

The Features of Program Structure in the Government Kindergartens in Terms of Quality of Childhood Education

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ABSTRACT

This research is undertaken to explore the status of the program structure of the government kindergartens in Jordan in terms of Schedule, Provisions for children with disabilities, Free play. The research also looked at the strengths and weaknesses of the program structure. The design of the research employed both quantitative and qualitative methods. The population of the research was the government kindergartens in Jordan. The sample consisted of 250 kindergartens in 12 provinces in Jordan which were involved in the main quantitative survey, and selected through random stratified sampling. The responses from the survey were analyzed using descriptive statistics (means, standard deviations). The findings of this research indicated that the status of the program structures is at high level whereby it was found that two dimensions of program structures were at high levels, namely, schedule and provisions for children with disabilities. Moreover, this research also found one dimension to be at medium level, and this was free play. The findings also revealed that to improve the level of the kindergartens need to focus on training for kindergartens teachers, increasing their salary, stricter licensing, upgrading the furnishings of kindergartens, improving and implementing new instructional strategies to be developed and implemented by the Ministry of Education.

Keywords: Program structures, quality, kindergartens, ECERS-R.

1. Background to the Research

The first five years of a child's life are vital to his or her future development. During this developmental period, tremendous growth occurs (Campbell et al., 2001). It is also a time when supportive environments are important in advancing the child's development across cognitive, social, emotional and motor domains (Peisner-Feinberg et al., 2001). There is a wealth of evidence coming from research on brain development which supports the view that high quality kindergartens children is of prime importance and children enrolled in high level education kindergartens tend to be more successful in later stages of their lives (Burchinal et al., 1996; Burchinal et al., 1998; Cryer et al., 1999; Peisner-Feinberg et al., 1999; Sylva et al., 2006). Indeed, the quality of education in kindergartens has been linked to a later of child-achievement outcomes and to brain and healthy development (Burchinal et al., 1996; Shonkoff & Phillips, 2000). Hence, the level of learning within early childhood education becomes an important factor in explore the reality of level of education in kindergartens.

In contrast, low level of learning quality has often led to disappointing results (Burchinal et al., 1998; Barnett et al., 2004; Beaty, 2004). In addition, these researchers emphasized the need to have highly qualified teaching staff,

knowledgeable teachers who are trained in child development programs, and a suitable environment in terms of safety and health (Espinosa, 2002; Ackerman, 2004).

In Jordan, the quality of kindergarten is of interest because of its great impact on children's development (Al-Hrob, 2008; Al-Hassan et al., 2009). The future of the Jordanian economy depends on its future workforce who should be well-educated and resourceful (Al-Khaldi, 2006). Because quality brings about positive and successful outcomes in children's development, it is thus explore the status of the quality of the learning environment in Jordanian kindergartens. In Jordan, over half the population of children between the ages of four to six is enrolled in government kindergartens and the number is on the rise (Ministry of Education, 2009).

With the growth of the youth population, the Jordanian government has to ensure that the quality of education and level of skills imparted can help the new generation to compete effectively in the national and international arena (Al-darabah, 2011). The education system in Jordan has been extensively reformed to be in line with global trends (MoE, 2008b). One of the efforts of the MoE was to heavily invest in developing the levels of learning in government kindergartens (MoE, 2003). Yet, despite this growth and heavy investment in kindergartens education, relatively little is known about the current status of kindergartens in Jordan after the implementation reforms in the quality of learning (MoE, 2011).

According to Ihmedh (2008), the reform included all the provinces in Jordan; however, there is still no clear picture or feedback on the reform. Despite great efforts made by the Jordanian government, the Ministry of Education and International Institutions, there is still a dire need to fix some of the persistent problems in this sector (Hussein, 2010). Moreover, education provided in Jordan kindergartens kind mainly focused on the children's academic development, with little emphasis on other developmental areas (Emad-Aldin & Dawood, 2005). This paper is motivated by the need to identify the current status of the learning environment in government kindergartens in Jordan. The MoE has been calling for experts and researchers to measure the level of early childhood education (MoE, 2012a). In light of this need, the current research is in response to this call, which is to uncover the quality that exists in the kindergarten.

2. Objectives of the Research

The overall purpose of this research is to explore the current status of the learning environment in government kindergartens in Jordan in terms of, schedule; provisions for children with disabilities; free play. This research also explores the strengths and weaknesses of the learning environment in government kindergartens of Jordan. Finally, the research seek to investigate the ways in which the program structures of the learning environment in government kindergartens could be improved.

3. Programme Structure

Kindergarten programs designed to improve children's education for school (Pianta & Howes, 2005). The level of kindergarten learning is related to program characteristics, and emphasizes to maximize the extent to contribute to the academic and social readiness of children to benefit from kindergarten, (Bryant et al., 2002; Gallagher, Rooney, & Campbell, 1999). This emphasis on ensuring access to high-quality classroom environments in the kindergarten years has in turn called attention to features of programs, (Bryant, Clifford, & Feinberg, 1991; Graue, 1999; Kagan & Neuman, 1998). In this paper, the dimension of program structures consists of 3 items and 60 indicators, which is collected from ECERS-R (1998). The first item is schedule; it is important element in kindergartens. Daily schedule is a must to organise the daily activities and to be familiar with children needs (Harms, et al, 1998). Schedules should provide a balance between structure and flexibility and there must be smooth transitions in the schedule (Carl & Fiene, 2003). There should not be a long period of waiting during transitions between daily events; changes in schedule must meet the children's demands (Essa, 1996). The daily schedule should be displayed in the classroom (Brewer, 2001).

In addition, free play contributes to cognitive growth and aids social and emotional development, and is essential to physical development (Brewer, 2001). In addition, free play should be practiced to include daily outdoor and indoor activities; supervision should be provided to facilitate children's play (Essa, 1996). Toys, games, and equipment should be ample and use in free play; there should be various types of toys, games, and equipment (Howes & Smith, 1995). Finally, needs of children with disabilities, Children with disabilities need special programmes that contain knowledge of routine care needs, and cater to their respective developmental levels (Harms et al., 1998). It also requires involving them with classroom activities and integrates them into the normal group (Venn et al., 2004).

4. Environment Rating Scale ECERS-R (1998)

ECERS-R focuses on the aspects of quality learning environments in the experiences of children in a kindergarten. ECERS-R is a tool designed to assess the quality in kindergarten. The instrument has been widely used in the study of early childhood for more than 17 years to determine the quality of early learning programs (Rebecca, 2010). Each item is scored 1-7 whereby 1 = Inadequate, 2 = between inadequate and minimal, 3 = Minimal, 4 = between minimal and good, 5 = Good, 6 = between good and excellent, and 7 = Excellent (Harms et al., 1998). Moreover, Harms et al. (1998) reported that the ECERS-R is a suitable instrument to assess the kindergarten in different cultures.

Tan- Niam and Ling (2000) used ECERS in Singapore. A random sampling procedure was used to select 16 day care centers in Singapore. The findings showed that most centers were rated within the minimal standard. The results showed that, on the average, centers scored slightly above minimal standards such as program structure. Carl and Fiene (2003) conducted their study to improve the quality of child care in Lycoming County in USA. They employed (ECERS-R). were in the medium level of quality.

Fiene's (2003) study aimed to assess early childhood quality in 372 Head Start programmes, in Pennsylvania State. The Early Childhood Environment Rating Scale-Revised (ECERS-R), showed higher quality on the Programme Structure. Al-Taib (2006) conducted a study to evaluate the level of government kindergarten in Kuwait. The data was collected by the researcher by use Early Childhood Environment Rating Scale– Revised (ECERS-R). The findings indicated that the kindergartens were at the medium level on the Programme structure. Barnard et al. (2006) conducted their study to evaluate Pennsylvania's Keystone STARS. Data was collected from 356 childcare centers, 81 group child daycare homes, and 135 family child daycare homes. This study used the Early Childhood Environment Rating Scale–Revised (ECERS-R) (Harms, Clifford, & Cryer, 1998). The results showed that Programme Structure was at medium level.

In Egypt, Abdullah, (2007) conducted a study to compare the status of the learning environment in private and public kindergartens. He found that the level of public kindergartens was significantly higher than the quality of private kindergartens. Overall, public kindergartens were at the good quality level, especially in terms of Programme Structure. Al-sa'de (2008) carried out a study in Bahrain to evaluate public kindergartens. A stratified random sample of kindergartens was selected to participate in the study. Overall, public kindergarten environment were reported to be inadequate in terms of program structures. Hofer (2008) conducted study to measure quality in a kindergarten classroom by using the ECERS-R, in California. The analysis revealed that most kindergartens ranged at the minimal level. However, the dimensions with the highest mean was Programme Structure. Peisner-Feinberg and Bryant (2008) conducted a study to assess the quality of care received by preschool in Cuyahoga County in Ohio. A stratified random sample was selected in Cuyahoga County observation and interviews were used. The findings showed that preschools scored a medium range of Programme structure. In addition, Kalkan and Akman (2009) conducted an investigation to examine preschools' physical environment in Turkey. They randomly selected preschools located in Ankara using ECERS (Harms et al., 1980). They found that Program Structure was at lowest scores. Moreover, Child Development Institute at the University of North Carolina (2009) conducted a study to evaluate the quality of Georgia's preschools. Data was collected from a sample of 173 preschools by random sampling. The Early Childhood Environment Rating Scale-Revised (ECERS-R) was used to measure preschool classrooms. On average, preschools across Georgia were of low to medium quality such Programmed Structure.

5. Measures and Procedures

The current paper utilizes both quantitative and qualitative data collection techniques to gain an in-depth picture of the subject matter and the respondents involved and also to optimize the efficacy of the adopted instruments. The use of two or more methods of data collection in a study is to explain the richness and complexity of human behaviour by studying it from different standpoints and making use of both

quantitative and qualitative data (Cohen et al., 2005). Data collected by using interview, and questionnaires. These two methods were used in this research.

5.1 Population and Sample

In this study, the population comprised of 707 kindergartens in 12 Province of Jordan namely, 1) Amman, 2) Irbid, 3) Al-Zarqa, 4) Ma'daba, 5) Al-Karak, 6) Jarash, 7) Al-Balqa, 8) Al-Tafela, 9) Al-Aqaba, 10) Al-Mafreg, 11) Ajlon, and 12) Ma'an. Thus, this research was used a stratified random sampling to select the kindergarten's teachers. A stratified random sampling is a technique used to increase the accuracy of results or to decline the cost of a survey without lose accuracy (Gay et al., 2009). Then, use random samples from each subpopulation to select the sample for current research, to guarantee to representation from each subgroup (Gay et al., 2009). For each Provinces the researcher selected the kindergarten's teachers by randomly sample. According to Meredith, Walter, and Joyce (2003), the sample size in qualitative studies is typically small. Thus, the qualitative sample in this study, which included interviews, was small. The researcher had chosen 8 teachers to be interviewed based in the 8 provinces nearest to the researcher's location. Table (1) shows the number of kindergartens that were selected from each province.

Table 1: The Number of kindergartens for Each Province in Jordan

No	Province	Population of kindergartens	Number of Questionnaires	Number of Interviews
1	Irbid	100	34	-
2	Amman	88	30	1
3	Al-Mafraq	88	30	-
4	Al- Karak	87	30	-
5	Al-Balqa	73	26	1
6	Ma'an	72	26	1
7	Al-Zarqa	43	15	1
8	Jarash	40	14	1
9	Ajlon	36	15	-
10	Ma'daba	35	15	1
11	Al-Aqaba	24	8	-
12	AL-Tafela	21	7	1
Total	12	707	250	8

5.2 ECERS-R Questionnaire

The researcher had made some modifieds of the paragraphs in ECERS-R to fit the Jordan Environment. The section of program structures contains of three items. In this research, each dimension consists of items which involve 60 items. The interview questions used in this research were developed based on the research objectives and the relevant literature review (Ary et al., 2006). Hence, in this research a semi-structured, conversational type of face to-face interview was carried out with eight teachers. Construction of the interview questions were designed to measure first, the availability of ECERS-R dimensions in kindergartens, objective one was designed to measure that. Second, to identify the weaknesses in kindergartens, the teachers was

requested to specified in which items there weak, objective 2 was design to identified that. The third objective designed to ask the teacher to propose ways to improve these weakness kindergartens.

5.3 Validity and Reliability of Instruments

ECERS-R has been designed for western kindergartens. However, it can still used for kindergartens in Arab countries, as it was in this research. Thus, the ECERS-R was presented the ECER-R (in the English version) on the three experts in the early childhood at the universities of Jordan, they have long experience in early childhood education start from they being as a previous teachers, as supervisors, and now as lectures in Jordan university, to know if this ECERS-R suitable for application in Jordan. Through meeting with the experts had agreed with applicability of the instrument and they also determined the appropriate paragraphs and they make some correction such as delete some paragraphs that do not fit government kindergarten in Jordan.

After approval by the experts, the researcher translated the questionnaire from English into Arabic and Arabic into English; word by word translation was avoided, with every effort made to ensure that the translation was accurate. Interestingly, back translation is a common technique used to translate questionnaires in cross-national research. Deutscher (1973) argues that this technique is widely employed to deal with language problems. Initially, the Arabic translation of the questionnaire was prepared by three bilingual experts in Arabic and English (who hold PhDs in Linguistics and were graduates from English-speaking countries, mainly UK, USA, and were teaching in Jordanian Universities. Finally, the questionnaires were reviewed to ensure that the two versions were similar and that there were no significant differences between the two versions. This further ensured that there was no loss of meaning in the translation. This was done also to ensure that ECERS-R would be contextually appropriate, especially for the Arab countries. In addition, the researcher had showed the interview's questions to the same experts who validated the ECERS-R, to validate the questions, to make sure if these questions achieved the goals to investigate the ways to improve the level of program structures of kindergartens. They suggested modifying some questions to be more specific about the goal of the interview; they also suggested shortening the number of questions to be more specific and comprehensive.

6. Procedures of Data Analysis

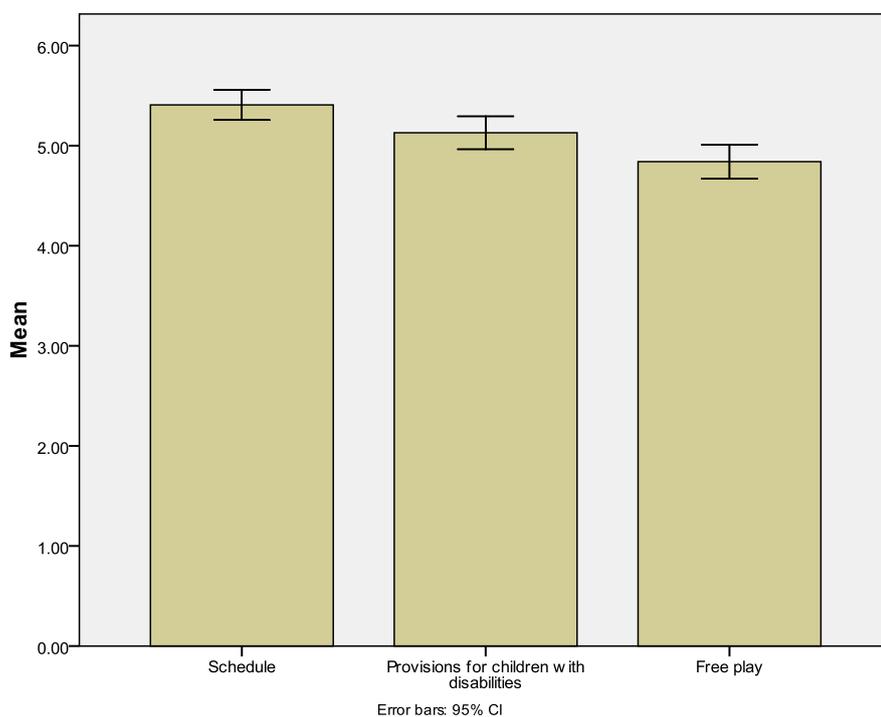
The Descriptive statistics were used in summing the data which included means and standard deviation. Qualitative data comprised participants' responses in the interviews. In interview, the participants were given certain codes for example, for the first preschool P1 and teacher T1. After that, the researcher obtained the themes by counted the number of times they occur in the text by specific the sentences. In the next phase, the researcher used these statements as specific items in the views of teachers. The researcher then wrote down the responses in detail and included some additional notes from her notebook. After that, the researcher wrote a summary of the responses in as per relevant to the interviewee.

7. Results

The findings showed that the mean scores of two items for Program Structure are of high. Those two items are Schedule (M = 5.41, S.D. = 1.13) and Provision for Children with Disabilities (M = 5.13, S.D. = 1.23). Thus, it can be concluded that only two elements of the Program Structure are the strengths of the quality of the learning environment, the Schedule and Provision for Children with Disabilities. On the other hand, Free Play (M = 4.84, S.D. = 1.28) showed the lowest mean score amongst all the items of Program Structure (see Table 2 Figure 2). This means that is of improvement for the Free Play as the range of the mean score is still in the medium quality status.

Table 2: The Arrangement of the Mean Scores in Descending Order for the Dimension of Program Structure

Items	Mean	Std. Deviation	Level
Schedule	5.41	1.13	High
Provisions for children with disabilities	5.13	1.23	High
Free play	4.84	1.28	Medium



The review of related studies revealed that Program Structure is significant in the quality of the learning environment in kindergartens (Harms et al., 1998). Thus, it can be interpreted that as follows: The schedule provided is familiar to the children and is improvised according to the needs of the children and that special programs are provided for children with disabilities, which encourage the children with disabilities

to participate in activities with other children where they can integrate into the normal group. On the other hand, free play showed the lowest mean score among all the items of Program Structure. Thus, currently, it can be interpreted that to some smaller degree, the time spent for daily indoor and outdoor free play is not enough for children to occur daily. Some toys, games and equipment are inadequate for children to use in free play, and supervision of teachers in kindergartens is inadequate to protect children's health and safety. Harms et al. (1998) insisted on the importance of the time for outdoors and indoors in kindergarten and the time should be significant enough to enable children to be involved in meaningful play. Moreover, they insisted that there should be adequate and varied games and equipment provided for children in kindergartens in free play. In comparison, the results of the review of studies showed some interesting findings. The results from this study agree with Hofer (2008) who found that the Program Structure was of high quality in Californian preschools. Similarly, Barnard et al. (2006) also found that the Program Structure was at the high quality levels on ECERS-R score when they evaluated Pennsylvania's Keystone STARS.

In contrast, Carl and Fiene (2003) found that Program Structure was at a fairly good level with a mean score of (4.82). This is relatively consistent with the current findings. The results from this research are contrary to what Abdullah (2007) found; he indicated that Program Structure was at a good level in public kindergartens; whereas, in private kindergarten it was at a minimum level of quality. On the other hand, the findings of this research contradicted with what Tan-Niam and Ling (2000) found; they reported that Program Structure was at a minimal level of quality. The current results are inconsistent with what Al-Taib (2006), and Peisner-Feinberg and Bryant (2008) found. They indicated that Program Structure in a kindergarten was at the medium level of quality. Fiene (2003) found that Program Structure quality was at a lower level in the Head Start Preschool in Cuyahoga County as opposed to Al-sa'de (2008) who found that Program Structure quality was at an inadequate level in public kindergartens in Bahrain. The explanation for the high scores on Program Structure dimension could be due to Her Majesty Queen Rania Al Abdullah's effort in launching the first phase of the project to improve the environmental situation and health of preschool children, which was implemented by the Greater Amman Municipality in cooperation with the Ministry of Education and with the support from the Ministry of Planning and International Cooperation (UNICEF, 2009). The project provided the preschools with a guideline on how to capitalize on outdoor and indoor space for learning, involving children with disabilities with activities, develop the children's skills and creating effective schedules for children (MoE, 2009).

This result is also supported by the qualitative data findings which revealed that the kindergartens were small and packed. The qualitative findings support the notion where the interviewees concurred that the equipment, materials, furniture, space, and room were not at the high quality level, the space was inappropriate and did not allow children to move and play freely. Thus, space did not meet the needs of the children, where the space is small and crowded in government kindergartens.

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