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Evaluating an early childhood educators' training in six European countries*

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ABSTRACT

The aim of the current study was to evaluate the training provided by the project "Early Change: Promoting the professional development of early educators."* The training was conducted in six European countries between October 2012 and January 2013, and the participants were 122 early educators from six different countries. The aim of the training was to help the participants develop basic research skills by teaching them how to implement an Environment Rating Scale, the ECERS-R. The evaluation design was based on the use of mixed methods as both qualitative and quantitative data were collected. The results supported the successful provision of the training towards the improvement of the participants' research skills and the enrichment of their knowledge. Implications for the educational field practice are also discussed.

KEYWORDS *Training evaluation, mixed method, professional development, early educators*

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INTRODUCTION

Training evaluation

The systematic pursuit of educators for acquiring new skills and knowledge is a basic presupposition for self-improvement and professional development. In order to meet the increasing need for new skills and knowledge, academic staff, institutes and universities must provide ample training programs and professional development initiatives (Boyle, Lamprianou, & Boyle, 2005). Increasing importance is also being attributed to the value of these initiatives (Torff, Sessions, & Byrnes, 2005). In our case, the term "training" is used to describe the procedure of teaching early educators knowledge, skills, and competencies that relate to their profession. Any training procedure has to improve educators' practices, otherwise progress cannot be anticipated in students' learning (Guskey, 2000). That's why evaluation is considered a key feature in identifying efficient training programs and indicating why positive or negative outcomes have appeared (Grammatikopoulos, Zachopoulou, Tsangaridou, Liukkonen, & Pickup, 2008; Guskey, 2000).

Several evaluation approaches have been proposed in the literature and all of them have their advantages and shortcomings (Coldwell, & Simkins, 2011; Guskey, 2000, 2002; Kirkpartick, 1959, 1976, 1994; Kuzmin, 2012; Leithwook, & Levin, 2005). The current study adopted a combination of methods. The quantitative part of the evaluation was based on the "level models" (Kirkpatrick, 1959, 1976, 1994; Guskey, 2000, 2002) and the qualitative on an approach similar to the SWOT method (Hill, & Westbrook, 1997). The Kirkpatrick's (1959, 1976, 1994) four-level model is the most commonly used training evaluation procedure in the organizational sector. Even though new methods have been developed, it remains till our days the most popular (Arthur, Bennet, & Edens, 2003; Praslova, 2010; Salas, & Cannon-Bowers, 2001). The four levels of Kirkpatrick's model are reaction, learning, behaviour, and results. The first two focus on what happens within the training, whereas the last two focus on changes that occur outside of the training. The "level models" have influenced the domain of training evaluation for decades and are considered very effective in simple instructional designs, such as the design of the current study's training (Yardley, & Dornan, 2012). The qualitative part of the study was based on the reports of the training lecturers and external observers who reported the strengths and the weaknesses of the seminars, making suggestions for future opportunities and identifying possible threats to future efforts. Their reports derived from the analysis, diagnosis and evaluation of the internal and external environment of the procedure. This approach was based on the foundations of the widely known SWOT analysis (Hill, & Westbrook, 1997).

Based on the successful implementation of the first phase, the educators will proceed with the training phase II that entails the implementation of ECERS-R in the field practice. Because of the importance of the first phase's training, the current study tried to ensure that the evaluation employed will be valid and appropriately designed. In order to meet these requirements, a mixed method evaluation design was adopted. Specifically, the triangulation of sources was selected as it is considered that it can reveal contexts which a more narrow approach may fail to highlight. Cohen and Manion (2007) argued that triangulation -by adopting multiple standpoints- can better explain the richness and complexity of human behavior. Altrichter, Feldman, Posch, and Somekh, (2008, p. 147) were congruent with the above argument and stated that triangulation "gives a more detailed and balanced picture of the situation." Additionally, triangulation provides a deeper view of the procedure under evaluation (Towns, & Serpell, 2004) and "can reveal contexts that a narrower approach might fail to illuminate" (Grammatikopoulos et al., 2008, p. 6). Based on the notion that triangulation is regarded an appropriate evaluation method for our goal, the authors decided to use both quantitative and qualitative methods. Therefore, a perception based questionnaire, and two reports, one by the lecturers teaching in the training, and another by

an external expert were used in order to collect the evaluation data.

Using the Environment Rating Scales (ERS) for professional development

The training procedure of this study is the first phase of a project which attempts to enhance the professional development of early educators. The name of the project is "Early Change: Promoting the professional development of early educators" and it is partially funded by the Education, Audiovisual and Culture Executive Agency of the European Committee (EACEA). The project aspires to help early educators improve their skills by enhancing their research skills and by providing them a valid and reliable mean for self-assessment. Thus, the training provided during the first phase of the project had as a main goal the learning of the content, structure, and use of the Early Childhood Environment Rating Scale-Revised (ECERS-R). The training procedure was based on the "short course training on the ECERS-R." In a three-day training, participants (about 20 from each country) were taught to use the scale and provided with practice experience by conducting on site observations in early childhood centers.

The ERS are internationally accepted rating scales for the evaluation of the quality of early childhood education (ECE) (Mathers, Linskey, Seddon, & Sylva, 2007). In the current study by the term "ECE" we are addressing the formal teaching of children aged between 2.5 and 5 by educators at schools. ERS scales are being used globally for decades and their major functions are: (a) research on environment quality, (b) mean for self-evaluation & self-improvement of teaching, and (c) accreditation (mainly in the USA). In several countries, the ERS have been used for the improvement of the educational practice in schools. In her study in Sweden, Andersson (1999) found that early educators improved the educational provision quality after their participation in a self-improvement initiative using ECERS. Siraj-Blatchford (2002a, b) confirmed the notion that the ERS can be used for the improvement of the early educators. Also in the UK, Mathers et al. (2007) reported a significant improvement for the educators involved after the implementation of a professional development programme in seven UK local government regions. The ERS have been used widely for professional development of early educators and various policy makers and stakeholders acknowledge their potential. These initiatives add to our understanding of how research can serve as a mean for the improving of the educational practice (Mathers et al., 2007).

Aim of the current study

The aim of the present study was to assess the training for the use of an evaluation scale provided to early educators through a mixed method design. Valuable feedback is considered to be provided by this evaluation procedure to the project coordinators and researchers in order to be taken into account for future efforts.

METHOD

Participants

The participants in this study were 108 (6 male and 102 female) out of the 122 educators who attended the training from six European countries (Denmark, Finland, Greece, Portugal, Romania, & Cyprus). Their mean age was 41.6 years (SD ±10.2) and their experience ranged between 2 and 38 years (M = 18.5, SD ±9.4). 14 were from Denmark, 16 from Romania, 20 from Cyprus, 18 from Finland, 19 from Greece, and 21 from Portugal.

The lecturers (six academics from Portugal and Greece) who taught in the training were asked to provide a report regarding their overall estimation of the provided training.

Additionally, an external observer from each country attended the training held in his/her country and provided their impressions about specific parts of the training. Their report was based on open ended questions that were developed for the contents of the training they observed.

Instruments

An adapted version of the Professional Development Evaluation Form (PDEF) (Grammatikopoulos, Papacharisis, Koustelios, Tsigilis, & Theodorakis, 2004; Grammatikopoulos, Papacharisis, & Koustelios, 2004) was used as the main evaluation instrument. The scores are in a Likert scale ranging from 1 (lowest) to 5 (highest). The questionnaire was slightly adapted in order to fit better to the design of the current training, similar to the adaptation attempted to another study (Grammatikopoulos et al., 2008). The scale used in the current study consisted of three factors: (a) "learning" with three items (e.g. I learned a lot of valuable things during the training), b) "use in schools" with four items (e.g. 'the knowledge I gained from the training will be very helpful for my work at school' or 'I learned a lot of valuable things that I intend to use in the field practice'), and (c) "total reactions" with six items (e.g. 'the organization of the training was very satisfactory' or 'the total impression of the training was very good' or 'the lectures regarding the teaching strategies techniques were very thoughtful'). The adapted instrument revealed satisfactory alpha values for the factors "learning," "use in schools," and "total reactions" (.86, .91, and .94 respectively).

The six academics reported the strengths and weaknesses of the training, offered suggestions for future opportunities and identified possible threats to future efforts. This evaluation approach was based on the widely applied SWOT analysis (Hill, & Westbrook, 1997).

Procedures

The adapted PDEF was administered to 122 educators and 108 of them completed it and returned it immediately after the end of their training. The six academics and the external observers provided their report a couple of days after the training.

RESULTS

The results of the evaluation provide evidence that the early educators were very satisfied with the overall quality of the training and they valued very high all the aspects of it (Table 1). Their reactions were very positive, and they reported that they learned a lot of valuable things during the training that will help them with their teaching practices. One-sample t-test was conducted in order to investigate the level of significance that the mean scores of the three training aspects had from the mean value of 3. Indeed, all three aspects of the training, "Learning," "Use in schools," and "Total reactions" had significant higher mean scores from the mean value of 3 ($t1 = 28.25$, $t2 = 26.30$, $t3 = 46.30$ respectively, $p < .000$).

Training aspects	*Mean*	*Std. Deviation*
Learning	4.69	± .52
Use in shcools	4.61	± .58
Total reaction	4.60	± .33

Table 1 Means and standard deviations of the training aspects as they evaluated

In order to investigate any differences in the educators' scores that can be attributed to their nationality or experience, a Mulitivariate Analysis of Variance (MANOVA) was performed. Multivariate Analysis of Variance is a statistical analysis for comparing multivariate means of several groups and it is used when there are two or more dependent variables, as in our case. The results of the MANOVA in the current study did not reveal any significant differences.

The academics' reports were also encoded and the major findings are presented in Table 2. The organization, the structure, and the knowledge the educators acquired were indicated as the major strengths of the training. The most important part that was described as an "opportunity" was that educators could implement what they learned in the field practice, something that points out the quality of the content of the training of the current study. The most important weaknesses of the training were focused on the rather "intense" schedule, and the relatively poor English language skills of some participants. Moreover, the additional workload for the educators, and the need for multicultural adjustments for the scales were mentioned as potential threats.

	Major points which indicated
Strengths	Knowledge that educators gained, Social relationships, Eager educators, Organization, Seminars' structure (combination of lectures & field practice, theoreticians & practicians, interaction)
Weakness	Busy schedule, Not so good English language skills of some participants, Not so good preparation of some participants
Opportunities	The use of what the educators learned in the field practice, Develop an addendum for each country regarding the function of the scales,
Threats	Additional workload for the educators, Multicultural adjustments for the scales

Table 2 Evaluation results by the academics for the training

The reports from the external observers were collected and analyzed thoroughly, and indicated that the specific training seminars provided by the Early Change project reached their goals and had a high value for the participating educators.

The external observers reported that the training seminars of the Early Change project communicated valuable knowledge to the educators. They also pointed out that the training managed to improve the educators' skills as evaluators and researchers, and that it may have a positive effect on their teaching skills and strategies. About the latter argument, all six external observers reported that they would prefer to wait for the completion of the second phase of the project before they draw any firm conclusions. Conclusively, all of them argued that the educators benefited significantly concerning their teaching practices in the daily classroom life.

CONCLUSIONS

The evaluation of the training program of the "Early Change" project was based on the adoption of a mixed method design. The quantitative data, based on the subjective perception and satisfaction of the participants suggested that the training was effective and valuable for the knowledge gained regarding their field practice experience. The educators' reactions were very positive and reported an overall satisfaction from the training. The qualitative data verified the results of the quantitative, supporting the notion that the application of mixed methods can empower the evaluation data and allow for more profound understandings of a topic (Greene, Kreider, & Mayer, 2005). However, it has to be pointed that the small number of participants and the specialized content of training limited the scope for generalising claims, especially concerning future implementation and effectiveness (Grammatikopoulos et al., 2008).

The mixed method was based on the integration of the data in the interpretation level. Three approaches were applied and the methods were

not blended, but just added on to each other (Celik, Abma, Klinge, & Widdeshoven, 2012). That is the component design of mixed methods where the integration occurs at the level of interpretation and conclusion (Fitzpatrick, Sanders, & Worthen, 2004). The mixed method component design of triangulation aims to strengthen the validity of the construct by exploring the similarity of the results (Grammatikopoulos et al., 2008). In our case, different methods were applied resulting to identical results, and thus indirect evidence was provided for the validity of the measurements. Moreover, triangulation facilitated the project coordinators' ability to understand the current study's outcomes. Worth to be noticed is that our qualitative method was elementary and could not be paralleled with an in depth analysis provided by more insightful methodologies. Reporting such a limitation "isn't necessarily problematic, but should be deliberately considered when choosing for a mixed methods strategy" (Celik et al., 2012, p. 64).

The results support the argument that the evaluation of the "Early Change" project's training reached its goals without any deviations. Both the qualitative and the quantitative data showed that the educators comprehended the content of the training and acquired valuable knowledge for improving their teaching practices.

Conclusively, it can be argued that due to their participation in the training, the early educators were able to develop their self-evaluation and research skills. These two goals constitute the basic objectives of the Early Change project and they can improve the educators' professional development. However, the findings that describe a successful training design can only be confirmed after the completion of the training phase II of the project, which is the implementation of the main study.

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