of the teachers however felt that pre-schools inculcate wrong concepts in children. Thus from the statistics above, most teachers and TICs seemed to feel that pre-schools are of benefit to the children and as such children from pre-schools are likely to perform better than their counterparts.

**Table 11: Supporting reasons**

Supporting reasons	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Emotional and social adjustments	15	50	3	60
Content basis for formal learning	7	23.3	1	20
Wrongly introduced concepts	3	10	-	-
Communication skills	5	16.7	1	20

Most teacher and TICs as shown in Table 12 were of the view that pre-schools have positive effects on academic achievement, since such children count, read simple words and have communication skills. Therefore, they will be a step ahead and such these children and likely to perform better than those not exposed to pre-schools.

**Table 12: Effects on academic achievement**

Effects	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Can not	10	3.3	3	60
Can read simple words	7	23.3	2	40
Communication skills	112	40	2	40
Easy understanding	5	16.7	-	-
Difficult to unteach wrongly taught concepts	3	10	-	-

Table 13 shows that most respondents were of the view that pre-schools have positive effects on social adjustment. This confirms what literature review suggested, that socialization is learned and does not simply result from maturation. Therefore, if pre-schools offer such benefits then pre-school children are likely to perform better than those not exposed to pre-school education.

**Table 13: Effects on social adjustment**

Effects	Trs (N=30)		TICs(N=5)	
	No.	%	No.	%
Ability to socialize, that is, mixing and sharing ideas with peers	20	66.6	3	60
Adjustment to the school environment	8	26.7	1	20
Creates social bullies	2	6.7	1	20

Tables 14 and 15 will be considered concurrently. Therefore considering both Tables 14 and 15, the following interpretation and discussion ensued. 83.3% of the Teachers enjoy teaching children exposed to pre-schools. This was supported by 100% of the TICs. They offered such reasons as, they will be socially and emotionally adjusted and that they have basic skills. While 16.7% felt that they do not like teaching children from pre-schools because they lack discipline

**Table 14: Enjoyment to teach children from pre-schools**

Enjoyment	Trs (N=30)		TICs (N=5)	
	No.	%	No.	%
Yes	25	83.3	5	100
No	5	16.7	-	-
Total	30	100	5	100

**Table 15: Reasons to Table 14**

Reasons	Trs (N=30)		TICs(N=5)	
	No.	%	No.	%
Social and emotional adjustment	17	56.7	1	20
Have basic skills	9	30	4	80
Playful	1	3.3	-	-
Lack of discipline and concentration	3	10	-	-

and concentration. These reasons were also given during the interviews. However, since the majority of the respondents stated that they enjoyed teaching children from pre-schools one would persuaded to conclude that children from pre-schools perform better than their counterparts bearing in mind the reasons given above. Apparently 10% of the teachers gave reasons that children from pre-schools lack discipline and concentration. This may be attributed to the fact that during the first few weeks children from pre-schools will be repeating the work they covered during the pre-school education. As such, children will be unchallenged bored and undisciplined and lack of concentration may result. Children from pre-schools therefore, may perform better as shown by the majority of the respondents who enjoy teaching them.

Tables 16 and 17 were discussed concurrently too. Most of the teachers did not enjoy teaching children who were not exposed to pre-schools as reflected in Table 16. This was also confirmed by 80% of the TICs who also said that they did not enjoy teaching children who had not been exposed to pre-schools. The reasons have been cited in Table 17 and they suggest that children from pre-schools perform better than those not exposed to pre-schools. The reasons cited however seem to suggest that children perform better during the first six weeks after which anything can happen. For example,

**Table 16: Teaching children who did not attend pre-schools**

<i>Enjoyment</i>	<i>Trs (N=30)</i>		<i>TICs (N=5)</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Yes	5	16.7	1	20
No	25	83.3	4	80
Total	30	100.0	5	100

**Table 17: Reasons to Table 16**

<i>Reasons</i>	<i>Trs (N=30)</i>		<i>TICs (N=5)</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Not socially and emotionally adjusted	15	50	3	60
Lack basic skills	5	16.7	1	20
Teacher develops the right concepts	5	16.7	-	-
Easy to control	3	10	1	20
Discipline and concentrate	2	6.6	-	-

lack of emotional and social adjustment and lack of basic skills can also be inculcated during the first six weeks. However, in general the statistics on both Tables 16 and 17 were all driving to the point that children from pre-schools perform better than those not exposed to pre-schools.

The general comments reflect the opinion that pre-schools offer a number of advantages and as such children from pre-schools are likely to perform better than those not exposed to pre-schools (Table 18). These general comments emphasized the opinions or sentiments which were observed in the analysis of results. 6.7% confirmed the opinion which was expressed by a few teachers earlier on that the children from pre-schools were exposed to wrongly taught concepts by pre-school teachers.

**Table 18: Additional comments**

<i>Additional comments</i>	<i>Trs (N=30)</i>		<i>TICs (N=5)</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Acquisition of basic skills	11	36.7	3	60
Emotional and social adjustment	8	26.6	2	40
Development of communication skills	7	23.3	-	-
Children become keen to learn	2	6.7	-	-
Wrongly taught concepts by pre-school teachers	2	6.7	-	-

The data in Table 19 reflected that pre-schools are most useful at the beginning of the year. This was stated by 80% of the teachers. Maybe this is the period when those pupils from pre-schools are to perform better. Thus during the course of the year there is room for the other children to catch up after the first few weeks. During the interviews the teachers and TICs mentioned that at the end of the year a number of variables will come into play to affect children's performance.

**Table 19: Opinions on most effective period**

<i>Opinion on most effective period</i>	<i>TICs (N=5)</i>	
	<i>No.</i>	<i>%</i>
At the beginning of the year	4	80
During the course of the year	1	20
All the time in Grade 1	-	-
None	-	-
Total	5	100

## DISCUSSION

When the findings are examined against the review of literature and in relation to the current research study, it is interesting to note the consistency and agreement of the findings with what the related literature review says about the performance of children exposed to pre-schools. The descriptive statistics show a great deal of agreement with the related literature review on the perceptions of teachers and teachers – in – charge.

Most teachers and TICs said that they enjoyed teaching children from pre-schools. The majority also confirmed that such children perform better academically as they will be able to count and read simple words and will have acquired communication skills. Children from pre-schools are also said to have emotionally and socially adjusted to the new environment as such they can easily relate well with teachers and their peers. It is from this perspective that it can be concluded that children from pre-school perform better than those not exposed to pre-schools. Some people may argue that children who have not been exposed to pre-school have high chances of catching up with their counterparts thereby rendering pre-schools to be a waste of money (Blau and Currie 2004; Barnett 2011). Children who have not been to pre-schools always catch up because of the highly qualified and long teaching experienced personnel who are found teaching grade one classes.

Furthermore, the fact that most teachers are with a lot of experience, such teachers may not see the difference in performance because of the approaches they use gained during their years of experience (Heckman 2010; Angrist and Lavy 2012). However, it has been generally agreed by the teachers TICs in the sample that children from pre-schools perform better than their counterparts, and socially relate well with others during the first few weeks of formal learning since they will also have acquired basic learning skills.

## CONCLUSION

It was established that children who have been to pre-schools perform better than their counterparts. However, it was also established that this takes place within the first six weeks before those children who had not been exposed to pre-schools catch up. It was further established that children from pre-schools are socially emotionally adjusted and therefore, perform better than their counterparts. The findings also

established that children who did not attend pre-schools were not socially and emotionally adjusted. This came out clearly in the interviews. Children who have not been exposed to pre-schools always isolate themselves during the first few weeks. At a lesser degree it was also established that some respondents indicated that children from pre-schools are difficult to teach and that they will have been exposed to wrongly taught concepts.

## RECOMMENDATIONS

On the basis of the findings the following recommendations were made:

1. It should be government policy that all children attend pre-schools before enrolling for formal learning.
2. All pre-school teachers should be qualified to handle pre-school children so that they employ appropriate strategies.
3. The syllabus should be structured in such a way that there is continuity from pre-schools to grade one.
4. Government should subsidize pre-schools so that every family can afford to send children to pre-school.

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