

COMPARING ASPECTS OF THE PROCESS QUALITY IN SIX EUROPEAN EARLY CHILDHOOD EDUCATIONAL SETTINGS

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Abstract

The European project 'Early Change' (<http://earlychange.teithe.gr>) attempts to evaluate the quality of early childhood education (ECE) environments of six European countries, Greece, Portugal, Finland, Denmark, Cyprus and Romania. The purpose of this paper is to compare the level of two dimensions of the process quality of these environments a) Space & Furnishings, and b) Personal Care Routines. Theorists, practitioners and researchers agree that in order to provide qualitative education to young children, one of the basic needs of all children must be met; that need is the protection of their health and their safety. A high quality early childhood education program must contain a safe and stimulating environment for the child (Lindsey, 1998). Such an environment includes indoor space, outdoor space, furniture, and room arrangement, and it is considered an integral part of a high quality early childhood program.

117 early educators from the six participating countries attended the training seminars about the evaluation of ECE quality using the Early Childhood Environmental Rating Scale-R (ECERS-R). The trained educators evaluated the 8 indicators of the subscale 'space & furnishings' and the six indicators of the subscale 'personal care routines' in approximately 600 early childhood classrooms from six European countries.

The results of this study highlight the similarities and differences concerning the specific dimensions of the process quality of ECE environments in six European countries, and reflect the diversity of ECE environment across these countries. The findings of this study may provide a valuable insight to researchers and educational policy makers for an enhanced understanding of the cultural diversities and the strengthening of the common values and targets of the European Union.

Keywords: early childhood education, comparative education, quality evaluation, ECERS-R.

1 INTRODUCTION

Early childhood education and care has not escaped the increasing emphasis paid to quality the recent years, whereas research and policy have become increasingly devoted to this subject. 'Quality' in early childhood education is generally understood as an attribute of services for young children that ensures the efficient production of predefined, normative outcomes, typically developmental or simple learning goals (Moss & Dahlberg, 2008).

Research shows that models and systems of early childhood education and care differ vastly in terms of coverage, intensity, quality, and probably impact (Urban, 2009). Yet, the age at which children may access these programmes, the extent to which programmes meet the existing demand as well as the nature of early education and care provision are subject to significant cross-national differences. So the notion of quality in early childhood educational settings can have many meanings, with different importance in each educational setting.

For example, a recent report from a UK government agency commissioned a research review that identified seven factors “indicative of good quality pre-school provision” for their impact on child development: adult-child interaction that is responsive, affectionate and readily available; well-trained staff who are committed to their work with children; facilities that are safe and sanitary and accessible to parents; ratios and group sizes that allow staff to interact appropriately with children; supervision that maintains consistency; staff development that ensures continuity, stability and the improvement of quality; and a developmentally appropriate curriculum with educational content (National Audit Office, 2004, p. 39).

In the United States, there is a definition of quality of early care and education (ECE) programs that is widely accepted in the early childhood profession. It emphasizes a child-centered approach for raising children, with caring adults who are kind and gentle rather than restrictive and harsh and who protect children's health and safety, while providing a wealth of experiences that lead to learning through play. According to this definition, individuality and creativity are encouraged rather than conformity. This definition is often criticized by those with differing perspectives, but in general, it appears to be valid for those who value the aspects of development that are associated with success in the current mainstream American educational system and society (Cryer, 1999).

There are many differences in the definitions of ECE quality in different countries and this makes the issue of assessing quality across cultures almost insuperable. A detailed examination and recording of these perceived differences could result to fewer difficulties in cross-country comparisons of early childhood programs (Tietze, Cryer, Bairrão, Palacios & Wetzel, 1996). Years of cross-cultural exchanges have in fact provided western industrial cultures with many shared notions about what children require for positive development. Within the early childhood profession, there appears to be a core of basic elements that are recognized as being necessary for children's positive development.

Two broad families of variables are included in the concept of child-care quality: the structural quality and the process quality (Cryer 1999; Doherty et al. 2006). Process quality emphasizes the actual experiences that occur in educational settings such as adult-child interactions and the types of activities in which children are engaged. It also includes health and safety provisions, as well as available materials, relationships with parents and professional development.

Cryer et al. (1996) examined one aspect of the ECE systems and observed the global process quality in center-based early childhood programs, from a point of view that is represented in the mainstream of the early childhood profession on both sides of the Atlantic (Belageur, Mestres & Penn, 1992; European Commission Network on Childcare, 1996). The study focused on the preschool global process quality in five different western industrialized countries (U.S.A., Germany, Spain, Austria and Portugal) and it examines aspects of ECE process quality that relate primarily to the children's health and safety, interactions with adults, learning and social opportunities. The results showed that German and Austrian child care settings scored highest on this measure, because these two countries are generally assumed to have stronger infrastructures for the support of high quality ECE services. On the other hand, in Spain, the country with the lowest scores, a more traditional school-oriented approach is used with an emphasis on teacher-directed classroom work that includes communication with the whole group, while free play and individualized work of children are less emphasized. Significant differences in the process quality were found between Austria with higher scores and the United States, where scores were lower.

Despite the differences among various educational systems, theorists, practitioners and researchers agree that in order to provide qualitative education to young children, one of the basic needs of all children that must be met is the protection of their health and their safety. A high quality early childhood education program must contain a safe and stimulating environment for the child (Lindsey, 1998). Such an environment includes variables such as indoor space, outdoor space, furniture, and room arrangement, and it is considered an integral part of a high quality early childhood program.

One of the evaluation instruments that measure these factors is the Early Childhood Environment Rating Scale – Revised Edition (ECERS-R), developed by Harms & Clifford (1980). It is often used to assess the quality of the early childhood education. This observational tool assesses stimulating and rich learning environments, teacher-child interactions, developmentally appropriate activities and family/personal relationships (Sheridan & Schuster, 2001). ECERS-R is a widely accepted and tested scale and it was used in many research studies that assessed the quality of early childhood education (Burchinal & Cryer, 2003; Cassidy, Hestenes, Hegde, Hestenes, & Mims, 2005; Sylva, Siraj-Blatchford, Taggart, Sammons, Melhuish, Elliot & Totsika, 2006; Sheridan, Giota, Han & Kwon, 2009).

The ECERS-R is an update of the original ECERS published in 1980. The revised edition retained the same goal of assessing programs for children 2 ½ through 5 years of age. However, the revised edition was designed to include culturally diverse populations and inclusive programs (Harms, Clifford, & Cryer, 1998). Measurements were obtained on 43 quality indicators consisting of seven subscales: space and furnishing, personal care routines, language-reasoning thinking, activities, interaction, programme structure and parents and staff.

The purpose of this paper is to examine the cross-national data for two dimensions of the observed process quality of ECE environments a) space & furnishings, and b) personal care routines in six European countries, using the ECERS-R. This study was conducted in Greece, Portugal, Finland, Denmark, Cyprus and Romania and it is a part of the European project 'Early Change' (<http://earlychange.teithe.gr>) funded from the Lifelong Learning Programme of the European Union, Comenius Multilateral Project.

The basic goal of the Early Change project is to enhance the professional development of early educators in six European countries (Greece, Portugal, Finland, Denmark, Cyprus and Romania) and to evaluate the quality of early childhood education environments of these countries using the ECERS-R. The partners in this project are academics from 9 Universities and early childhood educators from 10 educational districts.

2 METHOD

2.1 Participants

114 experienced early educators from the six participating countries (17 from Greece, 21 from Portugal, 27 from Finland, 13 from Denmark, 20 from Cyprus and 16 from Romania) were trained in using the ECERS-R. The trained assessors evaluated two dimensions of ECERS-R in 525 early childhood classrooms (Table 1), with children's age ranging from 2 ½ to 5 years.

Table 1. Early childhood classrooms from the six European countries.

Country	Number of early childhood classrooms
Greece	126
Portugal	72
Finland	98
Denmark	49
Cyprus	52
Romania	128
Total	525

2.2 Instruments

The ECERS-R was used to examine the level of two quality dimensions of the early childhood centres that were evaluated: space & furnishing, and personal care routines. 'Space and furnishings' contains eight quality indicators (indoor space, furniture for routine care, play and learning, furnishings for relaxation and comfort, room arrangement for play, space for privacy, child-related display, space for gross motor play, gross motor equipment), while 'Personal care routines' contains six quality indicators (greeting/departing, meals/snacks, nap/rest, toileting/diapering, health practices, safety practices). A seven Point Likert scale assesses each indicator and the odd numbers of this scale are accompanied by descriptive comments. For example, 1 represents an "inefficient condition", 3 is "minimum", 5 is "good" and 7 stands for "excellent condition."

2.3 Experimental procedure

The participating assessors were trained in using the ECERS-R by attending the training seminars conducted in each country from October 2012 till January 2013. Trained experts from Greece and Portugal who are partners of the Early Change project conducted the trainings.

The main topic of every seminar was the quality of early childhood education and the use of ECERS-R for evaluating it. Similar training procedures were followed in all six training seminars. Trainings included scale presentation and instructions, classroom observations (using the ECERS-R) and

debriefing procedures (reliability checks, etc.). This process ensured that the content of each indicator was understood in the same way, and was measured in a comparable manner in each country.

The data collection was carried out from February 2012 till June 2013, when each one of the trained assessors observed and evaluated a specific number of classrooms in their countries. The whole procedure of the data collection was supervised by the academic – coordinator of each country.

In order to ensure that many of the problems that are associated with comparing information gathered from different countries would be avoided, a collaborative effort was invested in assuring that data would be collected according to a standard procedure. All efforts considered essential that each national research team had the same definition and understanding of the items. This required not only a correct translation but also cooperative actions on behalf of the investigators from all countries to agree upon the meaning and content of each item. It also meant agreement on the scoring criteria and application of those criteria accordingly. Any ambiguity, disagreement or cultural difference was thoroughly discussed and clarified during the international meeting among all the academic partners of the project

3 RESULTS

In order to examine whether there were potential differences among the observed 525 classrooms, ECERS-R total scores and subscales scores were calculated and means and standard deviations were compared. ECERS-R scores below 3 represent poor quality, scores of 3, but less than 5 represent mediocre quality, and scores of 5 or higher are good quality. The descriptive statistics were calculated to provide an initial picture of the scores of the six countries in the two ECERS-R subscales.

The means and standard deviations scores for ‘Space & furnishings’ and for ‘Personal care routines’ of the six countries are presented in Table 2. In the Space and furnishings subscale, Finland has the highest mean score, while Denmark achieves the lowest. In the Personal care routines subscale, Greece seems to have the highest mean score, while Portugal scores the lowest.

Table 2. Means and standard deviations of the evaluated quality indicators in each country.

	Greece	Portugal	Finland	Denmark	Cyprus	Romania
Space & furnishings						
M	5.03	5.15	5.34	4.85	5.12	5.30
SD	1.12	.93	1.04	.78	1.09	.96
Personal care routines						
M	5.46	4.97	5.34	5.12	5.14	5.14
SD	1.11	1.26	1.32	1.24	1.31	1.23

To check for possible differences among the six countries in the ‘Space & furnishings’ and in the ‘Personal care routines’ scores, a one-way analysis of variance was used. The results indicated statistically significant differences among the six countries for ‘Space & furnishings’ scores ($F_{(5, 517)} = 2.43, p < .05$), while there weren’t any statistically significant differences among the six countries for ‘Personal care routines’ scores ($F_{(5, 516)} = 1.96, p > .05$).

Moreover, post hoc tests were used to identify the significant differences among specific countries regarding the ‘Space & Furnishings’ scores (see Table 3). Only one pair of countries had statistically significant differences between them in the Space and furnishings subscale, Finland who had the highest mean score and Denmark who had the lowest one.

Table 3. Post hoc results for ‘Space & furnishings scores’ for the six countries.

	Greece	Portugal	Finland	Denmark	Cyprus
Greece					
Portugal	.967				
Finland	.288	.817			
Denmark	.847	.414	.025		
Cyprus	.997	1.000	.834	.729	
Romania	.308	.879	1.000	.022	.890

Interesting was also the inspection of the distribution of the classrooms that were evaluated regarding the two subscales “space & furnishings” (sf), and “personal care routines” (pcr). In Table 4 the percentages of the classrooms that laying below 3, between 3-5, and above 5 are presented for each country.

Table 4. Percentages of classrooms by ranges of ECERS-R scores in the two subscales.

ECERS-R scores	Sub-scale	GR	PT	FI	DN	CY	RO
1 - 3	sf	08.0	02.8	03.1	02.0	05.8	02.3
(inadequate to minimal)	pcr	04.0	09.7	05.2	06.1	11.8	07.8
3 - 5	sf	45.6	41.6	38.1	59.2	42.3	31.3
(minimal to good)	pcr	28.8	40.3	32.9	42.9	27.4	35.2
5 - 7	sf	46.4	55.6	58.8	38.8	51.9	68.7
(good to excellent)	pcr	67.2	50.0	61.9	51.0	60.8	57.0

4 DISCUSSION

The notion of quality in early childhood education, from a relative perspective, is a value-driven concept, the meaning of which is dependent on the time; framework and the people involved in it and therefore it can be considered as socially and culturally unique. Based on such an approach, cross-cultural comparisons of quality could be very difficult to achieve (Tobin, 2005). However, despite the contextual differences (social, economical, political), there are some undeniable commonalities in most cultures relating to the values that are important for children’s learning and well-being (Balaguer, 2004; Sheridan, et al., 2009). Such similarities can become the foundation of any view of quality.

Comparisons among the quality of early childhood education environments of six European countries can bring out the importance of policy inputs, such as educational infrastructure, policies and expenditure on children.

The results in this study describe interesting findings about the subscales of ECERS-R ‘Space and Furnishings’ and “Personal care routines’ and the quality of early childhood environments in Finland, Denmark, Portugal, Greece, Romania and Cyprus.

The overall picture for all six countries is that they have rather high quality early childhood environments regarding the Space and Furnishings and the Personal care routines. Especially when it comes to Personal care routines there weren’t any statistically significant differences among the

countries, which shows that most European countries are basing their early childhood education systems in common values and they are adopting similar dimensions and definitions of quality.

Comparatively, Finland rates among the highest of the other participating countries in the Space and Furnishings scores, while Denmark has the lowest scores in the same subscale and the difference between their mean scores is statistically significant. A possible explanation for this finding could be traced in the differences in the curricula of the two countries and the various goals of each early childhood education system. The Danish early childhood centers are not heavily decorated and equipped and the indoor equipment is not considered equally important as it happens in the other countries and in Finland. The main orientation of the daily schedule in the Danish centers is the outdoor play and the physical activities outside the classroom.

Romania also seems to score high in the Space and furnishings scores, but this doesn't show that the space and furnishings in the two countries are similar. The fact that no important differences were found between the two countries does not necessarily mean that the samples do not differ in more specific characteristics. Those differences may occur, but may be averaged when all specific quality characteristics are considered, as it will be represented in the total score.

Another explanation for the relatively high mean scores that all countries had, could be the difficulty to assure the inter-rater agreement among the 117 assessors that evaluated the 525 classrooms in this study.

Despite the fact that from a macro perspective, countries like Greece, Romania, Portugal and Cyprus are in a different developmental phase regarding their early childhood education systems and also have different cultural contexts, they also seem to adopt common ideologies, and attitudes to childrearing and definitions towards what constitutes a qualitative early childhood environment that promotes effective learning and development.

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