Evaluation of early childhood education quality across Europe*

Grammatikopoulos¹, V., Gregoriadis², A., Liukkonen³, J., Zachopoulou⁴, E., Gamelas⁵, A., Leal⁵, T., Pessanha⁶, M., Barros⁶, S.

¹University of Crete, Greece
 gramvas@uoc.gr
 ²Aristotle University of Thessaloniki, Greece
 asis@nured.auth.gr
 ³University of Jyväskylä, Finland
 jarmo.liukkonen@jyu.fi
 ⁴Alexandrio Technological Educational Institute of Thessaloniki, Greece
 ezachopo@bc.teithe.gr
 ⁵University of Porto, Portugal
 anavgamelas@gmail.com,
 ⁶Polytechnic of Porto, Portugal
 Pessanha@ese.ipp.pt, silviabarros@ese.ipp.pt

Abstract: The aim of the current study was to present the initial results of the evaluation of early childhood education (ECE) quality in six European countries. This study discusses various aspects of the ECE quality in different educational systems. Such comparisons can create a fertile ground for communication and collaboration among the educational communities of different European countries and promote open education. Implications and future recommendations are also discussed.

Keywords: educational evaluation, early childhood education quality, teacher training

*With the support of the Lifelong Learning Programme of the European Union (Project Number: 517999-LLP-1-2011-1-GR-COMENIUS-CMP)

1 Introduction

The Universal Declaration of Human Rights and the Convention on the Rights of the Child (UN, 1989) have stated that children have a right to receive
education, and Early Childhood Education (ECE) is included in it. ECE is of great value to all children and should be available to all. It provides a sound basis for learning and contributes to the development of social skills, personal competence, confidence and a sense of social responsibility. Hence, every child, including those from deprived socio-economic backgrounds and other underprivileged groups, should have access to early education services of good quality (Urban, 2009).

Early childhood researchers have accumulated an enormous range of research over the last decades about the long-term developmental benefits of qualitative early childhood environments (e.g. Barnett, Carolan, Fitzgerald, Squires, 2012; OECD, 2012). Internationally, early childhood education has received unprecedented attention in the public and political sphere in recent years—but mostly for economic reasons. The link between the Lisbon Strategy of the European Union and the Barcelona childcare targets is a clear example for this rational.

At a European Union level, ECE is characterized by diversity and complexity. Quality concerns still exist in many European countries due to a variety of reasons, such as the existence of split systems between education and care (e.g. care and education are integrated unitary in some occasions and are split on age lines in others), the uneven level of staff qualifications (e.g. in some countries early childhood educators have a three or for year bachelor degree while in others they have a two year college diploma), and the differences in the content and the length of the curricula (some countries have national early childhood curricula and others only some general guidelines).

The notion of quality in early childhood education is strongly linked with socio-cultural expectations and covers a wide area of the educational procedure (structural quality—including workforce—educational concept and practice, interaction or process quality, educational concept and practice (curriculum), child-outcome quality, etc.). That is why data, monitoring and assessment systems that meet the accountability needs of policy makers, the pedagogical needs of teachers and the varied developmental needs of young children are considered necessary for an effective understanding of the strengths and weaknesses of the early childhood education environments. Where the children are concerned, adults at both policy and classroom levels need to have a basic understanding of how young children learn and of appropriate outcomes from early childhood programmes (WCECCE Report, 2010).

Today, Europe is more diverse than ever. The wealth of traditions, experiences, practices and aspirations must be seen as an asset for the future
development of the European educational systems. European diversity is, on the other hand, reflected in stark inequalities in the quality of early childhood education environments between and within its countries and regions.

A valuable aid for examining and understanding the diversity and complexity of early childhood education in Europe are cross-national and cross-cultural studies among European countries. Despite the contextual differences, there are nevertheless certain similarities in the early childhood programs and environments (Sheridan, Giota, Han, Kwon, 2009). One apparent commonality refers to the existence of widely accepted values that are crucial to children's learning and wellbeing (UN, 1989). Comparative studies on a cross-national level highlight the importance of policy inputs, such as expenditure on children, policies for children's wellbeing, inclusion, and high quality learning environments.

Valid comparable data are better provided by a common measure. Thus, in the current project it was decided that all participating countries would use the Early Childhood Environment Rating Scale-Revision (ECERS-R; Harms, Clifford, & Cryer, 2005) for the evaluation of the ECE quality. ECERS-R is a widely used instrument with sound psychometric properties. It was developed in the USA in the early 1980s and has since been used in more than 20 countries worldwide, gaining an extensive international reputation.

The purpose of the current study was to present the results of the ECE quality evaluation of the six participating countries (Greece, Finland, Denmark, Portugal, Cyprus, Romania) in the project “Early Change.” The assessors in the six European countries were not controlled for interrater reliability, and their training did not include field observations. Thus, this study only examines from a qualitative perspective the scores of ECERS-R by presenting tendencies and not actual quantitative scores. Such results can initiate a dialogue about the differences and similarities in the provision of European ECE quality, and can promote cross national efforts towards a more unified European Open Education.

2 Method

Participants

The participants of the current study were 546 early childhood classrooms from six European countries (Greece = 126, Cyprus = 52, Finland = 98, Denmark = 70, Romania = 128, & Portugal = 72). These classrooms were evaluated during
the school year 2012-2013 and randomly selected from the municipalities and educational districts that were partners in the project “Early Change.”

**Instruments**

The Early Childhood Education Rating Scale-Revision (ECERS-R) was used as the evaluation instrument of the current study. ECERS-R (Harms et al., 2005) is an observation instrument widely used since the early 80s. It comprises of 43 items and over 470 indicators and it is considered as a valid and reliable measure to capturing the quality provided in ECE settings. The ECERS-R consists of 43 items, organized under seven subscales that include 470 indicators. In the current project the seventh subscale (Parents & Staff) was not used after the suggestion by the authors of the scale. For a detailed presentation of the six subscales and the 37 items of the ECERS-R see Table 1.

Table 1. Subscales and items of the ECERS-R

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Space &amp; furnishings</strong></td>
<td>1. Indoor space</td>
</tr>
<tr>
<td></td>
<td>2. Furniture for routine care, play and learning</td>
</tr>
<tr>
<td></td>
<td>3. Furnishings for relaxation and comfort</td>
</tr>
<tr>
<td></td>
<td>4. Room arrangement for play</td>
</tr>
<tr>
<td></td>
<td>5. Space for privacy</td>
</tr>
<tr>
<td></td>
<td>6. Child-related display</td>
</tr>
<tr>
<td></td>
<td>7. Space for gross motor ability</td>
</tr>
<tr>
<td></td>
<td>8. Gross motor equipment</td>
</tr>
<tr>
<td><strong>Personal care routine</strong></td>
<td>9. Greeting/departing</td>
</tr>
<tr>
<td></td>
<td>10. Meals/snacks</td>
</tr>
<tr>
<td></td>
<td>11. Nap/rest</td>
</tr>
<tr>
<td></td>
<td>12. Toileting/diapering</td>
</tr>
<tr>
<td></td>
<td>13. Health practices</td>
</tr>
<tr>
<td></td>
<td>14. Safety practices</td>
</tr>
<tr>
<td><strong>Language-Reasoning</strong></td>
<td>15. Books and pictures</td>
</tr>
<tr>
<td></td>
<td>16. Encouraging children to communicate</td>
</tr>
<tr>
<td></td>
<td>17. Using language to develop reasoning skills</td>
</tr>
</tbody>
</table>
18. Informal use of language

**Activities**

19. Fine motor  
20. Art  
21. Music/movement  
22. Blocks  
23. Sand/water  
24. Dramatic play  
25. Nature/science  
26. Math /number  
27. Use of TV, video, and/or computers  
28. Promoting acceptance of diversity

**Interaction**

29. Supervision of gross motor activities  
30. General supervision of children (other than gross motor)  
31. Staff-child interactions  
32. Interactions among children

**Program structure**

33. Schedule  
34. Free play  
35. Group time  
36. Provisions for children with disabilities

**Procedures**

The trained observers were evaluated the ECE classrooms between October 2012 and June 2013. They made day visits in the ECE centres and evaluated each classroom per day by observing the daily activities for at least three hours. Immediately after the completion of the observation in each ECE centre, they filled in the score sheet of the ECERS-R and concluded the centre evaluation. The assessors in each country followed the same procedure the same procedure for every classroom.
3 Results

The results of the ECE classrooms’ evaluation of the six participating countries are presented in Table 2. A more “qualitative” procedure was adopted to present the evaluation results, as it was decided not to present mean scores due to limitations in training procedure.

**Table 2.** Ranking of the ECERS-R subscales from highest to lowest score in each country

<table>
<thead>
<tr>
<th>High to low</th>
<th>Greece</th>
<th>Cyprus</th>
<th>Finland</th>
<th>Denmark</th>
<th>Romania</th>
<th>Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
</tr>
<tr>
<td>2</td>
<td>Language &amp; Reasoning</td>
<td>Personal care routines</td>
<td>Program structure</td>
<td>Space &amp; furnishings</td>
<td>Space &amp; furnishings</td>
<td>Language &amp; Reasoning</td>
</tr>
<tr>
<td>3</td>
<td>Personal care routines</td>
<td>Space &amp; furnishings</td>
<td>Personal care routines</td>
<td>Language &amp; Reasoning</td>
<td>Personal care routines</td>
<td>Space &amp; furnishings</td>
</tr>
<tr>
<td>4</td>
<td>Program structure</td>
<td>Language &amp; Reasoning</td>
<td>Language &amp; Reasoning</td>
<td>Personal care routines</td>
<td>Activities</td>
<td>Program structure</td>
</tr>
<tr>
<td>5</td>
<td>Space &amp; furnishings</td>
<td>Program structure</td>
<td>Space &amp; furnishings</td>
<td>Program structure</td>
<td>Language &amp; Reasoning</td>
<td>Personal care routines</td>
</tr>
<tr>
<td>6</td>
<td>Activities</td>
<td>Activities</td>
<td>Activities</td>
<td>Activities</td>
<td>Program structure</td>
<td>Activities</td>
</tr>
</tbody>
</table>

In all six European countries the subscale valued higher was the “Interaction” subscale. In five countries the subscale valued lower was the “Activities” subscale (in Romania was at fourth place). The subscale “Language & Reasoning” was valued as second best in two countries (Greece & Portugal), as third and fifth best in one country (Denmark & Romania respectively), and as fourth best in two countries (Cyprus & Finland). The subscale “Personal Care Routines” was valued as third best in three countries (Greece, Finland, Romania), as second best in Cyprus, as fourth best in Denmark, and as fifth in Portugal. The subscale “Program Structure” was valued as fourth best in Greece and Portugal, at fifth place in Cyprus and Denmark, at the last place in Romania, and surprisingly at the second best place in Finland. Finally, “Space & Furnishings” was rated at the second place in Denmark and Romania, at the third place in Cyprus and Portugal, and at the fifth place in Greece and Finland.
4 Discussion

The methodological limitation of the lack of interrater reliability among the trained observers led the researchers to follow a different approach while examining the results. Instead of presenting quantitative scores and comparing means, it was decided to proceed to a comparison of the ranking of the different subscales in each country’s scores. This was a way to overcome the “bias” issue. It was assumed that if an educator/assessor would be biased, then he/she would be equally biased for all the subscales and items. Thus, the internal ranking of the subscales in each country would be considered valid. Based on the results, the most interesting finding is that in all six countries the subscale “Interaction” was valued as the best, and that in five countries (except Romania) the “worst” subscale was “Activities.”

The quality of classroom interactions with an emphasis on the teachers’ interactions with children has been shown to be a critical mechanism by which children develop (Pianta, Belsky, Houts, Morrison, & the National Institute of Child Health and Human Development Early Child Care Research Network, 2007). Domains of classroom interactions (e.g. instructionally supportive interactions, organizational interactions, emotionally supportive interactions) have been positively related to children's academic gains (Curby, Rimm-Kaufman, & Ponitz, 2009). A possible explanation about the highest ranking of "Interaction" in the six participating countries could be that interpersonal relationships and the socioemotional support and development of children have traditionally been a basic element of the European culture. For example, the Nordic countries paradigm is focused much more in the socioemotional development of children, their autonomy, their self-regulation and the development of their social skills in comparison with the Northern American early childhood education. An additional reason could be attributed also to the teachers’ high level of education (bachelor degree), as many studies revealed the merit of having a bachelor degree for ECE educators (Boyd, Goldhaber, Lankford, & Wyckoff, 2007; Burchinal, Roberts, Riggins, Zeisel, Neebe, & Bryant, 2000; Croninger, Rice, Rathbun, & Nishio, 2007; Early, Bryan, Pianta, Clifford, Burchinal, Ritchie, Howes, & Barbarin, 2006).

Another interesting finding was that in five out of six countries the “activities” subscale received the lowest scores comparing with the other subscales. A possible interpretation of this result could be based on the lack of specific “activities” in some countries. For example, in Greece, Portugal, and Cyprus there isn’t any provision for “sand/water” activities indoor or outdoor. An overall finding was also that “nature/science” and “promoting acceptance of diversity” activities were underdeveloped. Thus, the total scores for the subscale
“activities” were the lowest in five out of six countries. Of course, these results were based on educators’ observations only, and thus in order to draw firm conclusions further research will be needed. Generally, it can be argued that the diverse and low scores for the “activities” subscale reveal some differences between the US and European approach to ECE.

The main limitation of the study was that the assessors were not received a full training and hence, the results have to be treated with caution. Further cross-national studies have to include a full training for the assessors to be able to direct compare the ECERS scores. Moreover, these studies could initiate a discussion about the similarities and differences in ECE in Europe and develop a body of knowledge on which can be based a discussion in common language across Europe for the ECE future.

5 References


