11 The influence of kindergarten education on subsequent achievement in Grade One

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1 INTRODUCTION

1.1 Aims

The purpose of this study is to evaluate the effectiveness of kindergartens in Oman. Accordingly, I plan to identify benefits for children's development with regard to the first year of subsequent education, exploring the views of Grade 1 teachers, who have, in their classes, children with experience of kindergarten as well as those without.

1.2 Background

The popularity of kindergartens in Oman has risen markedly since 1977, when His Majesty issued a royal decree regulating private schools (Ministry of Education - MoE, 2003a). While there were just two kindergartens in 1973, by 2005 there were 158, educating 9,429 children aged 4-5 years old, approximately 7% of the children in this age group in the country (MoE, 2005). In relation to population size, the number of kindergartens in Muscat, the capital, where I conducted the research, is higher than average (MoE, 2006), which I suspect might relate to economic factors as well as parents' education levels.

Kindergartens can be distinguished from other types of pre-school education in Oman, such as Holy Quran schools. These provide initial education, including the principles of Islam, reading and writing in Arabic, and some elementary arithmetic for young children of both sexes.

Teaching in Holy Quran schools, following traditions that have been established over hundreds of years (Noorani, 2003), can take place in various locations, e.g.; under the shade of trees, in mosques or courtyards. Kindergartens, in contrast, while also based on Islamic and human values, such as honesty and respect, are more formalized and are housed in purpose built buildings. Though fees vary, they tend to be more expensive, with fewer students per class (not more than 20).

Teachers use educational games often considered suitable for children's development at a cognitive, emotional and social level (Lawati, 2005).

1.3 Rationale

Since, for most families, their primary goal is to empower their children to become independent, self-confident and responsible, issues of whether or not it is worth sending their children to kindergarten are important. The development of children and their well-being is also of national importance as these children will provide the cornerstone upon which the nations' wealth is based for generations to come. Therefore, it is worth exploring the extent to which kindergartens help support children's development, particularly since scant attention has been paid by researchers to this topic, particularly in Oman. The private schools' conference in 2003 called for enrolments at kindergarten level to be increased, which supports the 'Education for All' national directive (MoE, 2003b). I wish to draw attention to the issue of kindergartens by undertaking this research.

2 LITERATURE REVIEW

Studies conducted in Britain strongly suggest that children benefit greatly from early learning experience. For example, the Child Health and Education study's results show that children who attended playground, private nursery or local education authority nursery scored higher on tests of cognitive functioning and on language than those who did not (Osborn et al, 1984; Clark, 1988). Similarly, children who experienced pre-school education performed better at age seven in four subjects (English, Maths, Science and Technology) at Key Stage One of the National Curriculum (Shorrocks et al., 1992).

Admittedly, Tizard & Hughes (1984) found that language interactions at home with adults were more stimulating than those conducted at nursery. Indeed, they argue that social, physical, musical and creative activities are mostly developed at nursery schools, while children's basic verbal-cognitive skills are mostly developed at home. However, in my opinion this is not always true since many children spend a lot of time with their peers and teacher in the preschool classes, doing many activities such as acting and playing, which help develop language ability.

Various benefits accrued from attending kindergarten have been identified, including readiness for school. Jowett & Sylva (1986) found that kindergarten children were better prepared linguistically, more sociable, more likely to interact with their teachers, more independent and more settled. They also persevered longer on challenging tasks and were more motivated. According to Goodman & Sianesi (2005), who measured development at entry to school and at the end of Grade One, benefits include independence, concentration, sociability, as well as children's literacy and numeracy development. Furthermore, as these children are more socially developed, there is a resultant reduction in behavioural problems (Ball, 1994).

Studies in the United States have produced similar findings. Outcomes of attending kindergarten include better overall school performance, improved job prospects and self-esteem (Lazar & Darlington, 1982; Woodhead, 1985). Children

learn certain cognitive skills such as attentiveness to teachers, ability to follow instructions and perseverance in completing tasks. This has a very positive impact when they enter Grade One. They can do classroom activities, adapt to classroom procedures, and are more prone to learning new skills and doing schoolwork (Lazar & Darlington, 1982). Children with early education experience were compared with those who had stayed at home by the High/Scope Perry pre-school study, which traced the children's development until the age of 27. Kindergarten children did better than their peers, spending less time in remedial classes, showing greater self-esteem and completing courses. In adulthood, they were more likely to have jobs, own homes, earn good salaries and less likely to be involved in crime, drug abuse or teenage pregnancies (Schweinhart et al., 1993, as cited in Ball, 1994).

Unfortunately, very few studies on the effectiveness of pre-school education and its subsequent impact on children at later stages have been conducted in Arabic countries. The few that are available do not involve Oman. In Egypt, Azza (2002) found a strong correlation between the play activities of kindergarten (both outdoor and indoor), and readiness, in terms of reading development, in Grade One. In another study, Kuwaiti kindergarten teachers were asked to rank in order of importance six purposes of kindergarten education (aesthetics, home extension, social, physical, intellectual and national/religious purposes) (Nashif, 1985). Children's social, physical and intellectual developments were ranked highest. Other studies in Saudi Arabia, Egypt and Bahrain show a range of benefits for children in pre-school education. These include: significant reduction in later behavioural and learning problems; lower levels of absenteeism; less likelihood of grade retention and greater social and emotional maturity (Arab League Educational Cultural and Scientific Organization, 2000).

To summarize, it would appear that many experts would concur on the importance of pre-school education on a child's life. They reveal that children have positive short and long-term effects from pre-school education in their cognitive, social, emotional and physical development. In addition, they indicate that children with preschool experience are more ready for school and less likely to have behavioural problems. However, these benefits depend on the quality of the provision of the pre-school education programme. For example, the 'Cost, Quality and Child Outcomes' study shows that children who received poor quality child care were less prepared for school and tended to have less success in the early phases of schooling than those students who had received high quality care in their pre-school years (Peisner-Feinberg et al., 2000).

As they acquire knowledge, children need to be able to learn about themselves through play (Adas, 2001) and the environment is important. Suitable facilities are required, and in Oman these include materials, equipment and toys. The building should be roomy, well lit and aired, the walls painted with calm and soothing colours and the furniture well arranged and appropriate. There should be educational corners; art and science areas, quiet areas in the library corner where children can read, write and listen, noisy areas, such as for dramatic play. Safety and security requirements, such as fire extinguisher and first aid kit, should also be available in each building (MoE, 1996).

Outside, the kindergarten playground area should be securely fenced and contain covered sections for play. It should have in place equipment or games for swinging, climbing, sliding and crawling that strengthen a child's body, as well as moveable toys. The outdoor environment should include gardening, sandbox and water play areas and areas for digging, where children can discover the differences between dry and wet soil, and creatures, such as worms and insects. Also, the outdoor area should contain a large-sized pen for animals like hens, rabbits, birds and cats (MoE, 1996).

Not all Omani kindergartens offer all these facilities. Indeed, only a few are able to, to very high standards. Omani kindergartens differ in the provision of facilities, ranging from high to low quality. They are private and do not get support from the government.

3 RESEARCH METHODOLOGY

3.1 The Research Questions

My research questions are as follows:

1. What is the effect of attending kindergarten on learning, as evident in Grade One children?
2. Do young learners who have attended kindergarten interact differently in social settings (like the school playground and cafeteria) to those children who have not?
3. What are the views of Grade One teachers who deal with both sets of children?

3.2 Participants

To address these questions, I focused on Grade One teachers and learners in Elementary schools. I surveyed 164 Grade One teachers (out of approximately 300) through a questionnaire that made use of stratified random sampling (Robson, 2002), with larger samples taken from schools with larger teacher populations. 152 questionnaires were returned. To test literacy skills, I used a random sample of 90 pupils from 5 schools; a control group of 55, who had attended kindergarten and a non-control group of 35, who had not. I also interviewed 10 teachers, using purposive sampling (Cohen, Manion & Morrison, 2000). My previous position as head of section in the Private Schools Department within the Ministry of Education helped me gain the cooperation of schools and teachers.

3.3 Research Methods

I used three research methods; questionnaires, tests and interviews. Questionnaires, firstly, provide a simple and straightforward way of sampling attitudes, values, beliefs and motives. However, they do not allow for probing, prompting or clarification of questions (Burns, 2000). I designed and piloted my questionnaire carefully, including both open and closed questions, making use of a Likert Scale.

Secondly, I used semi-structured interviews for their flexibility and for the richness of in-depth data they can provide, while recognizing there is an opportunity for bias to occur as the interview is face-to-face (Burns, 2000). Before the interviews, I established a good rapport with the teachers through brief meetings, explaining the purpose of the research and eliciting cooperation. Some interviews were recorded, while others were paraphrased, as not all teachers wanted to be recorded.

For the third method, a short test was designed to assess literacy skills in Arabic. This was administrated with the cooperation of one of the Arabic language supervisors, after permission was sought from the parents of the children participating. The test contained eleven questions, such as matching pairs of items, inserting missing words, and circling words and/or letters. An answer key was provided. Students answered individually using pencils within a given time period. Where necessary, questions were explained to those students who requested assistance.

3.4 Analysing the data

Qualitative and quantitative data were analysed according to methods recommended by Wilkinson & Birmingham (2003). For quantitative data, I used the Statistical Package for Social Sciences (SPSS), with code numbers assigned to responses; 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. For the test method, the marks for each question were written directly into SPSS. However, qualitative data from the interviews and open questions in the questionnaires were analyzed using the deductive method. Responses to each question were copied onto sheets of paper, similarities were noted and comparisons and contrasts made.

4 FINDINGS

In this section, I present the findings obtained from the three methods used for data collection; questionnaire, interview, and test.

4.1 Questionnaire results

This section is based on 152 questionnaires completed by Grade One teachers. All the findings are presented in percentages. Data are presented below according to the five sections of the questionnaire (school readiness, literacy skills, numeric skills, social behaviour and general competence).

4.1.1 School Readiness

Table 1 (below) summarizes the results regarding school readiness.

Key: SA= strongly agree, A= agree, N= neutral, D= disagree, SD= strongly disagree

Table 1: School Readiness

No	Item	Group	SA%	A%	N%	D%	SD%
1.	Is ready for school	Control	52.0	38.2	7.9	2.0	0
		Non-control	1.3	25.8	31.6	37.5	13.8
2.	Is familiar with school environment	Control	53.3	42.8	2.6	1.3	0
		Non-control	1.3	5.9	15.8	57.9	19.1
3.	Is used to being separated from their parents	Control	39.5	47.4	11.2	1.3	0.7
		Non-control	2.0	8.6	23.7	48.7	17.1
4.	Quickly settles into the class routine	Control	41.4	46.1	11.8	0.7	0
		Non-control	0.7	10.5	27.6	46.1	15.1

Key: SA= strongly agree, A= agree, N= neutral, D= disagree, SD= strongly disagree

Clearly, the great majority of teachers surveyed agreed that the control group (those with kindergarten experience) were far more ready for school than the non-control group. There was 86% - 96% agreement on the four items that kindergarten children were ready for school. In contrast, only a small minority agreed that children without kindergarten experience were ready. Indeed, there was less than 8% agreement that the non-control group was familiar with the school environment (item 2), and scores on items 3 & 4 were only slightly higher.

4.1.2 *Literacy Skills*

Table 2 below summarizes the findings regarding literacy skills.

Table 2: Literacy Skills

No	Item	Group	SA%	A%	N%	D%	SD%
5.	Knows a number of letters and letter associations	Control	33.6	56.6	7.9	2.0	0
		Non-control	0	5.9	28.9	46.1	19.1
6.	Can read a lot of familiar words	Control	19.1	32.9	27.6	18.4	2.0
		Non-control	0	2.6	15.1	44.7	37.5
7.	Recognizes the letter sounds	Control	26.3	46.7	18.4	8.6	0
		Non-control	0	5.9	22.4	50.0	21.7
8.	Knows how to hold a pencil or crayon correctly	Control	35.5	53.9	9.2	1.3	0
		Non-control	2.0	9.2	34.9	43.4	10.5
9.	Writes easily without help from the teacher	Control	17.1	38.2	25.0	18.4	1.3
		Non-control	0.7	3.3	15.8	46.7	33.6
10.	Can write the letters of words easily	Control	16.4	38.8	27.6	15.1	2.0
		Non-control	0.7	1.3	17.1	48.7	32.2

Clearly, the teachers believed that the control group had better developed literacy skills. Indeed, the majority of the teachers agreed with all six statements. The lowest scores were for reading a lot of familiar words (52% agreement) and writing the letters of words easily (55.2%). The non-control group also scored lowest on these two items, gaining 2.6% and 2% agreement from the teachers respectively. This represents a highly significant difference. The non-control group scored highest in knowing how to hold a pencil or crayon correctly (11.2%). There was 89.4% agreement that the control group could do this.

4.1.3 Numeric Skills

Table 3 below summarizes the findings regarding numeric skills.

Table 3: Numeric Skills

No	Item	Group	SA%	A%	N%	D%	SD%
11	Recognizes numbers	Control	38.2	50.7	9.9	1.3	0
		Non-control	1.3	10.5	30.9	46.7	10.5
12	Can recite numbers in their proper order	Control	27.0	51.3	17.1	4.6	0
		Non-control	0.7	10.5	29.6	44.7	14.5
13	Can write basic numbers	Control	29.6	52.0	15.1	3.3	0
		Non-control	0	9.9	31.6	44.7	13.8
14	Understands the concept of numbers and their use	Control	20.4	44.1	26.3	7.2	2.0
		Non-control	0	7.2	23.0	50.7	19.1
15	Struggles to master shapes of objects	Control	8.6	21.1	27.0	37.5	5.9
		Non-control	2.6	31.6	27.0	27.6	11.2

Clearly, students with kindergarten experience perform much better in areas involving numeric skills than those without. There is over 80% agreement that kindergarten children can recognize and write basic numbers, but less than 12% agreement that children without this experience can (items 11 & 13). In the view of Grade One teachers, there are similar wide differences in the abilities of these groups to recite basic numbers and understand the underlying concepts (items 12 & 14). However, item 15 created some uncertainty amongst them, perhaps because it was phrased negatively.

4.1.4 *Social Behaviour*

Table 4 below summarizes the findings regarding social behaviour.

Table 4: Social Behaviour

No	Item	Group	SA%	A%	N%	D%	SD%
16	Is able to establish good relationships with his/ her classmates or teachers	Control	40.8	53.3	5.9	0	0
		Non-control	3.9	17.1	42.8	29.6	6.6
17	Interacts with other students	Control	38.2	55.3	5.9	0.7	0
		Non-control	3.3	23.7	38.2	29.6	5.3
18	Co-operates with classmates	Control	37.5	53.9	6.6	2.0	0
		Non-control	3.3	23.0	39.5	28.9	5.3
19	Participates in group work	Control	33.6	55.9	9.9	0.7	0
		Non-control	3.9	27.0	34.2	29.6	5.3
20	Participates in play activities	Control	41.4	50.0	8.6	0	0
		Non-control	5.9	32.9	38.2	19.1	3.9
21	Participates in school events like dramas, school broadcasting etc	Control	30.9	48.7	19.1	1.3	0
		Non-control	2.6	12.5	46.7	30.9	7.2
22	Has respect for others' needs & wishes	Control	19.7	50.0	28.3	2.0	0
		Non-control	2.0	19.7	46.1	28.3	3.9
23	Behaves well with others	Control	21.1	50.7	27.6	0.7	0
		Non-control	3.9	23.7	45.4	23.7	3.3

With regard to social behaviour, it seems clear that the great majority of the teachers regarded the control group as more developed, as is evident in Table 4. The kindergarten children scored much higher in relationship-building, interaction, cooperation and participation. Their lowest scores were for respecting others' needs and wishes, and behaving well with others, but even so most teachers (approximately 70%) agreed their behaviour in these respects was positive.

In contrast, the non-control group students were regarded as most developed in terms of their participation in play activities (38.8%) and in groupwork (30.9%). There was only 21% agreement that they established good relationships with classmates and teachers and just 15.1% agreement that they participated in school events.

4.1.5 General Competence

Table 5 below summarizes the findings regarding general competence.

Table 5: General Competence

No	Item	Group	SA%	A%	N%	D%	SD%
24	Is keen to participate when the teacher asks a question	Control	35.5	53.3	11.2	0	0
		Non-control	0.7	16.4	41.4	35.5	5.9
25	Can express himself/ herself freely with simple language	Control	30.3	52.6	13.2	3.9	0
		Non-control	0	11.8	40.1	40.1	7.9
26	Has high test scores	Control	20.4	41.4	30.9	6.6	0.7
		Non-control	1.3	11.8	36.2	38.8	11.8
27	Has knowledge of colours	Control	44.7	48.7	5.9	0.7	0
		Non-control	0.7	34.9	38.8	23.7	2.0
28	Has the ability to pay attention for a long period of time	Control	23.0	40.8	25.7	7.9	2.6
		Non-control	0.7	12.5	42.1	36.2	8.6
29	Has the ability to follow instructions	Control	28.9	52.0	16.4	2.0	0.7
		Non-control	0.7	23.0	41.4	28.9	5.9
30	Offers answers to simple questions	Control	31.6	56.6	10.5	1.3	0
		Non-control	0	27.6	37.5	27.0	7.9

Following the same pattern that has emerged in all previous sections, the results in Table 5 indicate more positive views of control group abilities and behaviour. Thus, the majority of the teachers felt the kindergarten children achieved high tests scores and could pay attention for a long period of time (items 26 & 28), while only approximately one eighth of the teachers felt these statements were true of the non-control group. Clearly, the teachers felt the general competence of the kindergarten children was higher.

4.1.6 Open Questions

At the end of the questionnaire, there were two questions inviting further comments. The majority of responses reflect the pattern that has emerged. Most frequent positive points relating to the control group were: children with preschool experience are more self-confident and independent; they have well-developed motor skills; they respect others' property and take care of their belongings; and have more well developed personalities as compared with their peers who have not attended kindergarten. However, they also mentioned negative points in relation to the same group. Some students were reported as forming letters in the wrong way, following the wrong direction, with the result that the teacher had to undo the learning that had taken place in the kindergarten with a resultant loss of time.

4.2 Test

The results of the literacy test, conducted with 90 pupils, would seem to demonstrate that those students with kindergarten experience had better developed literacy skills. The mean score of the control group was 18.98 out of 22, while it was 16.12 for the non-control group. While females in both groups performed better than males, control group males did better than non-control group females.

Table 6: The mean scores in the literacy test

Sex	Control Group	Non-control Group
Male	18.22	15.05
Female	19.61	17.56
Both	18.98	16.12

4.3 Interview

Findings will be presented according to the questions asked the interviewees.

4.3.1 What do you think are the outcomes of pre-school education?

The majority of the 10 teachers interviewed felt outcomes were positive, citing readiness for school, social development and linguistic knowledge as benefits. For example, one said: "Children become well-prepared and know the system of the school." Another noted: "Children who have attended kindergartens mingle easily with their peers and teacher. They know the alphabetic letters and their sounds."

However, a few respondents mentioned some negative outcomes of preschool education. For example, some students hold the pencil incorrectly and are confused regarding the names of letters and their sounds. The reason for these negative outcomes is unclear. It may depend on the quality of preschool programmes they have been exposed to, relate to individual reasons or reflect on the quality of teachers who have taught them and their lack of experience. Many kindergarten teachers are not specifically trained to teach at this level.

4.3.2 How effective do you think pre-school education is, in helping children achieve in Grade One?

All respondents answered 'very effective', except one who chose 'quite effective'.

4.3.3 Is it important to enrol a child at kindergarten level? Why?

None of the respondents answered negatively to this question. All agreed that parents should enrol their children in kindergartens. They cited many advantages. The most frequent ones were: to enable children to adjust to the school environment, be sociable, acquire some learning skills, develop cognitive skills, learn correct discipline, and build up their personality. One of the respondents said: "it is a chance for a child to get used to being away from his/her mummy." Another stressed that: "it is good for the children to get an idea about what school is; its environment,

teachers and students." One of the teachers emphasized: "attending kindergartens helps children gain firm and neat handwriting, strengthens their memory skills and helps them acquire a lot of knowledge."

4.3.4 Are children who have been to pre-school better prepared for school - socially and academically?

All interviewees responded positively. With regard to social preparation, they pointed out that children with preschool experience participate a lot more in school and class activities. One stated: "some children who came from kindergarten participate in the school broadcasting (morning assembly)." In addition, nine respondents mentioned that these children can interact and cooperate easily with their friends and teachers. Another said: "most of the preschool children are more able to make friends and form relationships in and outside the class."

From an academic point of view, all respondents stressed that children with preschool experience know the alphabetic letters, their sounds and forms, and how to make words from letters. Also, the majority pointed out that these children know how to hold the pencil correctly; know the numbers and colours; know how to write their names; understand instructions; and can tell stories from pictures.

4.3.5 Without looking at a student's records, are you generally able to predict during the early days of the school year which children have attended pre-school from their behaviour, discipline or skills? How?

Early in the school year, sometimes even on the first day, Grade One teachers perceive a pronounced difference between children who have had preschool experience and children who have not. All respondents said they can tell, even without looking at a student's records, which children in their classrooms have been to preschool. They base this on observations of the children's behaviour and skills in certain areas; from their interaction with their classmates, from the way they hold the pencil, how they answer questions, recognize the sound of the letters and from their reactions in class. One respondent said: "Yes, I know them. They come happy to the class, not shy and always talking with their peers."

4.3.6 What are the differences between students who have attended pre-school and those who have not?

A frequent response was that those with preschool experience are more literate. One commented: "Students with a preschool background are good in their handwriting, able to make words from letters and have good vocabulary." Another said: "I have a girl who attended kindergarten last year. She is the first to raise her hand when I asked my students to identify letters of the alphabet." Moreover, they are more sociable, more ready for school, more active, self-confident and well-disciplined. Another teacher said: "Children who have attended kindergarten are more mature socially and physically. They are quick to interact and make relationships with others."

On the other hand, students without preschool experience are perceived to be

unsociable; take longer to settle in class and also take considerably more time to interact with their peers both in and out of class; are weak in their literacy skills; and are more prone to be absent. One respondent criticized: "In my class, children who have not attended preschool do not know the alphabetic letters; they are shy and cry. They always want to go home and they fall further behind."

4.3.7 What are the problems that you face with students who have not attended kindergarten?

All respondents stated that too much effort and time is devoted to ensuring that students without preschool experience settle into class as quickly as possible, hold the pencil correctly, correct their writing, become sociable, write properly and learn the alphabet. Thus, they face difficulties in covering the aims and content of each lesson. One respondent mentioned: "I face difficulty in balancing my work with children who have preschool experience and those who have not. Some of them show home-sickness and are always crying, so I sometimes spend a third of the period calming them."

5 DISCUSSION

This section, based upon the findings reported above, presents answers to the research questions and then reflections.

5.1 What is the effect of attending kindergarten on learning, as evident in Grade One children?

Clearly, teachers believe that children benefit from attending kindergarten. The first advantage cited is school readiness. The majority of respondents in both questionnaire and interview findings were convinced that children's readiness for Grade One is substantially greater when children have participated in a preschool programme in the year before they begin their elementary schooling. These children come ready and well-prepared for school. They enjoy going to school, exhibit no fear, are confident and independent and aware that school is a place where they can learn and play. They also quickly settle into the class routine. This confirms Jowett & Sylva's (1986) findings about kindergarten supporting school readiness.

In addition, results indicate that students with pre-school experience are better prepared academically. Most had high scores in the literacy test conducted, scoring better than their peers, as they already had a firmer foundation in linguistic knowledge. They were familiar with the alphabetic letters and with reading and writing words. Similarly, Shorrocks et al. (1992) found that children who have had the opportunity to attend preschool scored higher on educational assessment than those who had not been afforded the opportunity. In kindergartens, children learn about numbers and their uses; thus, most of the respondents showed high agreement in relation to preschoolers' numeric skills. This also confirms Neuman & Roskos' (2005) claims that attending pre-schooling develops children's literacy and numeric skills. These children already have skills that a Grade One teacher can build upon. Moreover, the findings would appear to indicate other positive outcomes

from attending pre-school education. Children are seen to be more self-confident and independent. They can answer questions and talk about themselves freely.

However, a few respondents, in both the interview and the open question section of the questionnaires, made reference to some negative outcomes. Firstly, some students confuse the name of a letter and its sound, and write some letters incorrectly. In addition, some students hold the pencil incorrectly.

5.2 Do young learners who have attended kindergarten interact differently in social settings (like the school playground and cafeteria) to those children who have not?

From the responses provided in both the questionnaire and interview, the answer to this question can be classified as positive. Students with preschool experience are viewed as being more sociable than those who have not. The various facilities available in kindergartens allow children to participate and interact in different activities through sharing and playing with others. Hence, this strengthens relationships, develops behavior and teaches them how to control aggression (Ladd et al., 1999). As a result, more than 91% of the participants responded positively to the question that children with preschool education are better able to establish relationships with their classmates and teachers, interact more readily and are more co-operative, and participate to a far greater degree in all play activities than those who have no preschool experience.

Moreover, they are also more willing to participate in groupwork, and in class and school activities such as the school assembly. In contrast, children without kindergarten experience are afraid of mingling with others and playing with them, especially outside class. Furthermore, interview responses indicate that preschoolers are well-disciplined, show respect for others, whereas some students without preschool education are not kind to their peers.

5.3 What are the views of Grade One teachers who deal with both sets of children?

The above analysis reveals that most Grade One teachers are more comfortable with those children who have attended kindergarten than with those who have not. They are in favour of kindergarten attendance, pointing out that preschool experience can save the teacher a lot of time and effort. However, because of their need to work on the basic skills of the children who have not had the benefit of preschool, this results in them having less time to focus on the more advanced students.

Despite the clear advantages of preschool education, I would argue that benefits depend very much on both the quality of the preschool and its facilities. A number of interviewees made reference to this point. In addition, also important are individual differences in the children and the quality of teachers responsible for teaching them.

5.4 Reflections

While these findings are very much in favour of kindergartens, I should introduce a note of caution. Firstly, findings may have been influenced by the researcher's positive view of the advantages of pre-schooling, which may have affected the phrasing of questions, reducing the study's reliability. Secondly, while it could be argued that pre-schooling is generally a good thing for children, there may be the odd exception. For instance, for psychological or cognitive reasons, kindergarten may come too soon for some children. We should accept that children are individuals and have individual differences. Furthermore, I have not presented evidence to support an argument that would negate the advantages accrued to children by not attending pre-schooling, which could suggest I have approached the research in a limited and biased way. It occurs to me that other participants, such as principals, supervisors and parents (and from other parts of the country), might have varying views on this topic, and that I could have approached it differently to elicit a broader range of opinions.

6 IMPLICATIONS AND CONCLUSIONS

Despite the limitations of the research, referred to in 5.4 (above), I would argue that preschool education plays an important and significant role in developing children's skills cognitively, socially, emotionally and physically. Accordingly, I would make the following recommendations:

Firstly, attendance at kindergarten level should be prerequisite for every child in Oman. Secondly, the government should encourage parents to enrol their children in kindergarten. This can be done by: a) opening free kindergarten classes in every government school in all the regions of Oman or by b) providing financial support for those schools that include preschool education such as kindergartens in private schools. This would allow them to invest more in such programmes and also assist them in covering their expenses. Such support can be provided in different ways, such as by paying staff salaries or children's fees, by providing the necessary facilities and resources or by exempting the kindergartens from taxes.

Also, the Ministry of Education should support these kindergartens both technically and administratively in order to ensure they have high-quality programmes. In addition, the Ministry of Education should conduct in-service training programmes or workshops for kindergarten teachers.

Also, there is a need to enlighten society about the importance of kindergarten education (as only 7% currently benefit from it). This could be done by the Ministry of Education in coordination with other ministries and UNICEF. Strategies could include developing specific educational programs and broadcasting them through TV, radio, newspapers and magazines; distributing leaflets that discuss in detail the advantages of pre-schooling to every household in the country; establishing information centres in every region with qualified staff in attendance who would advise parents on preschool education.

Next, the Ministry of Education should organize televised local conferences focusing on the importance of pre-schooling and its benefits. Educationalists,

psychologists and experts from different countries could be invited to present their findings to private and government school headteachers, teachers, students and parents.

Finally, further investigations should be conducted into the effectiveness of kindergartens through semi-structured interviews, questionnaires and longitudinal case studies. More in-depth research is needed in this area.

REFERENCES

Adas, M. A. (2001). *Introduction to kindergarten*. Amman: Dar Al-Fikr.

Arab League Educational Cultural and Scientific Organization. (2000). *Review of previous Arabic strategy on elementary school, kindergarten level. Tunisia:* ALECSO Press.

Azza, K. (2002). The differences of play forms in pre-school education and its relation to the readiness development of children. *Psychological Science, 63*, 58-74.

Ball, C. (1994). *Start right: The importance of early learning*. London: RSA.

Burns, R. B. (2000). *Introduction to research methods*. London: Sage.

Clark, M. (1988). *Children under five: Educational research and evidence*. London: Gordon and Breach.

Cohen, L., Manion, L. & Morrison, K. (2000). *Research methods in education*. London: Routledge Falmer.

Goodman, A. & Sianesi, B. (2005). Early education and children's outcomes: How long do the impacts last? *Fiscal Studies, 26* (4), 513-48.

Jowett, S. & Sylva, K. (1986). Does kind of pre-school matter? *Educational Research, 28* (1), 21-31.

Ladd, G.W., Birch, S.H., & Buhs, E.S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development, 70* (6), 1373-1400.

Lawati, R. (2005). *The problems of administrating kindergartens in the Sultanate of Oman: A field study*. Unpublished MA dissertation: College of Education: Sultan Qaboos University, Sultanate of Oman.

Lazar, I., & Darlington, R. (1982). Lasting effects of early education: A report from the consortium for longitudinal studies. *Monographs of the Society for Research in Child Development, 47* (2-3), 1-151.

Ministry of Education. (1996). *Policy document for private schools*. Muscat: Ministry of Education, Sultanate of Oman.

Ministry of Education. (2003a) *Private schools: Thirty years of continuous giving*. Muscat: Ministry of Education, Sultanate of Oman.

Ministry of Education. (2003b). *Conference of the private schools: The reality and expectation*. Muscat: Ministry of Education, Sultanate of Oman.

Ministry of Education. (2005). *Statistical educational indicators*: *Academic year 2003-2004*. Muscat: Ministry of Education, Sultanate of Oman.

Ministry of Education. (2006). *Educational statistical year book 35: Academic year 2005-2006.* Muscat: Ministry of Education, Sultanate of Oman.

Nashif, H. (1985). *Pre-school education in the Arab world*. London: Croom Helm.

Neuman, S. B. & Roskos, K. (2005). The state of state pre-kindergarten standards. *Early Childhood Research Quarterly, 20* (2), 125-45.

Noorani, F. (2003). Private schools: Current reality and future vision. Paper presented at the Private Schools Symposium, April 2003, Muscat: Ministry of Education, Sultanate of Oman

Osborn, A.F., Butler N.R. & Morris, A.C. (1984). *The social life of Britain's five year olds. A report of the child health and education study*. London: Routledge and Kegan Paul.

Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S. L., Yazejian, N., Byler, P., Rustici, J., & Zelazo, J. (1999). *The children of the cost, quality, and outcomes study go to school*: Public report. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. Retrieved on 15th July 2006 from http://www.fpg.unc.edu/ncedl/PDFs/CQO- es.pdf

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers*. Oxford: Blackwell.

Schweinhart, L.J., Barnes, H.V., & Weikart, D.P. (1993). *Significant benefits: The High/Scope Perry preschool study through age 27*. Ypsilanti, MI: High/Scope Educational Research Foundation.

Shorrocks, D., Daniels, S., Frobisher, L., Nelson, N., Waterson, A. & Bell, J. (1992). *The evaluation of National Curriculum assessment at key stage 1 (ENCA 1 project): Final report*. London: SEAC.

Tizard, B. & Hughes, M. (1984). *Young children learning*. London: Fontana.

Wilkinson, D. & Birmingham, P. (2003). *Using research instruments: A guide for researchers*. London: Routledge Falmer.

Woodhead, M. (1985). Pre-school education has long term effects: But can they be generalized? *Oxford Review of Education, 11* (2), 133-55.