Journal of Family Social Work
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/wfsw20

Early Intervention in Portugal: Study of Professionals' Perceptions

Ana Paula da Silva Pereira[a] & Ana Maria Serrano[a]
[a] University of Minho, Braga, Portugal
Published online: 22 May 2014.

To cite this article: Ana Paula da Silva Pereira & Ana Maria Serrano (2014) Early Intervention in Portugal: Study of Professionals' Perceptions, Journal of Family Social Work, 17:3, 263-282, DOI: 10.1080/10522158.2013.865426

To link to this article: http://dx.doi.org/10.1080/10522158.2013.865426

Journal of Family Social Work, 17:263–282, 2014

ISSN: 1052-2158 print/1540-4072 online
DOI: 10.1080/10522158.2013.865426

Routledge
Taylor & Francis Group

Early Intervention in Portugal: Study of Professionals' Perceptions

ANA PAULA DA SILVA PEREIRA and ANA MARIA SERRANO
University of Minho, Braga, Portugal

Early intervention (EI) has been characterized by considerable advances in its domain, which has had great repercussions in the implementation of the family-centered approach. These changes have had implications in the practices and in the adoption and learning of new values that should be implemented in EI. This study evaluates the professional perspectives regarding family-centered practices in EI programs in Portugal. The results highlight the importance of effective collaboration and coordination between health, education, and social services and the importance of providing child and family support in a natural context. These results reinforce the need to invest in professional training to improve the quality of services offered to families in EI.

KEYWORDS family-centered practices, early intervention, natural context

Although the concept *family centered* was first applied in the 1950s and the 1960s, it was not until the last two decades that family-centered practices' operational aspects were articulated. This notion was originally used to refer simply to practices of intervention that focused on the family, instead of the individual. Currently, it is applied by different authors and in different domains to give greater significance to the different approaches applied in providing family support (Dunst, Trivette, & Deal, 1994; Dunst, Trivette, & Hamby, 2007; Hiebert-Murphy, Trute, & Wright, 2011).

According to Bailey, Buysse, Edmondson, and Smith (1992), although different authors apply different terminologies among themselves when they wish to refer to a family-centered approach, the core definition remains the

Address correspondence to Ana Paula da Silva Pereira, Instituto de Educação da Universidade do Minho, Campus de Gualtar, 4700 Braga, Portugal. E-mail: appereira@ie.uminho.pt

same; children and their families are strictly interconnected. Directly or indirectly, child support has a great impact on the family in the same way that support for the family has a great impact on the child; support that involves the family is more powerful than that which is exclusively centered on the child; members of the family should be able to choose their particular level of involvement in the all steps of support; and the professionals should respect the family's objectives and priorities, even when they differ substantially to those of the professionals'.

The family constitutes a common and central element in the family-centered approach that is seen as part of a social network system, encompassing interrelationships that include the parents and other members of the family, friends, neighbors, and so on. This social system forms part of a broader system that can include organizations like the school, EI programs, and so on, that exist within political, cultural, and economic contexts (Jung, McCormick, & Jolivette, 2004). This ecological approach considers the family as a dynamic and interactive unit of "two or more individuals who consider themselves family and who assume obligations, functions and responsibilities generally considered essential to a healthy family life" (Baker, cited by R. I. Allen & Petr, 1996, p. 68).

EI practices should therefore search for a balance between adequate goals and methods and the functioning of each family. According to Dunst, Trivette, and Mott (1994), no correct or incorrect styles of functioning exist, simply distinctly different styles that characterize the strengths of the families resulting in the combination of three components: beliefs and family values, family interaction patterns, and family competencies. In this way, according to Beckman, Robinson, Rosenberg, and Filer (1994), programs in EI must be carefully planned and implemented taking into consideration the following aspects: the complexity of each family, the need to use flexible intervention strategies that consolidate the diversity of beliefs, values, and the functioning styles of the family; and that families are dynamic units that change throughout time. Therefore, to better understand the value of the family-centered approach, R. I. Allen and Petr (1996) carried out a revision of literature regarding the definition of this approach paying special attention to the perspectives of a group of different authors from different research areas.

The classification of these nuclear characteristics, and their implications on practices, allowed F. I. Allen and Petr (1996) to create the following definition of family-centered practice:

> Family-centred service delivery, across disciplines and settings, recognizes the centrality of the family in the lives of individuals. It is guided by fully informed choices made by the family and focuses upon the strengths and capabilities of these families. (p. 68)

According to F. I. Allen and Petr (1996), despite the difficulty in defining the specific characteristics of the family-centered approach, two characteristics are common: individual family choice and the family's specific strengths. Family choice can be exercised in different ways, but a central aspect is that the final decision, in relationship to the child or the family, belongs to the family. The professional's role in this decision-making process should be that of mediation for active family participation based on her decisions (Dunst, 2000).

A family-centered approach includes the belief that each family has its own competencies that stem from the capacities, talents, possibilities, points of view, values, and expectations of the family. One of the responsibilities of the professional is to facilitate support recognizing and using family strengths. Research studies focused on the "process" within this approach are already being considered, and they reinforce the importance of EI programs that incorporate methodologies of assessment, planning, and adequate intervention for different families and children. In fact, there is much evidence regarding the benefits of a family-centered approach, namely, concerning the support mechanisms that use this approach, and that are directly related with improving some family life domains. Families that experience family-centered support refer to them, as positive influences in empowerment, in the well-being of the parents and the family, in the efficacy of identification in obtaining desired support and resources, in family cohesion, in parent–child interaction, and in parental satisfaction, among others (Dunst et al., 2007). As a result, the family-centered approach instills new responsibilities and includes multiple knowledge competencies with the different elements involved in the process, creating a feeling of belonging and identity that become operational by way of the partnership between the family and the professional (Turnbull, Turbiville, & Turnbull, 2000).

The family-centered approach was clearly expressed in the Portuguese Law 281 (September 2009). This law defines EI as an integrated family-centered support system that includes rehabilitation and preventive actions within the areas of education, health, and social security, aimed at children with disabilities or at risk from the time of birth to age 6 and their families. Moreover, this law created an organized model for EI in Portugal based on the coordination and collaborative articulation between different sectors such as education, health, social security, and other private and public institutions. Furthermore, it also defined three fundamental frameworks which should characterize EI programs, namely:

1. The involvement of the family in all phases of the intervention process.
2. The existence of an interdisciplinary team (local early intervention teams) with professionals from different disciplines such as early childhood educators, doctors, psychologists, social security professionals, occupational, physical and speech therapists, nurses, and others with specific training

in the area of child development. These professionals are allocated by the education, health and social security systems and by local institutions, taking into consideration the specific needs of the families and the current community resources.
3. The development of an Individualized Early Intervention Plan.

These three frameworks are similar to the EI practices recommended by international organizations and by the scientific evidence in this area.

Given the relevance of these laws and their principles and practices, we have defined, as the purpose of this study, the evaluation of the professional perspectives regarding family-centered practices in EI programs in Portugal, whose aims are to identify:

- the frequency level and the importance attributed by Portuguese professionals to family-centered practices;
- the impact on the natural context of the two dimensions of family-centered practices;
- the strong and weak points related to the coordination of EI programs in Portugal; and
- the barriers and recommendations in the implementation of family-centered practices in EI.

METHOD

In this study, the participants were all professionals who integrated Portuguese early intervention local teams. One thousand two-hundred questionnaires were sent to all teams available, 608 were returned; however, 50 questionnaires that were returned were rejected for lack of demographic information. This study sample was composed of 558 professionals working in local EI teams in 18 districts of Continental Portugal, the Azores, and Madeira. The professionals were from different disciplines: 184 early childhood educators, 93 psychologists, 79 speech therapists, 65 social workers, 42 nurses, 33 occupational therapists, 13 doctors, and 49 other professionals. The average age of the participants was 36.41 years ($SD = 8.42$); 94% ($n = 525$) were female. The average length of experience in EI was 4.83 years.

A questionnaire composed of three distinctive parts was used as an instrument for data collection: Part 1: Sociodemographic information, Part 2: "Brass Tacks" adaptation, and Part 3: Open-ended questions. Part 1 obtained sociodemographic data including age, gender, training, experience in EI, and the place where the support was given. Part 2 was composed of the adaptation of the Brass Tacks Professional Version developed at the Frank Porter Graham Child Development Centre by Pam J. McWilliam and Robin A. McWilliam, in 1993. The 48 items were divided into four steps:

contact with the family, evaluation, planning, and intervention. The Brass Tacks Professional Version applies the Likert-type scale with five response options. In assessing the frequency of practices, the answer choices are distributed, respectively, by: *never* (1); *seldom* (2); *sometimes* (3); *usually* (4); and *always* (5). Regarding the assessment of the importance of practice, the answer choices are distributed by: *not important* (1); *somewhat important* (2); *important* (3); *very important* (4); and *critical* (5). Part III requests that professionals clarify relevant aspects of the program, such as whether the program is coordinated and what its framework is within state legislation, using closed questions, followed by four open-ended questions asking about the strengths and weaknesses of the coordination of the program and its specific functions. The professionals were also requested to identify three barriers and three aspects, which would facilitate the implementation of family-centered practices.

Data Collection

After identifying the number of professionals who integrated in EI Local Teams, each professional was sent by mail one packet that included four items: (1) cover letter, (2) a copy of the questionnaire, (3) a small gift (minipencil), and (5) a self-addressed, stamped envelope. Approximately two weeks after the first mailing, non-respondents were contacted by phone or e-mail to urge them to complete the questionnaire.

Data Analysis

Descriptive statistics and inferential analysis were used to answer each aim of the research. Descriptive statistics (frequency, percentage, average, standard deviation) were used to summarize the characteristics of some variables of the study. Inferential statistics was conducted to identify statistically significant differences. The ANOVA was used to analyze the effect of more than one independent variable in dependent variables, and *t* test was used for comparison of independent samples. For the analysis of the open-ended questions, content analysis was used to identify emerging categories; the sentence was considered as the unit of analysis.

RESULTS

The Frequency Level and the Importance Attributed by Portuguese Professionals to Family-Centered Practices

Professionals considered applying family-centered practices in EI. These practices are more evident in Steps III and IV of the support process, in the Planning and Intervention steps respectively, and less evident in

TABLE 1 Average of Frequency by Steps of the Items the Brass Tacks Questionnaire

Steps	*N*	Average	*SD*
Step III: Planning	558	4.00	.53
Step IV: Intervention	558	3.97	.51
Step I: First encounters with families	558	3.90	.47
Step II: Assessment	558	3.70	.61

TABLE 2 The Average of Importance by Steps of the Items the Brass Tacks Questionnaire

Steps	*N*	Average	*SD*
Step III: Planning	558	4.09	.62
Step IV: Intervention	558	4.06	.60
Step I: First encounters with families	558	3.98	.51
Step II: Assessment	558	3.84	.64

Step II – Assessment (see Table 1). The professionals also noted that they value family-centered practices, reinforcing that they considered Step III - Planning and Step IV - Intervention to be the most important ones for providing support to families (see Table 2). The practices referred to as the most frequent and most important by professionals concern:

1. Valorization of the child at the time of the initial contact with the family.
2. Upgrading of the child's skills during evaluation.
3. Options of choice in relation to support/services available.
4. Constant reinforcement of the child's skills during the daily support process.

The practices mentioned with less frequency and importance by professionals were those referring to the family's choice in relation to the child's assessment tools and their respective administration procedures, as well as the readiness in responding to the support needs of the family after referral.

Moreover, the professionals considered family-centered practices very important in the support of families in EI. They referred to the fact that there existed extremely significant differences ($p = .000$) between family-centered practices frequency and their level of importance in the four steps of the Brass Tacks Professional Version. Therefore, the professionals considered that the frequency of practices used in the support of families was less than the level of importance attributed to them (see Table 3).

The analyses of the results regarding professional in-service training in EI allowed us to verify the existence of statistically significant differences in all the steps by the frequency of family-centered practices (see Table 4), and in all the steps by the importance of family-centered practices (see Table 5). Therefore, it was the professionals who had been involved in in-service

TABLE 3 Differences Between Family-Centered Practices and Their Level of Importance in the Four Steps of the Brass Tacks Questionnaire

Family-Centered Practices		Average	*SD*	*t*	*p*
Pair 1	First Encounter frequency	3.90	.51	−3.833	.000***
	First Encounter importance	3.97	.47		
Pair 2	Assessment frequency	3.70	.61	−7.063	.000***
	Assessment importance	3.84	.64		
Pair 3	Planning frequency	3.99	.53	−5.010	.000***
	Planning importance	4.09	.62		
Pair 4	Intervention frequency	3.96	.51	−4.947	.000***
	Intervention importance	4.06	.60		

***$p \leq 0.001$.

TABLE 4 Frequency of the Family-Centered Practices by In-Service Training

	Frequency			
	M	*SD*	*t*	*p*
First encounter	3.90	(.47)	−2.96	.01**
Assessment	3.70	(.61)	2.49	.05*
Planning	4.00	(.53)	−2.97	.01**
Intervention	3.97	(.51)	−2.31	.05*a

TABLE 5 Importance of the Family-Centered Practices by In-Service Training

	Importance			
	M	*SD*	*t*	*p*
First encounter	3.98	(.51)	−2.40	.05*
Assessment	3.84	(.64)	−3.93	.001***
Planning	4.09	(.62)	−4.16	.001***
Intervention	4.06	(.60)	2.62	.01**

training programs who obtained the best results, in the two dimensions of the practices. Given the analysis of the results, we would like to highlight the Planning and Intervention steps, as those in which professionals with in-service training demonstrated better results, and the Assessment step for being the one in which these professionals showed lower results, although they had obtained better results than those without professional in-service training.

Considering the professional years of experience in EI, it was possible to verify that this has had a significant impact ($p \leq .05$) on family-centered practices (frequency and importance). As the variable years of experience varied from between 1 and 30 years, with an average of 4 years and 83 months, and a standard deviation of 4.48, it was considered pertinent to group the professionals in three groups, namely:

- Group 1 (G1), professionals who have had between 1 and 4 years of experience.
- Group 2 (G2), professionals with between 5 and 9 years of experience.
- Group 3 (G3), professionals with 10 or more years of experience.

Therefore, there exist significant impacts of time variables related to service in EI in the following steps of family-centered practices: first encounters importance ($F = 4.12$, $p < 0.05$), assessment frequency ($F = 6.09$, $p < 0.01$), assessment importance ($F = 11.879$, $p \leq 0.001$), planning frequency ($F = 4.074$, $p < 0.05$), planning importance ($F = 9.181$, $p \leq 0.001$), and intervention importance ($F = 5.186$, $p \leq 0.01$). There were no statistically significant differences in the Intervention frequency step.

In an attempt to evaluate the differences that are more significant between groups, we decided to analyze the intergroup contrasts (Scheffé). The values of the differences and directions, taking into account the various steps of their respective practices, are first encounters importance – G3 > G1 ($p \leq 0.01$), first encounters frequency – G3 > G2 ($p < 0.05$), assessment frequency – G3 > G1 ($p \leq 0.001$), assessment importance – G2 > G1 ($p < 0.05$), G3 > G1 ($p < 0.001$), G3 > G2 ($p < 0.05$), planning frequency – G3 > G1 ($p \leq 0.01$), planning importance – G2 > G1 ($p < 0.05$), G3 > G2 ($p \leq 0.001$), and intervention importance – G3 > G1 ($p \leq 0.01$). In this analysis, it is clear that Group 3, which refers to the professionals who have 10 or more years of experience in EI, showed higher results compared with the other two groups in all stages of family-centered practices.

Impact on the Natural Context of the Two Dimensions of Family-Centered Practices

Regarding the location where support was provided, the results demonstrate that, in the age 0 to 2 group, support is given mostly in the home and simultaneously in the home and other locations; while in the age 3 to 5 year group, this same support is essentially given in kindergartens and in private institutions (see Table 6). Results indicate there is a significant difference between the places where support was provided, in the age group 0 to 2, in some steps of family-centered practices, namely: first encounter frequency (FEF) ($F = 2.798$, $p < 0.05$), assessment importance (AI) ($F = 2.794$, $p < 0.05$), planning frequency (PF) ($F = 2.851$, $p < 0.05$), intervention frequency (IF) ($F = 2.809$, $p < 0.05$), intervention importance (II) ($F = 2.352$, $p < 0.05$), and planning importance (PI) ($F = 5.470$, $p < 0.001$). However, there is not a significant difference in the steps first encounter importance (FEI) and assessment frequency (AF).

Table 7 shows the mean and standard deviation of family-centered practices (frequency and importance). Simple effects analysis revealed that the

TABLE 6 Characterization of the Location of Support of Children of the Age Groups of 0 to 2 and 3 to 5 Years

	0–2 Years		3–5 Years	
Support Locations	*n*	%	*n*	%
Home	192	(42)	78	(15.2)
Home and other locations	87	(18.9)	55	(10.7)
Private institutions	71	(15)	89	(17.4)
Day care or preschool	58	(12.6)	228	(44.4)
Health center	36	(7.8)	28	(5.5)
Other locations and combinations[a]	17	(3.7)	35	(6.8)

[a]Health center +private institutions; Private institutions + kindergarten.

support in the home and in home and elsewhere simultaneously in other locations were higher in family-centered practices than did the support in other places. In relation to the child support location in the age 3 to 5 year group, significant statistical differences were found in the following steps: first encounters frequency ($F = 4.322$, $p < 0.001$), intervention frequency ($F = 4.896$, $p < 0.001$), assessment frequency ($F = 3.241$, $p < 0.01$), planning importance ($F = 3.541$, $p < 0.01$), intervention importance ($F = 3.367$, $p < 0.01$), assessment importance ($F = 2.612$, $p < 0.05$), and planning frequency ($F = 2.561$, $p < 0.05$). No significant statistical differences were encountered in the step first encounters importance.

Table 8 shows the mean and standard deviation of family-centered practices (frequency and importance). Simple effects analysis revealed that the support provided in the home and in the home and other locations simultaneously is higher in family-centered practices than the support provided in other places. Therefore, we concluded that family-centered practices are more evident when support is home based, or is provided within a mixture of home-based, center-based, and school-based services. This applies with children between ages 0 and 2 and ages 3 to 5.

The Strong and Weak Points Related to the Coordination of EI Programs in Portugal

Coordination in education, health, social security services, and community resources in EI programs has a significant impact on the two dimensions of family-centered practices (frequency $p \leq 0.05$ and importance $p \leq 0.01$), except in Step I – first encounters importance. Those programs, where service coordination existed, obtained better results in family-centered practices in comparison with those where this coordination was nonexistent (see Table 9). Therefore, referring to the service coordination and support in EI programs, the professionals involved in this study identified three categories

TABLE 7 Means and Standard Deviations for Family-Centered Practices as a Function of Places of Support for Children Age 0 to 2 Group

Support Locations	FEI *M* (*SD*)	FEF *M* (*SD*)	AF *M* (*SD*)	AI *M* (*SD*)	PF *M* (*SD*)	PI *M* (*SD*)	IF *M* (*SD*)	II *M* (*SD*)
Home	4.02 (.49)	3.93 (.42)	3.75 (.64)	3.89 (.66)	4.06 (.54)	4.18 (.57)	4.02 (.51)	4.11 (.59)
Day care	3.93 (.56)	3.97 (.46)	3.67 (.59)	3.68 (.61)	3.93 (.47)	3.83 (.69)	4.00 (.44)	4.00 (.54)
Home and other	4.06 (.48)	3.98 (.43)	3.77 (.54)	3.88 (.63)	4.02 (.41)	4.11 (.58)	4.06 (.50)	4.18 (.59)
Health center	3.89 (.53)	3.74 (.60)	3.48 (.74)	3.60 (.72)	3.71 (.70)	3.82 (.73)	3.76 (.59)	3.82 (.67)
Other combinations	3.83 (.59)	3.78 (.61)	3.63 (.67)	3.82 (.54)	4.00 (.55)	4.33 (.61)	3.81 (.50)	4.11 (.57)

TABLE 8 Means and Standard Deviations for Family-Centered Practices as a Function of Places of Support for Children Age 3 to 5 Group

Support Locations	FEI *M* (*SD*)	FEF *M* (*SD*)	AF *M* (*SD*)	AI *M* (*SD*)	PF *M* (*SD*)	PI *M* (*SD*)	IF *M* (*SD*)	II *M* (*SD*)
Home	4.02 (.48)	3.93 (.44)	3.69 (.69)	3.91 (.67)	4.10 (.56)	4.25 (.58)	4.15 (.49)	4.24 (.58)
Preschool	3.92 (.51)	3.94 (.44)	3.76 (.57)	3.82 (.63)	4.01 (.48)	4.03 (.62)	3.98 (.49)	4.01 (.57)
Home and other	4.11 (.45)	4.05 (.34)	3.84 (.55)	4.02 (.55)	4.04 (.44)	4.21 (.58)	4.06 (.46)	4.25 (.60)
Health center	3.86 (.58)	3.74 (.59)	3.40 (.71)	3.57 (.70)	3.72 (.65)	3.83 (.76)	3.77 (.63)	3.94 (.74)
Other combinations	4.05 (.49)	3.94 (.50)	3.62 (.51)	3.70 (.57)	3.95 (.53)	3.98 (.61)	3.87 (.50)	3.97 (.54)

Note. FEI = first encounter importance; FEF = first encounter frequency; AF = assessment frequency; PF = planning frequency; PI = planning importance; IF = intervention frequency; II = intervention importance.

TABLE 9 Impact of Service Coordination in Family-Centered Practices

Steps	Coordination	*n*	Average	*SD*	*t*	*p*
First encounters importance	no	54	3.81	.60	−2.191	.32
	yes	504	3.99	.49		
First encounters frequency	no	54	3.68	.60	−2.919	.005**
	yes	504	3.92	.44		
Assessment frequency	no	54	3.42	.69	−3.492	.001**
	yes	504	3.72	.59		
Assessment importance.	no	54	3.62	.66	−2.684	.007**
	yes	504	3.86	.63		
Planning frequency	no	54	3.65	.64	−4.208	.000***
	yes	504	4.03	.50		
Planning importance	no	54	3.75	.64	−4.338	.000***
	yes	504	4.13	.61		
Intervention frequency	no	54	3.77	.49	−2.526	.014*
	yes	504	3.98	.61		
Intervention importance	no	54	3.84	.65	−2.801	.005**
	yes	504	4.08	.59		

*$p \leq 0.05$. **$p \leq 0.01$. ***$p \leq 0.001$.

of strong aspects founded in EI practices, namely: professional teams, organization and functioning of services, and collaboration with families.

In the first category, professional teams, the answers that the professionals highlighted were those based on the diversity and flexibility of the different team elements and the need for training in EI. Moreover, they referred to a set of attitudes and behaviors, that facilitate the functioning of the teams, namely: positive attitudes, dialogue and reflection, and the sharing of knowledge and experience. In the second category, organization and functioning of services, the professionals underlined the importance of service coordination and support systems that exist in the community; strong coordination, communication, and participation between partners and the existence of formal and informal networks; access to services; and profit from existing community resources, in the answer to child and family needs. Finally, in the third category, collaboration with families, the answers that the professionals gave revealed the importance of active involvement of the family in the entire process, embedded support in the family's routines, the elaboration of an Individualized Family Service Plan (IFSP), and positive relationships between families and professionals.

Barriers in the Implementation of Family-Centered Practices in EI

Concerning the question of barriers in the implementation of family-centered practices in EI**,** the professionals considered three categories of answers: relationship barriers with the professionals, with the system and with the family. In the category, system barriers, the professionals refer to a lack of

resource materials; the difficulties involved in the articulation, and functioning within and among teams; and the absence or the inadequacy of family support policies in EI. In the category, professional barriers, the professionals point out three subcategories, namely, attitudes and behaviors, training and supervision, and inter- and intra-team collaboration.

With regards to attitudes and behaviors, the professionals considered themselves experts in this area and, as a result, experienced difficulties accepting family choices and decisions, and also in collaborating with them. A further barrier is related to training and supervision, namely, a lack of specialized training and preparation in EI and effective supervision (regular and adequate). A subsequent barrier involved inter- and intrateam collaboration, a lack of dialogue between teams, and the use of different approaches (child centered vs. family-centered). Finally, the EI professionals referred to the problem that related to a lack of a full-time work schedules, necessary to offer total support to families in need to coordinate the availability of the family and the schedules of the professionals. This was a problem found in Portuguese EI teams, as the professionals that integrated the teams had, most of them, part-time work schedules.

Recommendations in the Implementation of Family-Centered Practices in EI

Professionals suggested four recommendations regarding the implementation of family-centered practices. First, better coordination of support and services, namely, the simplification of support networks for families to empower the existing informal resources in the family's community life. Second, development and functioning of EI policies such as equity on policies at national level that clarify eligibility criteria and promote universal accessibility to EI services, as well as the need for full-time professionals on the teams. Third, attitudes and the behavior of professionals who attributed greater value to the families in EI and enabled and empowered them with greater communication networks between the professionals and the families. Finally, training and supervision, which imply more and better specialized preparation and in-service training in EI.

DISCUSSION AND CONCLUSIONS

Since the 1950s and 1960s, the conceptualization and operationalization of EI models have brought about the understanding of the importance of the central role of the family in the child's life. The family's role has encouraged numerous discussion and publications, which attempt to explain the importance of family support in EI and, simultaneously, demonstrate the need for

a significant change in the role of the professionals in EI. As a result, the system demands from the professionals in EI, not only a change, but also an expansion of their roles in the interactions with families, as well as a significant shift in the way they carry out these roles (Brotherson, Summers, Bruns, & Sharp, 2008; Sandall, McLean, & Smith, 2000; Winton & McCollum, 2008).

The purpose of this study was to evaluate the professional perspectives regarding family-centered practices in EI programs in Portugal. The results of this investigation suggest that professionals give more value to the importance of family-centered practices than their frequency. These results are similar to those obtained by several researchers that refer to significant differences between real and ideal practices (Bailey et al., 1992; Bjorck-Akesson & Granlund, 1995; Dempsey & Carruthers, 1997; McBride, Brotherson, Joanning, Whiddon, & Demmit, 1993; McWilliam, Snyder, Harbin, Porter, & Munn, 2000; Pereira, 2003).

The results of this study highlight the importance of effective coordination between the health, education, social security systems, and community resources. This is consistent with other studies that refer to a coordination between services and promote family-centered practices that translate into various benefits, such as easy access to services, more positive relationships between families and professionals, and an improvement in the outcomes and the quality of life of the families (Bruder & Dunst, 2006, 2008; Bruder et al., 2005; Dunst & Bruder, 2002; Park & Turnbull, 2003). This positive influence of service coordination in family-centered practices reinforces the accompanying statement referring to EI in the Portuguese legislation in 2009 (Law 281, October 6), regarding the need for an integrated action process within the areas of education, health and social services, and the various partners involved.

The importance of the natural context support in EI is also highlighted in this study. This importance is verified by other researchers who demonstrate that the results in family-centered practices are higher when support is provided in the natural context of the family, namely, in the home and in preschool, in comparison with those results obtained when support is carried out in clinics or health centeres (McBride et al., 1993; McWilliam et al., 2000).

Singer, Biegel, and Ethridge (2010) reinforced the value of the natural context in their approach to public policy support for caregiving families, namely, the preference for the home as a place to give and receive care when referring to "the family as a key part of a network of support for a community-based system" (p. 199). Therefore, the value of the natural context is equally reinforced by the research carried out by many other investigators who refer to these contexts as a strong source of learning opportunities and development of the child and his or/her family (Dunst et al., 2001; Dunst, Hamby, Trivette, Raab, & Bruder, 2000; Dunst, Raab, Trivette, & Swanson, 2010; Dunst, Trivette, Humphries, Raab, & Roper, 2001; Mott & Dunst, 2006).

The findings also suggest that professionals with in-service training in EI, together with the length of professional experience, demonstrate better results in the two dimensions of family-centered practices. The relevance of these results reinforces the need to invest in professionals' training that allows for the promotion and development of knowledge, the acquisition of competencies, and attitudes to improve the quality of service and support provided to families in EI. The importance of in-service training on family-centered practices is proven, by several researchers, as a valuable framework for assuring the quality of the support and service in EI (Hiebert-Murphy et al., 2011; Jung & Baird, 2003; Mahoney & Bella, 1998; McBride et al., 1993; McWilliam et al., 1998; McWilliam et al., 2000; Serrano, 2007). This recommendation is given equal importance in the study by Tomasello, Manning, and Dulmus (2010), where they refer to the fact that training and regular supervision are critical to "enhance the capacity to provide family centred services" (p. 169).

These results alert us to the importance of professionals' stability and continuity in the programs to have greater and better experience in EI that will profit professionals and families. The impact of length of experience in EI was analyzed by several researchers, particularly the study by Dempsey and Carruthers (1997) which refers to the fact that the professionals with 5 or more years of service obtained better results in family-centered practices, namely, in the participatory component of these practices, particularly in the capacity to empower choice and decision making in comparison with the professionals who have fewer years of experience (between 1 and 5). These results are consistent with those obtained by McWilliam et al. (2000), which refer to the fact that the longer the experience time in EI, the better the result will be in practices and in the level of importance which they provide.

However, these results are contradictory with the results obtained in the research study by Pereira (2003), which refer to the lack of the existence of any type of significant correlation between frequency and the level of importance of family-centered practices and the years of professional experience in EI. Inclusively, Jung and Baird (2003) considered that the years of experience in EI are related in a negative way with family-centered practices, which imply that the greater the number of years of experience of the professional, the lower the results of their practices are.

Concerning the question of barriers in the implementation of family-centered practices in EI**,** the professionals considered system barriers, professionals' attitudes and behaviors, the lack of specialized training and preparation in EI and effective supervision, and the lack of inter- and intrateam collaboration.

System barriers can often reduce the number of eligible children and families for the support programs or bring about an increase in the number of cases supported by professionals (caseloads), implying that service delivery

was essentially driven by resource considerations rather than family needs (Hiebert-Murphy et al., 2011).

The barrier *professionals' attitudes and behaviors* is not congruent with family-centered principles and practices that enable and empower families to make their own choices and decisions regarding the support process (Tomasello et al., 2010). It is also important to reconsider that the value given to the barrier categories related to the professionals' attitudes and behaviors coincide with the results obtained by Zhang and Bennett (2001) in their studies regarding professional beliefs about family-centered practices.

Consulted literature made no reference to the impact of training and its relation to the definition of the barriers and recommendations for the implementation of family-centered practices. However, we encountered various studies that, overall, identify a set of barriers and recommendations for the implementation of these practices (S. F. Allen, 2007; Bailey et al., 1992; Bjorck-Akesson & Granlund, 1995; Hiebert-Murphy et al., 2011; McBride et al., 1993).

A subsequent barrier involved inter- and intrateam collaboration. Team collaboration is considered as evidence-based practice for the implementation of family-centered practices (S. F. Allen, 2007; Bruder & Dunst, 2008; Bruder et al., 2005). Regarding the implementation of family-centered practices, the Portuguese professionals suggested better coordination of support and services to empower the existing informal resources in the family's community life. The value of informal resources is equally highlighted by several authors (Dunst et al., 2001; Hiebert-Murphy et al., 2011). The coordination of services is an important aspect in the implementation of family-centered practices, as is emphasized by Greco, Sloper, Webb, and Beechman (2006), as a critical component of successful service delivery.

The recommendation *development and functioning of EI policies* is consistent with the results obtained by Hiebert-Murphy et al. (2011), who refer to the need for adequate resources that avoid large caseloads, allowing regular and qualified access by the families to services, as well as greater flexibility of policies.

Another important aspect was the value attributed to the attitudes and behaviors of the professionals, who will eventually attribute greater value to the families in EI. This perspective is reinforced in the study by Hiebert-Murphy et al. (2011) who refer that "service coordinators need to be caring individuals who possess strong relationship skills" (p. 148), and also to the respect given to the family's final decision-making power regarding services.

With regards to training and supervision, this will imply more and better specialized preparation and in-service training in EI. This recommendation is given equal importance in the study by Tomasello et al. (2010), where they refer to the fact that training and regular supervision are critical to "enhance the capacity to provide family-centered services" (p. 169).

Finally, this study highlights the importance of collaboration with families in EI. Several studies give value to the importance of collaboration with families in the support process (Goldfarb et al., 2010), as well as the benefits of this collaboration for care recipients and caregivers (Singer, Biegel, & Ethridge, 2009).

Limitations and Recommendations

One limitation of this study is the fact that only one instrument was used to describe the reality concerning family-centered practices in EI in Portugal, as it is considered that diversity of dimensions and assessment indicators increases the quality and validity of the information obtained. Nevertheless, our choice for this instrument was justified by the fact that it was a multidimensional one, involving qualitative and quantitative data that allowed the convergence of multiple aspects and perspectives of family-centered practices. Moreover, as a recommendation for future studies, families should be involved in research studies about family-centered practices, and researchers should diversify data collection methods in order to deepen clarification of the dimensions and evaluation indicators to allow a substantial increase in the quality and validity of the data.

REFERENCES

Allen, R. I., & Petr, C. G. (1996). Toward developing standards and measurements for family-centered practices in family support programs. In L. E. P. G.H. Singer & A. L. Olson (Eds.), *Redefing support: Innovations in public private partnership* (pp. 57–85). Baltimore, MD: Paul Brookes.

Allen, S. F. (2007). Parents perceptions of intervention practices in home visiting programs. *Infants & Young Children*, *20*(3), 266–281.

Bailey, D. B., Buysse, V., Edmondson, R., & Smith, T. M. (1992). Creating family-centered services in early intervention: Perceptions of professionals in four states. *Exceptional Children*, *58*(4), 298–309.

Beckman, P. J., Robinson, C. C., Rosenberg, S., & Filer, J. (1994). Family involvement in early intervention: The evolution of family centered services. In L. J. Johnson, R. J. Gallagher, M. J. LaMontagne, J. B. Jordan, J. J. Gallagher, P. L. Hutinger, & M. B. Karnes (Eds.), *Meeting early intervention challenges: Issues from birth to three* (pp. 13–31). Baltimore, MD: Paul H. Brookes.

Bjorck-Akesson, E., & Granlund, M. (1995). Family involvement in assessment and intervention: Perceptions of professionals and parents in Sweden. *Exceptional Children*, *61*(6), 520–535.

Brotherson, M. J., Summers, J. A., Bruns, D. A., & Sharp, L. M. (2008). Family centered practices: Working in partnership with families. In P. J. Winton, J. A. McCollum, & C. Catlett (Eds.), *Practical approaches to early childhood*

professional development: Evidence, strategies, and resources (pp. 53–80). Washington, DC: ZERO TO THREE.

Bruder, M. B., & Dunst, C. J. (2006). Advancing the agenda of service coordination. *Journal of Early Intervention*, *28*(3), 175–177.

Bruder, M. B., & Dunst, C. J. (2008). Factors related to the scope of early intervention service coordinator practices. *Infants & Young Children*, *21*(3), 176–185.

Bruder, M. B., Harbin, G. L., Whitbread, K., Conn-Powers, M., Roberts, R., Dunst, C. J., . . . Gabbard, G. (2005). Establishing outcomes for service coordination: A step toward evidence-based practice. *Topics in Early Childhood Special Education*, *25*(3), 177–188.

Dempsey, I., & Carruthers, A. (1997). How family-centered are early intervention services: Staff and parents perceptions. *Journal of Australian Research in Early Childhood Education*, *1*, 105–110.

Dunst, C. J. (2000). Revisiting "Rethinking Early Intervention." *Topics in Early Childhood Special Education*, *20*(2), 95–104.

Dunst, C. J., & Bruder, M. B. (2002). Valued outcomes of service coordination, early intervention, and natural environments. *Exceptional Children*, *3*, 361–375.

Dunst, C. J., Bruder, M. B., Trivette, C. M., Hamby, D., Raab, M., & McLean, M. (2001). Characteristics and consequences of everyday natural learning opportunities. *Topics in Early Childhood Special Education*, *21*, 68–92.

Dunst, C. J., Hamby, D., Trivette, C. M., Raab, M., & Bruder, M. B. (2000). Everyday family community life and children's naturally occurring learning opportunities. *Journal of Early Intervention*, *23*, 151–164.

Dunst, C. J., Raab, M., Trivette, M. C., & Swanson, J. (2010). Community-based everyday child learning opportunities. In R. A. McWilliam (Ed.), *Working with families of young children with special needs* (pp. 60–92). New York, NY: Guilford Press.

Dunst, C. J., Trivette, C. M., & Deal, A. G. (1994). *Supporting & strengthening families: Methods, strategies and practices* (Vol. 1). Cambridge, MA: Brookline Books.

Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2007). Meta-analysis of family-centered helpgiving practices research. *Mental Retardation and Developmental Disabilities Research Reviews*, *13*, 370–378.

Dunst, C. J., Trivette, C. M., Humphries, T., Raab, M., & Roper, N. (2001). Contrasting approaches to natural learning environment intervention. *Infants & Young Children*, *14*(2), 48–63.

Dunst, C. J., Trivette, C. M., & Mott, D. W. (1994). Strengths based family centered intervention practices. In C. J. Dunst, C. M. Trivette, & A. G. Deal (Eds.), *Supporting & strengthening families: Methods, strategies, and practices* (pp. 115–131). Cambridge, MA: Brookline Books.

Goldfarb, F. D., Devine, K., Yingling, J. T., Hill, A., Moss, J., Ogburn, E. S., . . . Pariseau, C. (2010). Partnering with professionals: Family-centered care from the parent perspective. *Journal of Family Social Work*, *13*, 91–99.

Greco, V., Sloper, P., Webb, R., & Beechman, J. (2006). Key worker services for disabled children: The views of staff. *Health and Social Care in the Community*, *14*(6), 445–452.

Hiebert-Murphy, D., Trute, B., & Wright, A. (2011). Parents' definition of effective child disability support services: Implications for implementing family-centered practice. *Journal of Family Social Work*, *14*, 144–158.

Jung, L. A., & Baird, S. M. (2003). Effects of service coordinator variables on individualized family service plans. *Journal of Early Intervention*, *25*, 206–218.

Jung, L. A., McCormick, K. M., & Jolivette, K. (2004). Early intervention in rural natural environments: Making the most of your time. *Rural Special Education Quarterly*, *24*(3), 30–35.

Mahoney, G., & Bella, J. M. (1998). An examination of the effects of family centered early intervention on child and family outcomes. *Topics in Early Childhood Special Education*, *18*(2), 83–94.

McBride, S. L., Brotherson, M. J., Joanning, H., Whiddon, D., & Demmit, A. (1993). Implementation of family-centered services: Perceptions of families and professionals. *Journal of Early Intervention*, *17*(4), 414–430.

McWilliam, R. A., Fergunson, A., Harbin, G. L., Porter, P., Munn, D., & Vandiviere, P. (1998). The family-centeredness of individualized family service plans. *Topics in Early Childhood Special Education*, *18*, 69–82.

McWilliam, R. A., Snyder, P., Harbin, G. L., Porter, P., & Munn, D. (2000). Professionals and families perceptions of family-centered practices in infant-toddler services. *Early Education & Development*, *11*(4), 519–538.

Mott, D. W., & Dunst, C. J. (2006). Influences of resource based intervention practices on parent and child outcomes. *CASEinPoint*, *2*(6), 1–8.

Park, J., & Turnbull, A. (2003). Service integration in early intervention: Determining interpersonal and structural factors for its success. *Infants & Young Children*, *16*(1), 48–58.

Pereira, A. P. S. (2003). *Práticas centradas na família: Identificação de comportamentos para uma prática de qualidade no distrito de Braga* [Family centred practices: Identification of behaviours for quality practices in district of Braga] (Unpublished master's thesis). Universidade do Minho, Braga, Portugal.

Sandall, S., McLean, M., & Smith, B. J. (2000). *DEC recommended practices in early intervention/early childhood special education*. Denver, CO: SOPRIS West.

Serrano, A. M. (2007). *Redes sociais de apoio e sua relevância para a intervenção precoce* [Social support networks and their relevance for early intervention]. Porto, Portugal: Porto Editora.

Singer, G. H. S., Biegel, D. E., & Ethridge, B. L. (2009). Toward a cross disability view of family support for caregiving families. *Journal of Family Social Work*, *12*, 97–118.

Singer, G. H. S., Biegel, D. E., & Ethridge, B. L. (2010). Trends impacting public policy support for caregiving families. *Journal of Family Social Work*, *13*, 191–207.

Tomasello, N. M., Manning, A. R., & Dulmus, C. N. (2010). Family-centered early intervention for infants and toddlers with disabilities. *Journal of Family Social Work*, *13*, 163–172.

Turnbull, A. P., Turbiville, V., & Turnbull, R. H. (2000). Evolution of family-professional partnerships: Collective empowerment as the model for the early twenty-first century. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of*

early childhood intervention (pp. 630–650). Cambridge, England: Cambridge University Press.

Winton, P. J., & McCollum, J. A. (2008). Preparing and supporting high quality early childhood practitioners: Issues and evidence. In P. J. Winton, J. A. McCollum, & C. Catlett (Eds.), *Practical approaches to early childhood professional development: Evidence, strategies, and resources* (pp. 1–12). Washington, DC: ZERO TO THREE.

Zhang, C., & Bennett, T. (2001). Beliefs about and implementation of family centered practice: A study with Early Head Start staff in six states. *Infant - Toddler Intervention. The Transdiciplinary Journal*, *11*(3/4), 201–222.