Family-Centered Practices in Early Childhood Intervention

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Family-Centered Practices in Early Childhood Intervention

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Carl J. Dunst and Marilyn Espe-Sherwindt

Introduction

The purposes of this chapter are to describe the key characteristics of family-centered practices, review the research foundations for this approach to working with families, and provide illustrative examples of how these types of practices are used as part of early childhood intervention. The term *family-centered* is defined as a particular type of help-giving practice that involves adherence to principles and values that include treating families and family members with dignity and respect, information sharing so that families can make informed decisions, acknowledging and building on family member strengths, active family member participation in early childhood intervention, and the provision or mobilization of supports and resources in response to family concerns and priorities (Dunst, 2002; Espe-Sherwindt, 2008). Family-centered practices are conceptualized as a particular approach to how other child, parent-child, parent, and family interventions are implemented (Coogle, 2012).

The term early childhood intervention (ECI) encompasses both early intervention and preschool special education (Odom & Wolery, 2003). The division of ECI into early intervention (birth to age 3) and preschool special education (ages 3–5) is unique to the United States, whereas ECI in most other countries covers intervention birth to age 6 and in some cases birth to age 8 (e.g., Odom, Hanson, Blackman, & Kaul, 2003; Soriano, 2005).

ECI as used in this chapter includes, but is not limited to, family-centered practices used in home, community, preschool, and childcare settings that promote family member engagement in ECI and practitioners' responsiveness to family-identified priorities (Stepanek, Newcomb, & Kettler, 1996; Warner, 2006). ECI also includes family- and systems-level intervention practices where the family is viewed as a primary source of influence on child behavior, learning, and development, and family-centered practices are considered one of a number of extrafamily factors that can contribute to positive family, parent, and child outcomes (Dunst & Trivette, 2009a; Guralnick, 2011).

Figure 3.1 shows the manner in which family-centered practices are conceptualized as a particular and distinctive way in which other ECI practices are implemented and in turn have hypothesized or expected child, parent, and

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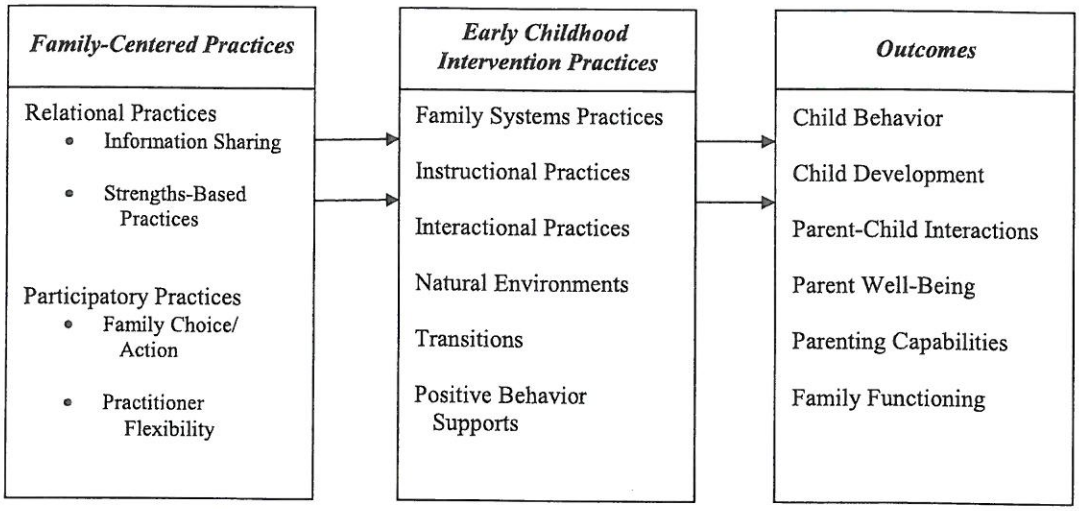

Fig. 3.1 Proposed relationships between family-centered practices, early childhood intervention practices, and child, parent, and family outcomes (*Note*: The practices and outcomes in the figure are illustrative and not exhaustive)

family outcomes. As described in this chapter, family-centered practices include (a) relationship-building practices and (b) practices that actively engage parents and other family members in child, parent-child, parent, and family interventions (Dunst & Trivette, 2009a). These two types of family-centered practices are described, respectively, as relational help-giving practices and participatory help-giving practices (Dunst, Trivette, & Hamby, 1996).

As shown in Fig. 3.1, family-centered practices are viewed as one way in which any or all other kinds of (ECI) practices are used to affect child, parent, and family functioning. Family-centered practices are how ECI practitioners interact with and actively involve family members in different types of interventions in order to affect child, parent, and family outcomes. These outcomes include, but are not limited to, knowledge and skill acquisition, a sense of competence and confidence, and other capacity-building consequences (e.g., Levine, 2013).

At the outset, we note that family-centered practices are often misunderstood as simply "being nice to families" or "giving or doing whatever a family wants." This misunderstanding is unfortunate because such a euphemism overshadows the complexities of family life and the role family-centered practices play in supporting and strengthening meaningful changes in child, parent, and family functioning. Too often, ECI practitioners claim that they use family-centered practices but without a complete understanding of what it means to be a family-centered practitioner.

The chapter is divided into five sections. The first section includes a brief history of family-centered practices to provide a foundation for understanding the origins and evolution of this approach to working with families. The second section includes an overview of the principles, values, and beliefs that are the foundations for family-centered practices. The third section includes a description of the different ways in which family-centered practices have been measured with a focus on the commonalities found by different investigators. The fourth section includes a description of findings from research syntheses that show the manner in which family-centered practices are related to child, parent, and family outcomes. The fifth section includes examples of how family-centered practices have been used to engage parents, children, and families in different types of early childhood and family intervention practices. The chapter concludes with a description of three areas of research and practice that would contribute to advances in understanding and implementing family-centered practices.

Origins and Evolution of Family-Centered Practices

The term family centered first appeared in the published literature in the late 1940s and early 1950s, where the term was used to describe a type of family lifestyle (e.g., Remsberg, 1948) or a type of community outreach by clergy (e.g., Warmer, 1947). One of the first references to family-centered practices in the helping professions was Hamilton's (1947) use of the term to refer to nursing practices that were family rather than nurse centered as a way of improving the outcomes of nursing care. Birt (1956) and Scherz (1953) first used the term family centered to describe different approaches to social work practice.

The terms family-centered practices (Hartman & Laird, 1983), family-centered care (Warrick, 1971), family-centered parent training (Christophersen, 1979), and their variants (Wilson & Dunst, 2004) began to appear in the published literature in the 1970s and the early 1980s. Schaefer (1969) used the term family-centered in a conference presentation to describe an approach to ECI that emphasized both parent involvement and parent-child interactions as a focus of ECI practices. The term family-centered early intervention was first used by Bronfenbrenner (1974) in the published literature to describe the need for a shift in focus from a child-centered to family systems approach to working with parents, their children, and other family members in order to optimize the benefits from ECI.

Different proponents trace the origins of family-centered practices to different sources (e.g., Allen & Petr, 1998; Bamm & Rosenbaum, 2008; Johnson, 2000; Jolley & Shields, 2009). Bamm and Rosenbaum (2008) attributed the origins of family-centered practices to Carl Rogers' client-centered therapy, whereas Allen and Petr (1998) traced the beginnings of family-centered practices to shift toward strength-based approaches in social work, mental health, health care, and education practices. In contrast, Johnson (2000) stated that "the development of family-centered care ... is rooted in the consumer and family support movements in the 1960s" (p. 138). Although the origins of family-centered practices have been traced to multiple sources, it was the development of family-centered value statements (Dokecki, 1983), family support principles (Family Resource Coalition, 1981), and guiding belief statements (Center on Human Policy, 1986) about working with families that laid the foundation for a shift in the ways in which different types of intervention practices were conceptualized and implemented.

Contributions of Family Support Principles

The foundations of family-centered practices were first articulated in the mid- and late 1980s as sets of principles, elements, beliefs, and value statements that described the scope of this approach to working with families. Family-centered principles are belief and value statements about how professionals ought to treat and interact with parents, their children, and other family members and how different interventions should be implemented with children and their families in order to have optimal positive benefits and outcomes.

More than a dozen sets of principles were proposed during the mid- and late 1980s (see Dunst & Trivette, 2005, for a list of these principles). The *Elements of Family-Centered Care* articulated by Shelton, Jeppson, and Johnson (1987) by far have had the most influence on understanding the potential value of family-centered practices. The core elements include, but are not limited to, recognizing the family as a constant in a child's life, sharing complete and unbiased information in order for families to make informed decisions, and recognizing and building on family strengths, parent-professional collaboration, parent-to-parent support, and flexible, accessible, and responsive intervention practices. Shelton et al.'s (1987) book and its subsequent revisions (e.g., Shelton, Jeppson, & Johnson, 1989; Shelton & Stepanek, 1994) have been used to describe the core features of family-centered practices in

health care (e.g., American Academy of Pediatrics Committee on Hospital Care, 2003), ECI (e.g., Dunst, 2000), mental health (Friesen & Koroloff, 1990), rehabilitation therapy (e.g., Grady, 1995), social work (e.g., Lotze, Bellin, & Oswald, 2010), and other fields and professions (see, e.g., Dunst, 1995).

Allen and Petr (1996), as part of a content analysis of 28 definitions of family-centered practices, identified a number of key concepts (elements) that proponents of this approach to working with families consider core beliefs and value statements. The elements most often found in the definitions were the family as the unit of intervention, family-professional collaboration, practitioner responsiveness to family-identified needs, family choice and decision-making, and recognizing and building on family member strengths and capabilities. Dunst, Trivette, and Thompson (1990) conducted a content analysis of more than ten sets of family support principles and found that treating families with dignity and respect; valuing family beliefs and diversity; acknowledging and building on family member strengths, family choice, and decision making; responding to family concerns and priorities; and actively involving family members in intervention practices were some of the common elements in most sets of principles. The Allen and Petr (1996) and Dunst et al. (1990) elements are very similar to those articulated by Shelton and Stepanek (1994).

Measuring Family-Centered Practices

The development of a number of different family-centered practice scales in the 1990s led to advances in an understanding of the key characteristics of this approach to help giving (e.g., Dempsey, 1995; Dunst et al., 1996; King, Rosenbaum, & King, 1996; Petr & Allen, 1995). The use of the scales in research and practice permitted analyses and evaluations of a family-centered approach to working with parents and their children. First, the investigators attempted to develop operationalized indicators for different family-centered principles and value statements. Second, the psychometric analysis of the scale items permitted identification of the factor structure of family-centered help-giving. Third, the use of the scales allowed evaluation of practitioner adherence to the use of family-centered practices. Fourth, the use of the scales as part of research permitted investigation of the relationships between family-centered practices and child, parent, and family outcomes. Placed in the context of measurement theory (Babbie, 2009), family-centered practice scale developers were able to take family-centered principles and values (constructs), develop family-centered practices indicators for the principles and values (operationalization), and have parents or other family members evaluate practitioners' use of the practices (measurement).

Family-Centered Practice Scale Items

Table 3.1 shows examples of items on five different family-centered practice scales. The different versions of the *Help-giving practices scale* (Dunst, Trivette, & Hamby, 2006) include between 12 and 26 items. The *Enabling practices scale* includes 24 items (Dempsey, 1995). The two versions of the *Measure of processes of care* (King et al., 1996; King, King, & Rosenbaum, 2004) contain 20 and 56 items, respectively. The *Family-centered behavior scale* includes 26 items (Allen, Petr, & Brown, 1995). The different versions of the *Family-centered practices scale* (Dunst et al., 2006) contain between 8 and 17 items. Each indicator on each scale is rated on a Likert scale by a parent or other family member who judges the extent to which a professional working with a family uses or performs each of the behavior indicators.

The scale developers used different sources of information for constructing their measures, but each set of scale items overlaps considerably and in many cases is identical or very similar. Trivette and Dunst (1994) used results from studies of professional help-giving practices (Dunst & Trivette, 1988) and conceptualizations of empowering processes (Rappaport, 1981,

Table 3.1 Examples of items on family-centered practice scales

Family-centered scales/items
Help-giving practices scale (Trivette & Dunst, 1994)
Staff are honest and sincere with me
Staff listen to what I have to say about my child and family
Staff provide me information about resources and options
Staff are warm and caring toward me and my family
Enabling practices scale (Dempsey, 1995)
Staff accept my family beliefs and values
Staff offer help in response to my family's needs
I am an equal partner in the relationship I have with staff
Staff care about my son/daughter and family
Measure of processes of care (King et al., 1997)
Staff provide opportunities for me to make decisions about [my child's] treatment
Staff give me information about the types of services offered in my community
Staff plan together so they are all working in the same direction
Staff treat me as an individual rather than as a "typical" parent of a child with a disability
Family-centered behavior scale (Petr & Allen, 1995)
Staff help us get all the information we want and/or need
Staff respect our family's beliefs, customs, and ways that we do things
Staff talk in everyday language that we understand
Staff support me making as many decisions as I choose about my child and family
Family-centered practices scale (Dunst & Trivette, 2002)
Staff listen to my concerns and requests
Staff recognize my child(ren)'s and family's strengths
Staff provide me information I need to make good choices
Staff are flexible when my family's situation changes

1987) to develop their scale. Dempsey (1995) developed his scale using 12 different types of enabling and empowering practices (Dunst, Trivette, & Deal, 1988). King et al. (1996) used research on processes of caregiving (e.g., Tugwell, 1979) and parent-"identified behaviors of health-care professionals that were important to them" (p. 759) to generate the items on their scale. Dunst and Trivette (2002) used family support principles to develop their scale items (Dunst et al., 1990).

Inspection of the items shown in Table 3.1 as well as the complete item pools on the scales finds more similarities than differences. The similarities include information sharing so that parents can make informed decisions; respect for family beliefs, values, and preferences; provision of information about supports, resources, and services; responsiveness to family concerns and priorities; and family and professional partnerships and collaboration. A comparison of the scale items with family support principles (Dunst et al., 1990) finds that they may be considered operationalized behavioral indicators of the principles (Dunst, 2005).

Factor Structure of Family-Centered Practices Scale Items

The item pools on three of the five scales listed in Table 3.1 have been subjected to psychometric analyses that included factor analysis to identify scale structure (Dempsey, 1995; King, King & Rosenbaum, 2004; King, Rosenbaum, & King, 1997; Trivette & Dunst, 2007). Three, four, or five subscales were identified on the different scales. Table 3.2 shows the subscales with similar item content aligned in the table to show how they overlap. Despite the fact that different subscale names were used by the different scale developers, the factor analysis results were all very much alike.

Content analyses of the items on the different subscales indicate that there are two discernible categories of family-centered practices: relational help-giving practice indicators and participatory help-giving practice indicators. Relational practices include (a) practitioner behavior typically associated with effective clinical practice including, but not limited to, compassion, active and reflective listening, empathy, and effective communication, (b) practitioner beliefs and attitudes about family and cultural strengths and values, and (c) practitioner sensitivity to these beliefs and values as part of intervention practices. Participatory practices include (a) practitioner behavior that engages family members in informed choice and decision making, (b) practitioner capacity-building practices to promote family members' use of existing strengths and abilities as well as the acquisition of new

Table 3.2 Factor structure and subscales for three family-centered practice scales

Family-centered scales	Relational practices		Participatory practices	
Help-giving practices scale	HG interpersonal skills	HG beliefs and attitudes	Family choice/ action	HG responsiveness
Enabling practices scale	Comfort with relationship		Parent autonomy	Collaboration
Measure of processes of care	General information Specific information	Respectful/supportive care	Coordinated care	Enabling/partnership

HG help giver

capabilities needed to be actively involved in different types of child and family interventions, and (c) practitioner responsiveness to and flexibility in how help is provided to children and their families. The factor analysis results show that family-centered practices include different kinds of practitioner and family-practitioner practices that are intended to have capacity-building (Dunst & Trivette, 2009a), empowering (Dempsey & Foreman, 1997), competency and development enhancing (McIntyre, 2000), and health promoting (Summers et al., 2007) characteristics and consequences.

Measuring Adherence to Family-Centered Practices

The extent to which practitioners interact with, treat, and involve families in interventions in ways consistent with the intent of family-centered practice scale indicators has been the focus of research by a number of investigators. These types of adherence studies allow a determination of how closely ECI professional practices are aligned with family-centered practice indicators. Practitioner adherence to the use of family-centered practices is a measure of fidelity of the use of the practices (Dunst, Trivette, & Raab, 2013a).

Adherence has been typically evaluated in one of two ways. One approach has compared parents' responses to questions asking "how important" is it for practitioners to behave in ways stated on scale items to parents' responses to questions asking "how much" do practitioners who work with a family do so in ways consistent with family-centered indicators (e.g., Applequist & Bailey, 2000). Another approach has been to determine how many family-centered practice indicators are rated as highly consistent with the intent of the indicators (e.g., Dunst, 2005).

Results from studies comparing importance and behavior adherence ratings show, with only a few exceptions, that parents' ratings of practitioner behavior are consistently lower than their importance ratings (see Dunst, 2002). Findings from these studies show, for example, that there are statistically significant differences between items rated as important or ideal compared to items rated as typical or actually used by practitioners (e.g., Dempsey & Carruthers, 1997).

Dunst and Trivette (2005) used a consumer sciences approach to measuring adherence to family-centered practice indicators in one ECI program over a 14-year period of time. Adherence was evaluated separately for relational and participatory family-centered practices and was defined as the percentage of behavior indicators that were rated a five on a 5-point scale which is the standard in consumer sciences research (Reichheld, 2003). The results are shown in Fig. 3.2. As can be seen, there was considerable variability in the levels of adherence across the 14 years, where the dips in adherence were used to implement programmatic changes to improve practitioners' use of both types of family-centered practices. Dunst and Trivette (2005) concluded that adherence is difficult to attain and even more difficult to maintain because of multiple systematic, programmatic, and practitioner factors that interfere with the consistent use of family-centered

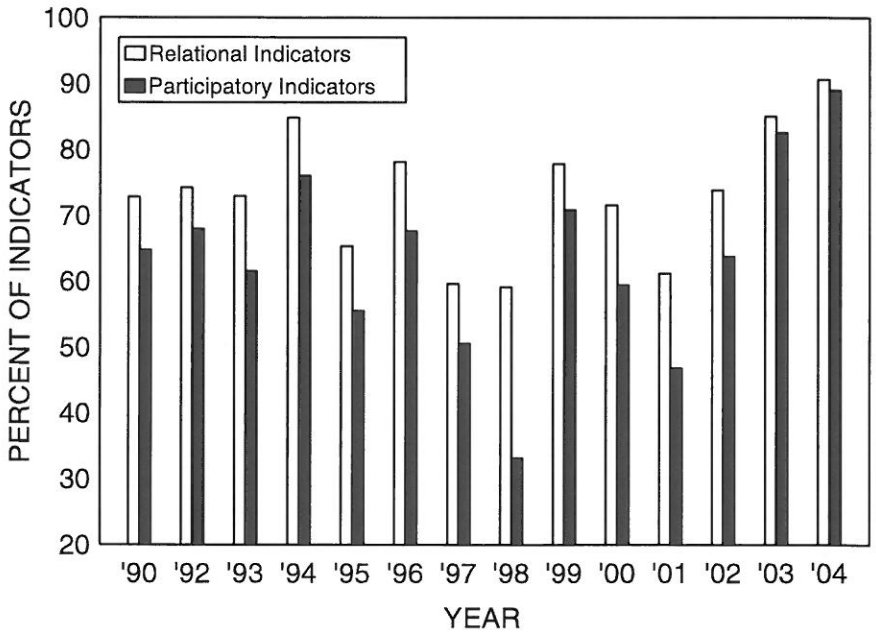

Fig. 3.2 Patterns of adherence to relational and participatory family-centered practices in one early childhood intervention program over a 14-year period of time

practices. The interested reader is referred to Dunst and Trivette (2005) for explanations for the low levels of adherence found across the 14 years of data collection.

Moderators of Adherence to Family-Centered Practices

A review of studies of family-centered practices (Dempsey & Keen, 2008) together with findings from more recent investigations (e.g., Dunst, Bruder, & Espe-Sherwindt, 2014) indicates that adherence varies as a function of a number of moderator variables. These factors include, but are not limited to, program type, program context, and program setting.

Research shows that parents' judgments of practitioner adherence to family-centered practices show a downward trend from early intervention to preschool and into the early elementary grades (Dunst, 2002; Dunst & Trivette, 2009b). This finding is the case, at least in part, because family-centered practices are viewed as less relevant in preschool education compared to early intervention (e.g., Burton, 1992) and less applicable in the early elementary grades compared to the preschool years (e.g., McWilliam, Maxwell, & Sloper, 1999).

The context in which practitioners work with parents also moderates adherence to family-centered practices. Parents rate ECI practitioners' behavior as being more family-centered when practiced on a one-to-one basis compared to working with parents in groups (Dunst & Trivette, 2005). This finding is not surprising since it is simply more difficult to engage and be responsive to families when working with multiple numbers of families at the same time compared to working with only one parent, for example, during home visits.

Another moderator of adherence is the setting in which ECI is implemented. For example, Dunst et al. (2014) found that ECI practitioners used capacity-building participatory practices to involve parents in their children's early intervention only 22 % of the time when interventions were implemented outside the families' home. In contrast, 53 % of parents were involved

in their children's ECI in a capacity-building manner when interventions were implemented in the families' homes. These differences were not unexpected inasmuch as the implementation of ECI on practitioners' "turf" is more likely to result in professionals taking the lead in terms of working with children rather than their parents.

Research on Family-Centered Practices

Advances in an understanding of family-centered practices occurred as a result of studies that examined the influences of this approach to help giving on a number of outcomes of interest. Findings from these studies provide a foundation for determining how and in what manner family-centered help-giving is related to child, parent, and family behavior and functioning.

Literature Reviews and Research Syntheses

The relationship between parents' judgments of practitioner use of family-centered practices and child, parent-child, parent, and family outcomes has been the focus of a number of literature reviews and research syntheses (Cunningham & Rosenbaum, 2014; Dempsey & Keen, 2008; Dunst, Trivette, & Hamby, 2007, 2008; King, Teplicky, King, & Rosenbaum, 2004; Kuhlthau et al., 2011; Shields, Pratt, & Hunter, 2006). The studies in these reviews and syntheses included families of children with different types of disabilities involved in different types of ECI, rehabilitation, and health-care programs in more than 15 different countries. The reviews and syntheses included either or both qualitative or quantitative analyses of family-centered practice studies where the results, taken together, provide evidence about the manner in which this type of help giving is related to a wide range of child, parent, and family outcomes.

Table 3.3 shows the findings reported by Dunst et al. (2007) in terms of the relationships between relational and participatory family-centered practices and parent, child, and family outcomes. The sizes of effect for all the outcomes except one were statistically significant, indicating that greater use of family-centered practices is related to better parent, child, and family functioning. The sizes of effects, however, differ as a function of the particular outcomes that were the focus of analysis. As can be seen in Table 3.3, outcomes directly associated with help giver-practitioner interactions (satisfaction and self-efficacy belief appraisals) are larger than those for outcomes that are the focus of other kinds of intervention practices (e.g., resources and support, well-being, parenting). These findings were not unexpected inasmuch as the conceptual framework guiding the conduct of the meta-analysis posited indirect effects of family-centered practices on more distal outcomes mediated by self-efficacy beliefs (Dunst et al., 2008).

The nature of these indirect effects was the focus of analyses by Dunst et al. (2008) where the relationships between family-centered practices and child behavior, parent and family well-being, and parenting competence and confidence were all found to be mediated by parent self-efficacy beliefs. For example, the average effect sizes for the direct effects of relational and participatory practices on parenting competence and confidence were $B = .04$, $p = .500$ and $B = .13$, $p = .050$, respectively. In contrast, the effect sizes for the indirect effects were $B = .47$, $p = .000$ and $B = .40$, $p = .000$, respectively, mediated by parents' belief appraisals in terms of control over practitioner responsiveness to obtaining program resources. Results from the mediated analyses show that the effects of family-centered practices on outcomes typically the focus of other types of ECI practices (e.g., parent-child interactions) are manifested through other variables and in particular different types of self-efficacy beliefs and personal control appraisals. Graves and Shelton (2007) found the same type of mediated relationship between family-centered practices and changes in children's behavior functioning.

Table 3.3 Effect sizes for the relationship among relational and participatory family-centered help-giving practices and study outcome measures

	Relational help-giving practices					Participatory help-giving practices				
	Number			Effect size[a]		Number			Effect size[a]	
Outcome measures	Studies	Sample size	Effect size	Mean	95 % CI	Studies	Sample size	Effect size	Mean	95 % CI
Participant satisfaction										
All measures combined	10	2128	24	0.64****	0.62–0.65	9	2053	13	0.59****	0.56–0.61
Satisfaction with staff	3	601	4	0.67****	0.63–0.72	2	526	5	0.38****	0.34–0.42
Satisfaction with program	8	1598	20	0.63****	0.62–0.65	8	1598	8	0.67****	0.65–0.70
Self-efficacy beliefs										
All measures combined	16	1765	32	0.61****	0.59–0.63	17	2015	43	0.59****	0.57–0.61
Practitioner control	10	1368	10	0.62****	0.59–0.65	10	1368	11	0.62****	0.59–0.66
Program control	8	754	10	0.70****	0.66–0.73	8	754	13	0.67****	0.64–0.70
Life event control	8	675	12	0.32****	0.26–0.38	9	913	19	0.39****	0.35–0.43
Program resources										
All measures combined	3	347	6	0.36****	0.30–0.43	3	347	6	0.44****	0.38–0.51
Parent/child supports	2	181	4	0.26****	0.17–0.36	2	181	4	0.37****	0.28–0.46
Program helpfulness	2	252	2	0.47****	0.37–0.56	2	252	2	0.52****	0.43–0.61
Child behavior										
All measures combined	3	345	19	0.24****	0.20–0.29	3	345	12	0.27****	0.22–0.32
Positive child behavior	3	345	8	0.25****	0.19–0.31	3	345	5	0.34****	0.27–0.41
Negative child behavior	1	93	8	0.25****	0.18–0.31	1	93	4	0.20****	0.11–0.30
Behavioral competence	2	252	3	0.24****	0.14–0.34	2	252	3	0.18***	0.08–0.28
Well-being										
All measures combined	10	1543	30	0.26****	0.24–0.29	10	1543	20	0.27****	0.23–0.30
Personal well-being	10	1543	26	0.27****	0.25–0.30	10	1543	16	0.26****	0.22–0.30
Family well-being	2	245	4	0.18****	0.11–0.27	2	245	4	0.29****	0.23–0.37
Parenting behavior										
All measures combined	3	331	8	0.13****	0.07–0.19	3	331	11	0.21****	0.16–0.27
Confidence	3	331	3	0.16**	0.06–0.27	3	331	4	0.26****	0.18–0.35
Competence	2	236	2	0.05	−0.07–0.18	2	236	3	0.11*	0.01–0.21
Enjoyment	3	331	3	0.15**	0.05–0.26	3	331	4	0.24****	0.16–0.32

*$p<.05$, **$p<.01$, ***$p<.001$, ****$p<.0001$

[a]Significance Z test for covariation between help-giving practices and the outcome measures

Meta-Analytic Structural Equation Modeling Syntheses

The manner in which the relationship between family-centered practices and parent, parent-child, and child outcomes is mediated by variables in addition to self-efficacy beliefs has been the focus of three meta-analyses (Dunst & Trivette, 2009c; Dunst, Trivette, & Raab, 2013b; Trivette, Dunst, & Hamby, 2010). These research syntheses employed a methodology called meta-analytic structural equation modeling (Cheung & Chan, 2009) to trace the influence of family-centered practices on different types of parent self-efficacy beliefs, parent well-being, parent-child interactions, and child behavior and development. Meta-analytic structural equation modeling is a procedure for combining data (e.g., correlations) from multiple studies (meta-analysis) and using the combined data set to evaluate the fit of a model to the patterns of relationships among the variables in the model using structural equation modeling.

Dunst and Trivette (2009c) found that the effects of family-centered practices on parent well-being were mediated by parents' belief appraisals of control over different life events and that the effects of family-centered practices on child psychosocial behavior were mediated by both life event control appraisals and parent well-being. Both Dunst et al. (2013b) and Trivette et al. (2010) found that the indirect effects of family-centered practices on parent-child and child outcomes could be traced through a number of intervention-related variables, self-efficacy beliefs, and parent well-being in a manner consistent with the family systems theory that guided the conduct of the meta-analyses (Dunst & Trivette, 2009a). Trivette et al. (2010), for example, found that the effects of family-centered practices on parent-child interactions were mediated by family systems intervention practices, self-efficacy beliefs, and parent well-being. Furthermore, they found that the effects of family-centered practices on child development could be traced through three different paths (mediators) in the model guiding the conduct of their analyses.

Role of Mediation in Family-Centered Practices

Identification of the mediated effects of family-centered practices on outcomes germane to ECI helps explain how and in what manner family-centered help giving can be expected to contribute to changes in parent, parent-child, and child outcomes. The mediated relationships detected in the research syntheses and meta-analyses described above highlight the fact that most effects of family-centered practices are indirect, mediated by other variables, and in particular self-efficacy beliefs, in a manner identical to that found in other types of studies (see Bandura, 1997).

The role of mediation is illustrated with findings from a study of parents of preschool children with and without disabilities participating in community-based family resource programs. Parents completed a family-centered practices scale, rated program staff responsiveness to their concerns and the helpfulness of their responses, completed two parent self-efficacy scales, and made judgments of their parenting competence and confidence. Structural equation modeling was used to test the hypothesis that family-centered practices would be indirectly related to parenting competence and confidence mediated by staff responsiveness to parent concerns and self-efficacy beliefs regarding the ability to obtain desired supports and resources from family resource program practitioners.

The results are shown in Fig. 3.3. The three fit indices were all acceptable, indicating an adequate fit of the hypothesized model to the pattern of relationships among the variables in the model. Family-centered practices were indirectly related to the parenting outcomes mediated by both self-efficacy beliefs and staff responsiveness to family concerns and by a combination of both mediators. The indirect effect of family-centered practices on parenting capabilities mediated by self-efficacy beliefs was $B = .24$, $p = .000$, and the indirect effect on parenting capabilities mediated by practitioner responsiveness to parent concerns was $B = .15$, $p = .050$. The total indirect effect of both mediators through all pathways in the model

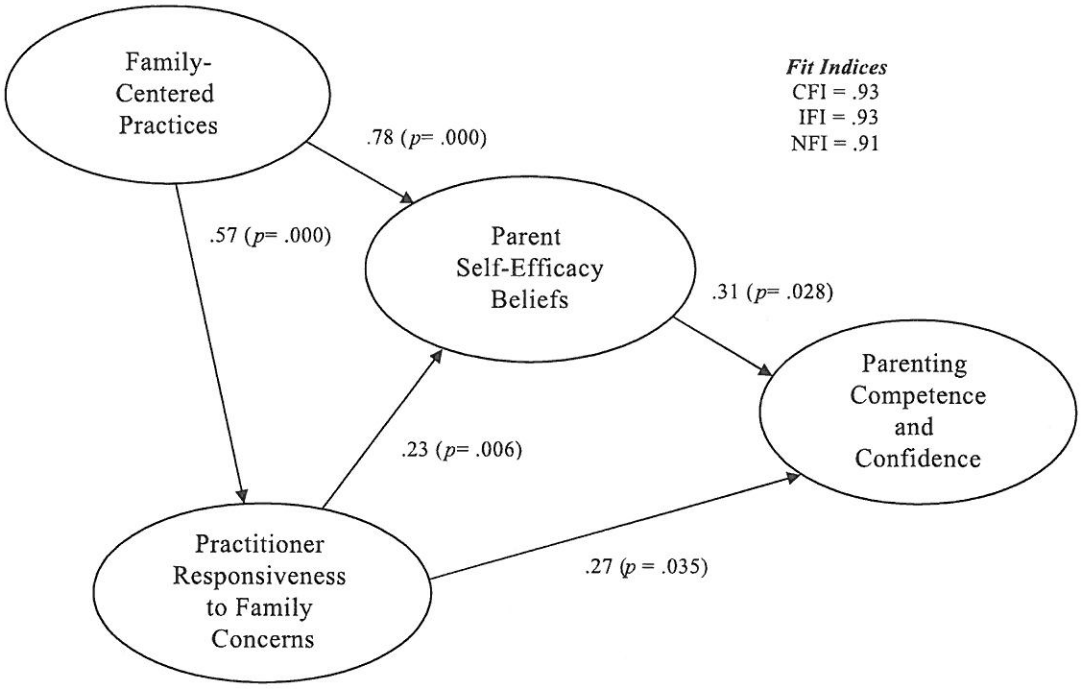

Fig. 3.3 Structural equation modeling results for illustrating the indirect effects of family-centered practices on parenting outcomes mediated by both parents' self-efficacy beliefs and practitioner responsiveness to parent and family concerns (*CFI* comparative fit index, *IFI* incremental fit index, and *NFI* normed fit index)

was $B=.43$, $p=.000$. The results highlight the importance of how mediators explain how family-centered practices are related to outcomes typically the focus of ECI practices.

Family-Centered Early Childhood Intervention

Family-centered practices were conceptualized and operationalized in this chapter as the foundations for other ECI practices (see Fig. 3.1). The manner in which different dimensions or characteristics of family-centered practices have been proposed or used to design and carry out other kinds of early childhood and family intervention practices has been described by a number of practitioners and researchers. Selected examples are used in this section of the chapter to illustrate how one or more dimensions or characteristics of family-centered practices have or could be used to improve the benefits of ECI practices.

Parent-Child Interaction Practices

One of the primary emphases of ECI is supporting and improving parent-child interactions to promote and enhance child learning and development (e.g., Mahoney & Nam, 2011; Marfo, 1988). The use of family-centered practices to support and encourage parents' use of interactional behavior to enhance child competence has been described by a number of practitioners and researchers (e.g., Mahoney & Wheeden, 1997; McCollum & Yates, 1994).

McCollum and Yates (1994) describe the use of capacity-building practices that build on existing parent strengths and promote acquisition of new parenting competencies as a way to support and enhance parenting competence and confidence. In comparison, Mahoney and Wheeden (1997) propose the use of practices to promote parents' understanding of how their interactive behavior influences their children's development as a foundation for improving parent-child interactions.

Natural Learning Environment Practices

The use of different dimensions of family-centered practices to promote parents' use of everyday activities as sources of child learning opportunities has been described by a number of practitioners and researchers (Campbell & Sawyer, 2007; Salisbury, Woods, & Copeland, 2010; Woods, Wilcox, Friedman, & Murch, 2011). Campbell and Sawyer (2007), for example, describe how practitioners who used family-centered competency-enhancing practices with parents during home visits promoted their use of everyday routines and activities as contexts for increasing child engagement with the social and nonsocial environment. Woods et al. (2011) describe how a particular component of family-centered practices (collaborative consultation) can be used to promote parent-implemented interventions in the context of naturally occurring child learning opportunities. In both of these examples, different types of help-giving practices (coaching, supportive guidance, etc.) were used to actively involve parents in using natural environment strategies to improve child outcomes.

Positive Behavior Support Practices

A number of practitioners and researchers have used family-centered practices to promote parents and other caregivers' use of positive behavior supports with children having challenging behavior (e.g., Fox & Dunlap, 2002; Marshall & Mirenda, 2002; Vaughn, White, Johnston, & Dunlap, 2005). One of the main purposes of using family-centered practices to promote parents' use of positive behavior supports is to improve the ecology of family routines and functioning in order to improve child behavior functioning (Spagnola & Fiese, 2007).

Fox and Dunlap (2002), for example, describe how parent-professional collaboration is used to jointly plan, develop, and implement positive behavior support interventions that encourage child prosocial engagement in family activities. Marshall and Mirenda (2002) also describe how relationship-building and parent-practitioner collaboration are used to identify family routines and the positive child behavior that is the focus of intervention in the routines.

Transition Practices

Inasmuch as transitions can be especially difficult and stressful for families of young children with disabilities, it is not surprising that there is a large and rich literature on how family-centered practices have been used to facilitate smooth and effective transitions from hospital to home (e.g., Bruder & Walker, 1990), early intervention to preschool (e.g., Pang, 2010; Podvey, Hinojosa, & Koenig, 2010), and preschool to kindergarten (e.g., Fowler, Schwartz, & Atwater, 1991; Fox, Dunlap, & Cushing, 2002). Bruder and Walker (1990), for example, describe how information sharing and the joint development and implementation of a hospital-to-home discharge plan can facilitate a more smooth transition between settings. Pang (2010) describes how different relational and participatory help-giving practices can be used to actively involve family participation in children's transitions between early intervention and preschool in ways that are supportive and not stressful.

Strength-Based Practices

Acknowledging and building on family member strengths is one of the defining characteristics of family-centered practices. A number of practitioners and researchers have developed or proposed methods for identifying child, parent, and family strengths (e.g., DuBose, 2002; Green, McAllister, & Tarte, 2004) and for using strengths as the building blocks for promoting the development of new competencies (e.g., Swanson, Raab, & Dunst, 2011; Ylvén & Granlund, 2009). Campbell, Milbourne, and Silverman (2001), Gregg, Rugg, and Souto-Manning (2011), and Rugg and Stoneman (2004) describe how portfolios can be used to change the focus of ECI practices from deficit based to strength based. These

kinds of tools as well as strength-based practices can accomplish what Trute, Benzies, Worthington, Reddon, and Moore (2010) describe as accentuating the positive to mitigate the negative.

Family Systems Intervention Practices

Relational and participatory practices are central components of a number of family systems approaches to ECI (e.g., Davis & Gavidia-Payne, 2009; Dunst & Trivette, 2009a; Madsen, 2009; Wayman, Lynch, & Hanson, 1991). These different approaches to family systems interventions each use different dimensions of family-centered help-giving practices to be responsive to family concerns and priorities and to provide or mobilize supports and resources to achieve family-identified outcomes.

Wayman et al. (1991) describe the manner in which parent-professional partnerships based on mutual respect, trust, and open communication, together with sensitivity to family cultural beliefs, values, and practices, are used as the foundations for improving home-based ECI. Dunst and Trivette (2009a) describe how family-centered help-giving practices are used to identify (a) family member concerns and priorities; (b) the resources, supports, and ECI practices to achieve family-identified outcomes; and (c) how help giver capacity-building practices are used to promote family members' use of existing strengths and develop new competencies, to mobilize supports or resources or implement different kinds of interventions.

Family Involvement in Children's Preschool Education

A number of researchers and practitioners advocate for the use of different dimensions and characteristics of family-centered practices to support and strengthen family member involvement in children's childcare, preschool, and early education (e.g., Hamilton, Roach, & Riley, 2003; Knopf & Swick, 2008). Hamilton et al. (2003) proposed the use of a number of family-centered practices to strengthen parent involvement in their children's preschool programs. These include promoting open, respectful, and frequent communication between practitioners and parents (relational practices) and involving parents in meaningful ways in school programs and their children's preschool education (participatory practices). Knopf and Swick (2008) describe the need to adopt a strength-based approach to working with families, responsiveness to family concerns and situations, and providing a range of parent involvement options, to engage parents in their children's preschool education.

Discussion

The focus of this chapter was the evolution, conceptualization, operationalization, measurement, and use of family-centered practices in ECI. The foundations of a family-centered approach to working with parents and their children are family support principles and elements of care that constitute value statements about how professionals ought to treat and interact with family members and how interventions should be carried out with parents and their children. These belief and value statements have been used by a number of researchers to develop behavioral indicators of family-centered elements and principles and to conduct research on the use of practices. Findings from different studies were used to show that family-centered practices include two types of help giving: (1) relationship-building (relational) practices based on mutual trust and respect and (2) participatory (capacity-building) practices that involve family member use of existing strengths as well as the acquisition of new competencies.

The information described in the chapter highlight three particular issues and findings that heretofore have not been emphasized in the ECI research and practice literature. The first is the mechanisms through which family-centered practices influence or are related to outcomes of interest. The second is the lack of information about the degree of adherence to the use of

family-centered practices in both research and practice. The third is the need for studies that relate fidelity of the use of family-centered practices to the fidelity of the use of ECI practices.

Mechanisms of Change in Family-Centered Interventions

Research described in the chapter as well as in related fields (e.g., Graves & Shelton, 2007; Haslam, Pakenham, & Smith, 2006) indicates that the effects of family-centered practices on ECI outcomes are indirectly mediated by different types of self-efficacy beliefs (Bandura, 1997) and personal control appraisals (Skinner, 1995) as well as other variables (e.g., parent well-being). These indirect effects are the rule rather than the exception. Findings described in this chapter indicate a need for research that involves identification and investigation of the mediators that influence the effects of family-centered practices on ECI outcomes of interest. For example, it would be of practical importance to know how and in what manner family-centered practices are related to informed family decision-making and how parents' self-efficacy beliefs about their ability to make such choices are directly and indirectly related to child, parent, and family outcomes.

Adherence to Family-Centered Practices

Findings from adherence studies generally do not support widespread claims that ECI practitioners routinely use family-centered practices or that ECI programs are based on a family-centered philosophy. One possible explanation is that adherence data are typically not collected to determine if practitioner behavior matches or is consistent with the intent of family-centered practice indicators. This type of process evaluation would provide the basis for targeting changes or improvements in practitioner help-giving behavior (see, e.g., Dunst, 2005). Routinely collecting adherence information from parents and other family members could be especially useful for identifying slippages in practitioner help-giving practices and provide the information needed to intervene to take action to improve ECI practitioner work with families.

Family-Centered Practices and Implementation Science

In studies that purport to use family-centered practices to promote parents' use of ECI practices, researchers typically fail to report adherence (fidelity) data about the use of family-centered help-giving practices. This omission is unfortunate since fidelity of family-centered practices would be expected to be related to fidelity of ECI practices and, in turn, variations in fidelity of intervention practices would be expected to be related to differences in outcomes of interest (see Fig. 3.1). Implementation science provides a framework for studying the methods and strategies that influence adoption of evidence-based intervention practices (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Placed in the context of an implementation sciences (Dunst et al., 2013a), the fidelity of the use of family-centered practices by practitioners is an *implementation* practice, and the fidelity of the use of different ECI practices by parents is *intervention* practices. Studies that include both types of adherence measures would be able to evaluate how family-centered practices are related to the fidelity of parents' use of ECI practices since the latter is expected to have positive effects on outcomes of interest.

Conclusion

The adage that "we have come a long way ... but we still have a long way to go," certainly captures the current state of knowledge and research on family-centered practices in ECI. While initially grounded in primarily value statements and elements of care, family-centered practices are now

recognized as a set of capacity-building relational and participatory help-giving practices used to engage parents and other family members in other kinds of ECI practices. Advances have also been made in terms of how family-centered practices are directly and indirectly related to child, parent, and family outcomes mediated by self-efficacy beliefs.

Notwithstanding significant advances, we see a need to continue to expand our understanding of the mechanisms through which family-centered practices are indirectly related to outcomes of interest, research to establish the degree to which and conditions under which adherence to family-centered practices is achieved, and research on how family-centered practices can be used to engage parents and family members in ECI so as to have optimal positive outcomes. Advances in these areas will require, in our opinion, a better understanding of the place of family-centered practices in broader-based social, family, and developmental systems frameworks as well as the adoption of implementation science models for discerning the relationships between systems, family-centered, and ECI practices and the intended or expectant outcomes of these practices.

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