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CHILD STUDIES THROUGH THE LENS OF APPLIED FAMILY SOCIAL SYSTEMS THEORY

OS ESTUDOS DA CRIANÇA VISTOS ATRAVÉS DA LENTE DA TEORIA APLICADA DOS SISTEMAS SOCIAIS DA FAMÍLIA

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Abstract

The foundations of an applied family social systems theory for explaining the multiple determinants of child well-being, learning, and development, parenting beliefs, behavior and practices, and family well-being are described. The theory is derived from tenets of Bronfenbrenner's ecological systems theory and other social, family, and contextualized theories. The applied theory was used to develop an activity setting model of young children's everyday learning opportunities and a family systems intervention practices model for ensuring parents and other caregivers have the time and psychological energy to provide young children with development-instigating and development-enhancing learning opportunities in the contexts of everyday family and community life. Results from three different lines of research are described which provide support for the applied systems model and the two associated intervention models. Results showed that different child characteristics, setting characteristics, parenting behavior and practices, family and social systems variables, and practitioner measures were empirically related to variations in child, parent, and family outcomes. There were also discernable pathways of influence between family systems intervention model practices, parenting practices, and child outcomes mediated by parent self-efficacy beliefs and parent well-being. The contributions of the theory, models, and research findings to child studies are described.

Keywords: social systems, family systems, family activities, community activities, parenting practices, child learning, intervention

Resumo

Neste artigo descrevem-se os fundamentos de uma teoria aplicada dos sistemas sociais da família para explicar as múltiplas variáveis do bem-estar infantil, da aprendizagem e do desenvolvimento, das crenças parentais, do comportamento e das práticas e bem-estar familiar. A teoria deriva de princípios dos sistemas ecológicos de Bronfenbrenner e outras teorias sociais, familiares e contextualizadas. A teoria aplicada foi usada para desenvolver um modelo de configuração de atividades das oportunidades de aprendizagem quotidianas de crianças pequenas e um modelo de práticas de intervenção de sistemas familiares para garantir que os pais e outros cuidadores tenham tempo e energia psicológica para fornecer às crianças oportunidades de aprendizagem que estimulam e melhoram o seu desenvolvimento nos contextos da vida quotidiana da família e da comunidade. O artigo inclui resultados de três diferentes linhas de investigação que sustentam o modelo de sistemas aplicados e os dois modelos de intervenção associados. Os resultados mostram que as diferentes características da criança, assim como as do meio, os comportamento e as práticas parentais, as variáveis dos sistemas familiares e sociais e as ações do profissional estão empiricamente relacionados com as variações nos resultados da criança, dos pais e da família. Foram igualmente identificadas vias de influência entre as práticas do modelo de intervenção dos sistemas familiares, as práticas parentais e os resultados da criança mediados pelas conceções de autoeficácia dos pais e pelo seu bem-estar. Descrevem-se as contribuições da teoria, dos modelos e dos resultados da investigação para os Estudos da Criança.

Palavras-chave: sistemas sociais, sistemas familiares, atividades familiares, atividades comunitárias, práticas parentais, aprendizagem infantil, intervenção

Introduction

Child studies is a multidisciplinary field that focuses on the life events and experiences that enhance child well-being, learning, and development Zwozdiak-Myers (2007). The fields of study most interested in which life events and experiences are related to optimal child functioning include, but are not limited to, psychology, education, sociology, anthropology, and other behavioral and social sciences.

One aspect of children's studies that differentiates the field from other disciplines is an emphasis on holistic child development (e.g., Taylor & Woods, 2005). The focus of interest is the learning experiences and opportunities that promote children's physical, social, emotional, psychological, mental, and intellectual development. Whole child learning and development is concerned with the broad-based acquisition of knowledge, skills, and competencies in different domains needed for healthy child well-being and optimal development (Cantor et al., 2021).

Investigations of the life events and experiences that are related to different domains of child development within children's studies place primary emphasis on understanding and studying children's development in context (Cantor et al., 2019; Graue & Walsh, 1998). The meaning of context, however, differs according to which discipline is investigating the factors related to variations in child learning and development (compare e.g., Bragg & Kehily, 2013; Edwards et al., 2019). Contexts have been described in terms of the social (Murry et al., 2015), physical (Evans, 2021), societal (Gershoff et al., 2016), ecological (Osher et al., 2020), and cultural (Nugent, 2002) settings in which child learning and development occurs.

Development-in-context theories view child learning and development as related to and influenced by different life events and experiences (e.g., Lerner, 1991; Richardson, 2011; Wozniak & Fischer, 1993). Systems theories, for example, view children as embedded within the contexts of family systems and families embedded within the contexts of larger social systems where events in the different systems have direct and indirect effects on child learning and development (Friedman & Allen, 2010; Laszlo & Krippner, 1998). For example, Bronfenbrenner's ecological systems theory emphasizes how different social systems factors, both directly and indirectly, influence child learning and development (Bronfenbrenner, 1979, 1992).

This paper includes descriptions of key features of an applied family social systems theory, a family systems intervention model derived from basic tenets of the theory, and the research evidence for the hypothesized relationships between the model practices and child, parent, and family outcomes. The theory and associated model "borrows" key concepts from ecological system theories, family and social systems theories, development-in-context theories, and other theories that were used to develop the intervention model and set of operationalized practices. The practices were developed for use by early childhood intervention (ECI) practitioners with parents and other primary caregivers to improve the well-being, learning, and development of young children and their families (see Dunst, 2017a, for a description of these theories).

The foundations for the family systems intervention model were first described in Dunst (1985) and subsequently updated in other sources (e.g., Dunst, 2000, 2017a; Dunst, Trivette & Deal, 1988, 1994a). Available research at the time the model was

developed was used as the evidence for the hypothesized relationships among the operationalized practices in the model. Research conducted over the past three decades by myself and my colleagues systematically evaluated how different intervention practices are directly and indirectly related to variations in child, parent, and family functioning. Results from these investigations are described in this paper to illustrate how family social systems intervention practices are directly and indirectly related to child learning and development. At the outset, it is noted that the variables considered the key characteristics of the model are not the only variables known to be related to variations in child learning and development (see e.g., Wachs, 2000). The variables of interest are ones that were operationalized as intervention practices for improving child, parent, and family functioning.

An Applied Family Social Systems Theory

Three elements of Bronfenbrenner's ecological systems theory have proven particularly useful as the foundation for the intervention model and associated practices. The first is Bronfenbrenner's description of the characteristics of everyday experiences that are the context for child learning and development (Bronfenbrenner, 1993). The second is Bronfenbrenner's description of the conditions necessary for parents to be able to competently carry out parenting roles and responsibilities (Bronfenbrenner, 1979). The third is Bronfenbrenner's description of the role social network members play in the provision of supports and resources that influence parenting practices and provide parents the time to engage their children in different learning experiences and opportunities (Bronfenbrenner, 1979).

Children's Learning and Development

Bronfenbrenner (1993) contended that the experiences that promote and enhance child learning and development are influenced by different child, caregiver, and setting characteristics. According to Bronfenbrenner (1993),

The personal characteristics likely to be most potent in affecting the course...of [child] development [include] those that set in motion, sustain, and encourage processes of interaction between the [developing] person and two aspects of the proximal environment: first, the people present in the settings; and second, the physical and symbolic features of the setting that invite, permit, or inhibit engagement in sustained, progressively

more complex interaction with an activity in the immediate environment (p. 11).

Figure 1 shows how Bronfenbrenner's (1993) description of everyday social and nonsocial settings was operationalized for intervention purposes. Everyday activities are considered major sources of child learning opportunities, children's interests are considered a personal characteristic that motivates children to engage in interactions with the social and nonsocial environment, the interestingness (situational interests) of everyday activities are considered activity setting features that encourage and invite child participation in everyday activities, and responsive and supportive parenting behavior and practices are considered factors that encourage and promote child learning while engaged in everyday activities.

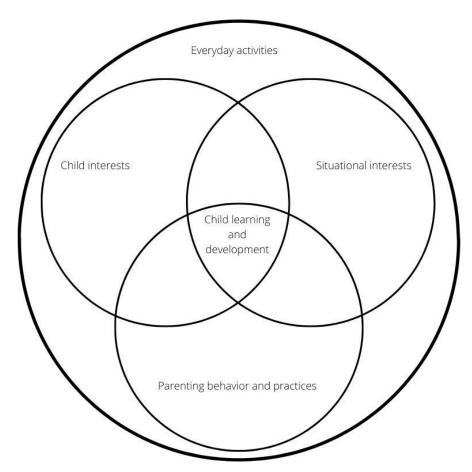


Figure 1. Child, setting, and caregiver characteristics that are the key characteristics of an everyday activity setting model of child learning and development.

Sources of Child Learning Opportunities

Activity setting theory proposes that the everyday activities than make up a child's life are important contexts for learning functional and meaningful cultural behavior (Farver, 1999). Young children with and without disabilities are routinely involved in hundreds of different family and community activities (Dunst, 2001; 2020a; Dunst, Bruder, et al., 2001, 2002; Dunst, Hamby, et al., 2002). Family activities include such things as mealtimes, bath times, bedtime routines, floor play, and dressing and undressing. Community activities include such things as food shopping, neighborhood walks, visiting friends or relatives, library storytimes, and visiting a nature center or petting zoo.

Dunst, Hamby, et al. (2000), in a national study of everyday child learning, found that young children, birth to 6 years of age, are routinely involved in 11 different kinds of family activities (e.g., child routines, parenting routines, play activities) and 11 different kinds of community activities (e.g., family outings, outdoor activities, running family errands). Results from several studies of parents' strengths (self-reported interests and abilities) found that parents' strengths-based activities are also major sources of everyday child learning opportunities (Dunst, 2008, 2020c). All of these different types of activities are sources of many different child learning opportunities and the foundations for learning different child behavior (see especially Dunst, 2020a).

Child and Situational Interests

Child and setting characteristics are both considered factors that engage children in everyday activities as sources of child learning opportunities (Bronfenbrenner, 1993). Two of the more potent characteristics associated with child participation in everyday activities are children's interests and the situationally interesting features of people and materials in everyday activities (Dunst & Raab, 2012; Renninger et al., 1992).

Children's interests include their preferences, the things they enjoy doing, and the people and activities that get them excited (e.g., a child handing a favorite book to a parent to initiate a shared reading activity). Situational interests include the characteristics and features of everyday activities that evoke and encourage engagement with the people and materials in everyday activities (e.g., a child happening upon a puddle on a neighborhood walk which elicits jumping up and down in the puddle). Both types of interests are related to children with and without disabilities' participation in family and community activities (Dunst & Raab, 2012; Dunst, Bruder, et al., 2001).

Parenting Behavior and Practices

Parents and other primary caregivers play important roles in engaging young children in everyday activities and promoting child learning in the activities. The National Academies of Sciences (2016), for example, as part of a narrative review of parenting knowledge, attitudes, and practices, identified family routines (Spagnola & Fiese, 2007) and caregiver responsiveness (Dunst et al., 1990) as two of the more important parenting practices that are related to optimal child development.

Richter (2004), in her narrative review of the parent-child interaction literature, concluded that "sensitivity and responsiveness [to child behavior] have been identified as the key features of caregiving behavior related to later positive health and developmental outcomes in young children" (p. 1). Other parenting behavior found important for facilitating child learning in everyday activities include parent-guided child participation (Rogoff et al., 1993), parent scaffolding of child behavior (Kermani et al., 2009), and children observing and active involvement (Rogoff et al., 2014) in everyday parent and family activities.

All of the above parenting behavior and practices have been used to develop different naturalistic teaching procedures that include everyday activities as the sources of child learning opportunities, child and situational interests as means to engage children in the activities, and parent sensitivity, responsiveness, turn-taking, scaffolding, and other supports (e.g., guided participation) for promoting child learning and development (Dunst, Raab & Trivette, 2012).

The findings from the different studies of young children's everyday learning opportunities provide converging evidence that the development-in-context activity setting model (Figure 1) includes practice characteristics that engage children in family and community activities. The results, taken together, indicate that person (child and caregiver) and activity setting characteristics are related to child participation in everyday activities.

Parenting and Family Supports

Parents are not able to engage their children in everyday learning activities if they do not have the time and psychological energy to carry-out parenting roles and responsibilities. Demands unrelated to parenting can and often do interfere with having the time to spend with their children. Bronfenbrenner (1979) noted that "Whether parents can perform effectively in their child-rearing roles within the family depends on the role demands, stresses, and supports emanating from other settings" (p. 7). Elsewhere, Bronfenbrenner (1975) stated that "Inadequate health care, poor housing,

lack of education, low income, and the necessity for full-time work...rob parents of the *time and energy to spend time with their children*" (p. 466, emphasis added).

Bronfenbrenner (1979) hypothesized that different social networks are the sources of supports and resources for parents to have the time and psychological energy to carry-out parenting responsibilities (see also, Cochran & Niego, 2002). Findings from family social support studies indicate that parent and family social networks are comprised of four to six different groups of informal and formal social network members (e.g., Almasri et al., 2014; Dunst et al., 1994b; Hanley et al., 1998; Littlewood et al., 2012).

Figure 2 shows one way of depicting the different social networks that are generally available to parents of young children. The particular social network members available to families would be expected to vary according to different family, neighborhood, cultural, and other factors. Members of the different social networks are considered potential sources of supports and resources depending on the types of help and assistance needed for parents to be able to engage their children in everyday activities and promote learning and development.

The sources of supports and resources shown in Figure 2 show a developing child embedded in his or her nuclear family and the family embedded in both kinship and informal social networks. (The Figure 1 variables and practices are the core features of the developing child component in Figure 2.) These informal social networks are embedded in different formal social networks that are sources of support and resources to young children and their families. These informal and formal social networks are viewed as sources of supports and resources for parents of young children with and without identified disabilities, chronic health conditions, or those at-risk for poor outcomes to be able to carry out parenting roles and responsibilities (Dunst, 2017a).

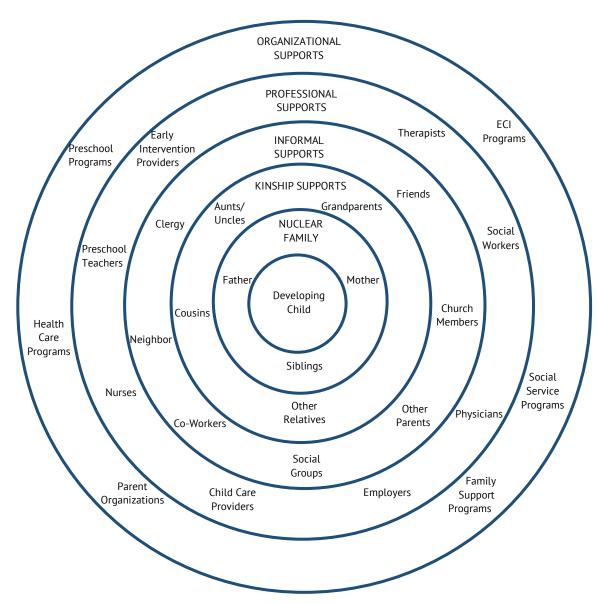


Figure 2. The informal and formal social networks that are sources of social support and resources for caregivers of young children. (NOTE. ECI = Early childhood intervention)

Research Foundations for the Family Systems Intervention Model

The hypothesized relationships described above and elsewhere (Dunst, 2017a) were used to develop a family social systems definition of ECI as the procurement or mobilization of supports and resources by parents and other family members from informal and formal family social network members in ways that directly and indirectly improve child, parent, and family functioning and which have capacity-building consequences (Dunst, 1985, 2000, 2017a). This is accomplished by ECI practitioners

using relational and participatory family-centered practices for working with parents and other family members (Dunst & Espe-Sherwindt, 2016).

The family systems intervention model that has been the focus of practice and applied research is shown in Figure 3. The model components are derived from the tenets described above as well as from lessons learned from more than three decades of practice and research. The four sets of practices in the model are operationalized by having parents, other family families, or other primary caregivers identify their needs (concerns and priorities), the supports and resources for addressing concerns and fulfilling needs, and using family and family member strengths to obtain needed supports and resources (Dunst, 2017a). Family-centered help-giving practices provide the foundation for building and strengthening a family's capacity to obtain needed family support and resources and to engage in desired child, parent, and family activities (Dunst & Espe-Sherwindt, 2016). Markers for determining if parent and family capacity has been strengthened are different self-efficacy beliefs and appraisals about the ability to execute courses of action to achieve goals and aspirations (Bandura, 1997; Skinner, 1995).

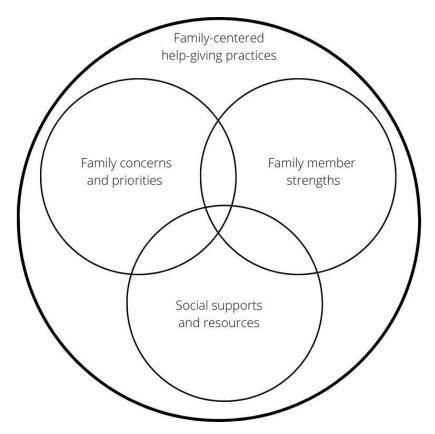


Figure 3. Four components of a family systems intervention model.

Research Evidence for the Intervention Model Practices

Three lines of applied research were conducted to test basic tenets of the family systems intervention model and to identify the conditions under which operationalized family systems intervention practices are related to child, parent, and family functioning. One line of research focused on evaluating how everyday activities, child and situational interests, and parenting behavior and practices are related to child learning and development. The second line of research focused on ascertaining how family concerns and priorities, supports and resources, family strengths, and family-centered practices are related to different domains of child, parent, and family functioning. The third line of research focused on identifying the pathways between (a) family systems intervention practices, (b) parent self-efficacy beliefs, (c) parent and family well-being, (d) parenting behavior and practices, and (d) child well-being, behavioral functioning, and child development.

Child Learning Opportunities

A basic premise of the framework in Figure 1 is that everyday activities are sources of development-enhancing child learning opportunities. An activity setting perspective of ECI uses everyday activities as the sources of children's learning opportunities and not places where traditional ECI is implemented. Results from several studies found that using everyday activities as sources of child learning and development resulted in considerably more learning opportunities compared to implementing ECI in everyday activities (Dunst, Bruder, et al., 2005; Raab & Dunst, 2004). Using everyday activities as sources of learning opportunities is associated with more child-initiated participation in the learning activities compared to implementing ECI in everyday activities (Dunst, Bruder, et al., 2006; Raab & Dunst, 2004).

Comparative studies of the two types of ECI practices also showed that using everyday activities as sources of child learning opportunities was associated with more positive and less negative child, parent, and family functioning compared to implementing ECI practices in everyday activities (Dunst, Bruder, et al., 2001, 2006; Dunst, Trivette, et al., 2006). This included differences in child well-being, child behavioral functioning, parent well-being, parenting competence, and family quality of life.

Results from meta-analyses of child participation in everyday family and community activities were related to young children's early literacy and language development (Dunst, Valentine, et al., 2013a, 2013b). Dunst, Valentine, et al. (2013b) found that child participation in shared reading activities, family routines, family outings, and other literacy activities was related to both expressive and receptive child

language outcomes and phonological and print awareness. The more frequently the children participated in family and community activities, the better the outcomes.

Meta-analyses of interest studies indicate that both child and situational interests are related to different child outcomes (Dunst, Jones, et al., 2011; Dunst, Trivette & Hamby, 2012a, 2012b; Raab & Dunst, 2007; Raab et al., 2013). The child outcomes related to interest-based learning opportunities include sustained child engagement in everyday activities and differences in child behavior functioning, child social-emotional behavior, child interpersonal relationships, and child cognitive, language, and literacy development.

Results from meta-analyses of caregiver behavior studies indicate that parent sensitivity and responsiveness to child behavior were both related to different child outcomes (Dunst & Kassow, 2008; Raab et al., 2013). Caregiver scaffolding and guided participation are two parenting practices often used to provide support and assistance to young children to enhance learning in everyday activities (see e.g., Vandermass-Peeler et al., 2002). Findings from meta-analyses of parenting practices studies showed that different verbal and nonverbal supports used while children were engaged in everyday activities had development-enhancing effects (Dunst, Williams, et al., 2012; Raab et al., 2013).

Studies that have included two or more of the activity setting characteristics shown in Figure 1 indicate that different combinations of factors contribute to child learning and development (Dunst, 2020b; Dunst, Bruder, et al., 2001; Dunst, Raab, & Hamby, 2016). Dunst, Raab, and Hamby (2016), for example, found that parents' use of naturalistic teaching practices as part of intentional efforts to increase child participation in interest-based everyday family activities was related to improved child language outcomes. Results from this study as well as those from the other studies described above provide empirical evidence for the development-instigating and development-enhancing consequences of the activity setting model practices.

Family Systems Intervention Model

The contentions that parents' abilities to carry-out parenting roles and responsibilities depend on the supports and resources available from informal and formal social network members and parents' abilities to seek out and procure those supports and resources requires evidence that the family systems intervention model components (Figure 3) are related to parenting well-being, beliefs, behavior, and practices as well as child and family behavior. The contention that the influences of family social systems variables can be traced to parenting practices and child learning

and development requires evidence for pathways of influence between the family systems intervention practices and parent, parent-child, and child outcomes.

Meta-Analytic Evidence

A series of meta-analyses have been conducted to determine if measures of the four different family systems intervention components are related to variations in parent, family, and child functioning. This has included meta-analyses of family needs studies (Dunst, 2022b), family resources studies (Dunst, 2021e, 2022d), family support studies (Dunst, 2022a, 2022c), family strengths studies (Dunst, 2021b; 2021c; Dunst, Serrano, et al., 2021), and family-centered help-giving practices studies (Dunst, Trivette, & Hamby, 2007, 2008). The caregivers in the studies in the meta-analyses were primarily mothers but also included fathers and grandmothers of children and adolescents with and without identified disabilities or chronic health conditions. The focus of analysis in all of the meta-analyses was the sizes of effect (correlations) between the different family systems intervention practices measures and parent wellbeing, family well-being, parenting self-efficacy beliefs, parenting stress, parenting practices, child well-being, child behavioral functioning, and child development.

Table 1 (at end of the paper) shows the results for the relationships between the different intervention model components and the parent, family, and child outcome measures. The pattern of results was the same for all five sets of analyses. Fewer family needs, more family resources, more family support, more family strengths, and practitioner use of family-centered practices were related to less negative and more positive parent, family, and child functioning. More specifically, higher scores on the intervention-related measures were associated with less parenting stress and less child-rearing burden, and more positive parenting beliefs, parent well-being, parenting practices, family well-being, child well-being, and child behavior functioning. The results, taken together, provide support for the hypothesis that the different family systems intervention model practices would have positive effects on parents, families, and children.

In the meta-analyses where the relationships between the intervention model components and the study outcomes were examined for different subgroups of children, the sizes of effects for children with and without identified disabilities or chronic health conditions, the relationships between measures were all statistically significant. The same was the case for children at-risk for poor outcomes. In those meta-analyses including other moderator analyses, the difference in the sizes of effects was related to sub-components of the intervention model practices rather than caregiver, family, or child variables (Dunst, 2021a, 2021c, 2021f). For example, in a meta-analysis of the relationships between three different types of family resources

(basic resources, financial resources, and time availability) and caregiver psychological health and well-being, the size of effect for time availability was almost twice as large as the sizes of effect for the other two types of family resources (Dunst, 2021a).

Pathways

Several pathways models have been proposed to discern how different systems variables are directly and indirectly related to parent and child behavior (see e.g., Armstrong et al., 2005; Newland, 2015; Richter et al., 2018). The contention that the family systems intervention model practices are directly and indirectly related to parenting and child behavior and functioning requires evidence that there are pathways of influence between the family systems intervention model components and parent and child outcomes.

The pathways model that has been investigated by myself and my colleagues is shown in Figure 4. The arrows show the hypothesized direct effects between the six variables in the model. There are also hypothesized indirect effects between the different variables in the model. Family-centered practices are hypothesized to be indirectly related to self-efficacy beliefs mediated by the family systems intervention practices. The family systems intervention practices are hypothesized to be indirectly related to parent and family well-being mediated by parent self-efficacy beliefs. Parent self-efficacy beliefs are hypothesized to be indirectly related to parent-child interactions mediated by parent well-being. And parent well-being is hypothesized to be indirectly related to child behavior and development mediated by parent-child interactions.

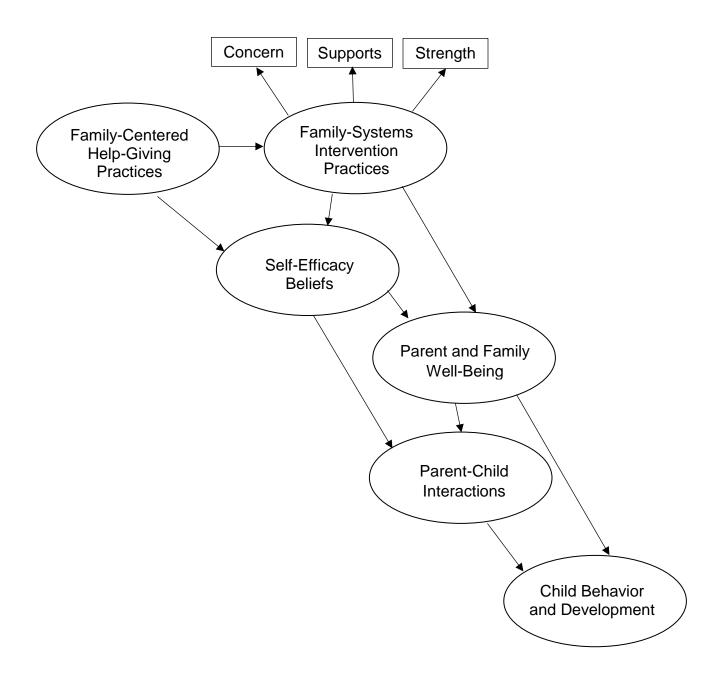


Figure 4. Pathways of influence between the family systems intervention model practices and parent self-efficacy beliefs, parent well-being, parent-child interactions, and child behavior and development.

One structural equation modeling study and three meta-analytic structural modeling studies were conducted to test the hypothesized direct and indirect relationships in the model (Dunst & Trivette, 2009; Dunst, Hamby & Brookfield, 2002;

Dunst, Hamby & Raab, 2019; Trivette et al., 2010). The studies included either family-centered practices measures or both family-centered practices and family systems intervention practices measures. All of the studies included self-efficacy belief and or both parent and family well-being measures. The parent-child interaction measures assessed parent sensitivity and responsiveness to children's behavior. The child outcomes in the different studies included child social competence, child well-being, and child development. The study participants were parents and other caregivers of young children with identified disabilities and/or chronic health conditions. Some studies included children at-risk for poor outcomes. Nearly all of the children were receiving ECI.

All of the pathways in Figure 4 were statistically significant in the studies including the variables in the model. Results showed that the family systems intervention model measures were directly related to parenting self-efficacy beliefs and well-being and indirectly related to well-being mediated by belief appraisals. In the two studies including parenting practices measures, the family systems intervention practices measures were indirectly related to positive parent-child interactions mediated by parent self-efficacy beliefs and parent well-being. Parent well-being was directly related to parenting practices and the child outcomes and indirectly related to the child outcomes mediated by positive parent-child interactions. The results showed that the pathways of influence between the family systems intervention model practices could be traced to parenting practices mediated by parent self-efficacy beliefs and parent well-being.

Discussion

The results described in this paper provide empirical support for the basic tenets of the applied family social systems theory and both the activity setting and family systems intervention model practices. The research reviewed for the activity setting model showed that child learning and development were related to children's interests, the interestingness of people and materials in everyday activities, and parents' behavior and practices. The meta-analytic research reviewed for the family systems intervention model practices showed that family needs (concerns and priorities), supports and resources, family strengths, and family-centered practices were related to variations in parent, family, and child behavior and functioning. The research reviewed for the pathways model showed that the family systems intervention model practices could be traced to variations in parenting practices and child behavior and development through positive parent self-efficacy beliefs and positive parent well-being. These different set of results contribute to what Canosa and Graham (2020) describe as theoretical

contributions to child studies by showing how child learning and development is related to sources of influence beyond a child's family.

The three sets of results, taken together, indicate that parents and other primary caregivers' abilities to engage young children in development-enhancing everyday activities (Bronfenbrenner, 1993) depends on the supports and resources necessary for parents and caregivers to have the time and psychological energy to promote child learning and development (Bronfenbrenner, 1993). The results also indicate that other family systems variables also covary with parents' abilities to use positive parenting behavior and practices. The different sets of meta-analysis results (Table 1) for the four family systems intervention model components showed that the family needs (concerns and priorities), family support and resources, and family strengths measures were all associated with less parenting stress, less parenting burden, more positive parent self-efficacy beliefs, and more positive parenting practices. Results from the family-centered meta-analyses showed that the use of these types of help-giving practices was also associated with less parenting stress and more positive parent selfefficacy beliefs. The pattern of findings is consistent with Armstrong et al.'s (2005) pathways model between social support, well-being, parenting, and child functioning (see also Richter et al., 2018).

The applied family social systems theory described in this paper differs from other applied theories in three important ways. First, one focus of analysis is understanding child learning and development in the context of everyday child, parent, and family life (Mehl & Conner, 2012). Second, the variables of interest are ones that can be operationalized as intervention practices for improving children's, parents', and families' lives (see Dunst, 2017b, for a description of procedures for developing operationalized practices). Third, variables that cannot be altered (e.g., child condition) or are beyond the scope of ECI are treated as moderators and the focus of analysis is whether the relationships between intervention practices and outcomes of interest are the same or different for the moderator variables (see e.g., Dunst, 2021e).

One contribution of the applied family social system theory to child studies in the context of ECI is the findings that different family and systems variables and intervention-related practices have direct and indirect effects on child well-being, learning, and development. The practices that are related to parent, family, and child outcomes include those considered best practices (e.g., family-centered practices) but also practices that are still not a main focus of ECI (e.g., use of informal social supports and broad-based family resources). This is unfortunate because these latter variables (as well as family strengths) were found to be important in terms of explaining the availability of child learning opportunities, positive parenting beliefs and practices, and child well-being, learning, and development. Research is needed to better understand

the processes and mechanisms to explain how and in what manner the family systems intervention model practices provide the foundation for desired outcomes in ECI programs for children with identified disabilities, chronic health conditions, and developmental delays.

References

- Almasri, N. A., Saleh, M., & Dunst, C. J. (2014). Psychometric properties of the Arabic Family Support Scale for families of children and youth with cerebral palsy in Jordan. *Journal of Intellectual and Developmental Disability, 39*(3), 223-232. https://doi.org/210.3109/13668250.13662014.13914474
- Armstrong, M. L., Birnie-Lefcovitch, S., & Unger, M. T. (2005). Pathways between social support, family well-being, quality of parenting, and child resilience: What we know. *Journal of Child and Family Studies*, 14(2), 269-281. https://doi.org/210.1007/s10826-10005-15054-10824
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.
- Bragg, S., & Kehily, M. J. (Eds.). (2013). *Children and young people's cultural worlds* (2nd ed.). Bristol University Press.
- Bronfenbrenner, U. (1975). Is early intervention effective? In B. Z. Friedlander, G. M. Sterritt, & G. E. Kirk (Eds.), *Exceptional infant: Vol. 3. Assessment and intervention* (pp. 449-475). Brunner/Mazel. https://doi.org/10.1177/016146817407600202
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187-248). Jessica Kingsley Publishers.
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3-44). Erlbaum.
- Canosa, A., & Graham, A. (2020). Tracing the contributions of childhood studies: Maintaining momentum while navigating tensions. *Childhood*, *27*(1), 25-47. https://doi.org/10.1177/0907568219886619
- Cantor, P., Lerner, R. M., Pittman, K. J., Chase, P., & Gomperts, N. (2021). *Whole-child development, learning, and thriving: A dynamic systems approach*. Cambridge University Press. https://doi.org/10.1017/9781108954600

- Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2019). Malleability, plasticity, and individuality: How children learn and develop in context. *Applied Developmental Science*, *23*(4), 307-337. https://doi.org/310.1080/10888691.10882017.11398649
- Cochran, M., & Niego, S. (2002). Parenting and social networks. In M. H. Bornstein (Ed.), Handbook of parenting: Vol. 4. Social conditions and applied parenting. Psychology Press.
- Dunst, C. J. (1985). Rethinking early intervention. *Analysis and Intervention in Developmental Disabilities*, 5(1-2), 165-201. https://doi.org/110.1016/S0270-4684(1085)80012-80014
- Dunst, C. J. (2000). Revisiting "Rethinking early intervention". *Topics in Early Childhood Special Education*, 20(2), 95-104. https://doi.org/110.1177/027112140002000205
- Dunst, C. J. (2001). Participation of young children with disabilities in community learning activities. In M. J. Guralnick (Ed.), *Early childhood inclusion: Focus on change* (pp. 307-333). Brookes Publishing Co.
- Dunst, C. J. (2008). Parent and community assets as sources of young children's learning opportunities: Revised and expanded. Winterberry Press.
- Dunst, C. J. (2017a). Family systems early childhood intervention. In H. Sukkar, C. J. Dunst, & J. Kirkby (Eds.), *Early childhood intervention: Working with families of young children with special needs* (pp. 38-60). Routledge.
- Dunst, C. J. (2017b). Procedures for developing evidence-informed performance checklists for improving early childhood intervention practices. *Journal of Education and Learning*, 6(3), 1-13. http://www.ccsenet.org/journal/index.php/jel/article/view/66005
- Dunst, C. J. (2020a). Everyday learning opportunities of young children with and without developmental disabilities. *International Journal of Early Childhood Environmental Education*, 7(3), 23-41. https://eric.ed.gov/?id=EJ1264525.
- Dunst, C. J. (2020b). Modeling the relationships between parent strengths, parenting efficacy beliefs, and child social-affective behavior. *International Journal of Child Development and Mental Health*, 8(2), 11-18. https://he01.tci-thaijo.org/index.php/cdmh/article/view/232866
- Dunst, C. J. (2020c). Parents' interests and abilities as sources of young children's everyday learning opportunities. *Journal of Family Strengths*, *20*(1), 4. https://digitalcommons.library.tmc.edu/ifs/vol20/iss21/24
- Dunst, C. J. (2021a). Differential relationships between the adequacy of different types of family resources and psychological health and well-being: A meta-analysis.

- International Journal of Health and Psychology Research, 9(2), 1-18. https://doi.org/10.37745/ijhpr.37713
- Dunst, C. J. (2021b). Family hardiness and parent and family functioning in households with children experiencing adverse life events: A meta-analysis. *International Journal of Psychological Research*, 14(2), 93-118. https://doi.org/110.21500/20112084.20115236
- Dunst, C. J. (2021c). Family strengths, the circumplex model of family systems, and personal and family functioning: A meta-analysis of the relationship among study measures. *Journal of Behavior, Health & Social Issues, 13*(2), 1-19. http://dx.doi.org/10.22201/fesi.20070780e.20072021.20070713.20070782.20077837
- Dunst, C. J. (2021d). Meta-analysis of the relationships between the adequacy of family resources and parenting beliefs and practices. *British Journal of Psychology Research*, *9*(2), 56-76. https://www.eajournals.org/journals/british-journal-of-psychology-research-bjpr/vol-59-issue-52-2021/meta-analysis-of-the-relationships-between-the-adequacy-of-family-resources-and-parenting-beliefs-and-practices/">https://www.eajournals.org/journals/british-journal-of-psychology-research-bjpr/vol-59-issue-52-2021/meta-analysis-of-the-relationships-between-the-adequacy-of-family-resources-and-parenting-beliefs-and-practices/
- Dunst, C. J. (2021e). Meta-analysis of the relationships between the adequacy of family resources and personal, family, and child well-being. *European Journal of Psychological Research*, 8(2), 35-49. https://www.eajournals.org/journals/british-journal-of-psychology-research-bjpr/vol-39-issue-32-2021/meta-analysis-of-the-relationships-between-the-adequacy-of-family-resources-and-parenting-beliefs-and-practices/">https://www.eajournals.org/journals/british-journal-of-psychology-research-bjpr/vol-39-issue-32-2021/meta-analysis-of-the-relationships-between-the-adequacy-of-family-resources-and-parenting-beliefs-and-practices/
- Dunst, C. J. (2021f). A meta-analytic investigation of the relationships between different dimensions of family strengths and personal and family well-being. *Journal of Family Research*, 33(1), 209-229. https://doi.org/210.20377/jfr-20578
- Dunst, C. J. (2022a). Associations between perceived family social support and the psychological health of caregivers of children and adolescents: A systematic review and meta-analysis. *European Journal of Psychological Research*, *9*(2), 32-57. https://www.idpublications.org/ejpr-vol-9-no-2-2022/
- Dunst, C. J. (2022b). Systematic review and meta-analysis of family needs studies: Relationships with parent, family and child functioning. *European Journal of Psychology and Educational Research*, 5(1), 11-32. https://pdf.ejper.com/EJPER_15_11_11.pdf
- Dunst, C. J. (2022c). Systematic review and meta-analysis of the relationships between family social support and parenting stress, burden, beliefs and practices.

- International Journal of Health and Psychology Research, 10(3), 18-30. https://doi.org/10.37745/ijhpr.13/vol10no1pp.18-30
- Dunst, C. J. (2022d). Systematic review and meta-analysis of the relationships between the adequacy of family resources and parenting stress. *International Journal of Health and Psychology Research*, 10(1), 18-30. https://tudr.org/id/eprint/85
- 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*(2), 68-92. https://doi.org/10.1177/027112140102100202
- Dunst, C. J., Bruder, M. B., Trivette, C. M., & Hamby, D. W. (2005). Young children's natural learning environments: Contrasting approaches to early childhood intervention indicate differential learning opportunities. *Psychological Reports*, 96(1), 231-234. https://doi.org/210.2466/pr2460.2496.2461.2231-2234
- Dunst, C. J., Bruder, M. B., Trivette, C. M., & Hamby, D. W. (2006). Everyday activity settings, natural learning environments, and early intervention practices. *Journal of Policy and Practice in Intellectual Disabilities*, *3*(1), 3-10. https://doi.org/10.1111/j.1741-1130.2006.00047.x
- Dunst, C. J., & Espe-Sherwindt, M. (2016). Family-centered practices in early childhood intervention. In B. Reichow, B. A. Boyd, E. E. Barton, & S. L. Odom (Eds.), *Handbook of early childhood special education* (pp. 37-55). Springer International.
- Dunst, C. J., Hamby, D. W., & Raab, M. (2019). Modeling the relationships between practitioner capacity-building practices and the behavior and development of young children with disabilities and delays. *Educational Research and Reviews*, 14(9), 309-319. https://doi.org/310.5897/ERR2019.3742
- Dunst, C. J., Hamby, D. W., Trivette, C. M., Raab, M., & Bruder, M. B. (2000). Everyday family and community life and children's naturally occurring learning opportunities. *Journal of Early Intervention*, *23*(3), 151-164. https://doi.org/110.1177/10538151000230030501
- Dunst, C. J., Hamby, D. W., Trivette, C. M., Raab, M., & Bruder, M. B. (2002). Young children's participation in everyday family and community activity. *Psychological Reports*, *91*(3), 875-897. https://doi.org/810.2466/PR2460.2491.2467.2875-2897
- Dunst, C. J., Jones, T., Johnson, M., Raab, M., & Hamby, D. W. (2011). Role of children's interests in early literacy and language development. *CELLreviews*, *4*(5), 1-18. http://www.earlyliteracylearning.org/cellreviews/cellreviews v14 n15.pdf

- Dunst, C. J., Lowe, L. W., & Bartholomew, P. C. (1990). Contingent social responsiveness, family ecology, and infant communicative competence. *NSSLHA Journal*, *17*, 39-49. https://doi.org/10.1044/nsshla_1017_1039
- Dunst, C. J., & Kassow, D. Z. (2008). Caregiver sensitivity, contingent social responsiveness, and secure infant attachment. *Journal of Early and Intensive Behavior Intervention*, *5*(1), 40-56. http://dx.doi.org/10.1037/h0100409
- Dunst, C. J., & Raab, M. (2012). Interest-based child participation in everyday learning activities. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1621-1623). Springer. https://doi.org/10.1007/978-1-4419-1428-6
- Dunst, C. J., Raab, M., & Hamby, D. W. (2016). Interest-based everyday child language learning. *Revista de Logopedia, Foniatria y Audiologia, 36*(4), 153-161. https://doi.org/110.1016/j.rlfa.2016.1007.1003
- Dunst, C. J., Raab, M., & Trivette, C. M. (2012). Characteristics of naturalistic language intervention strategies. *Journal of Speech-Language Pathology and Applied Behavior Analysis*, 5(3-4), 8-16. http://www.baojournal.com/SLP-ABA%20WEBSITE/index.html
- Dunst, C. J., Serrano, A. M., Mas, J. M., & Espe-Sherwindt, M. (2021). Meta-analysis of the relationships between family strengths and parent, family and child well-being. *European Journal of Applied Positive Psychology, 5*(5), 2397-7116. https://www.nationalwellbeingservice.org/volumes/volume-5-2021/volume-2025-article-2025/
- Dunst, C. J., & Trivette, C. M. (2009). Meta-analytic structural equation modeling of the influences of family-centered care on parent and child psychological health. *International Journal of Pediatrics*, 2009, 1-9. https://doi.org/10.1155/2009/576840
- Dunst, C. J., Trivette, C. M., & Deal, A. G. (1988). *Enabling and empowering families:***Principles and guidelines for practice. Brookline Books.

 **https://doi.org/10.1002/1520-6807(198910)26:4<424::AID-PITS2310260416>3.0.CO;2-6
- Dunst, C. J., Trivette, C. M., & Deal, A. G. (Eds.). (1994a). Supporting and strengthening families: Methods, strategies and practices. Brookline Books.
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (1994b). Measuring social support in families with young children with disabilities. In C. J. Dunst, C. M. Trivette, & A. G. Deal (Eds.), *Supporting and strengthening families: Methods, strategies and practices* (pp. 152-160). 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*(4), 370-378. https://doi.org/310.1002/mrdd.20176
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2008). *Research synthesis and meta-analysis of studies of family-centered practices*. Winterberry Press.
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2012a). Effect of interest-based interventions on the social-communicative behavior of young children with autism spectrum disorders. *CELLreviews*, *5*(6), 1-10. http://www.earlyliteracylearning.org/cellreviews/cellreviews v15 n16.pdf
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2012b). Meta-analysis of studies incorporating the interests of young children with autism spectrum disorders into early intervention practices. *Autism Research and Treatment, 2012*, 1-10. https://www.hindawi.com/search/all/meta-analysis+of+studies+incorporating+the+interests+of+young+children+with+autism+spectrum+disorders+into+early+intervention+practices/
- Dunst, C. J., Trivette, C. M., Hamby, D. W., & Bruder, M. B. (2006). Influences of contrasting natural learning environment experiences on child, parent, and family well-being. *Journal of Developmental and Physical Disabilities*, 18(3), 235-250. https://doi.org/210.1007/s10882-10006-19013-10889
- Dunst, C. J., Valentine, A., Raab, M., & Hamby, D. W. (2013a). Everyday activities as sources of language learning opportunities for infants, toddlers, and preschoolers. *Everyday Child Language Learning Reports*, 6, 1-10. http://www.cecll.org/download/ECLLReport_6_Everyday.pdf
- Dunst, C. J., Valentine, A., Raab, M., & Hamby, D. W. (2013b). Relationship between child participation in everyday activities and early literacy and language development. *CELLreviews*, 6(1), 1-16. http://www.earlyliteracylearning.org/cellreviews/CELLreviews_v16_n11.pdf
- Dunst, C. J., Williams, A. L., Trivette, C. M., Simkus, A., & Hamby, D. W. (2012). Relationships between inferential reading language strategies and young language and literacy competence. *CELLreviews*, *5*(10), 1-10. http://www.earlyliteracylearning.org/cellreviews/cellreviews_v15_n10.pdf
- Edwards, A., Bottcher, L., & Fleer, M. (Eds.). (2019). *Cultural-historical approaches to studying learning and development: Societal, institutional and personal perspectives.* Springer.
- Evans, G. W. (2021). The physical context of child development. *Current Directions in Psychological Science*, *30*(1), 41-48. https://doi.org/10.1177/0963721420980719

- Farver, J. A. M. (1999). Activity setting analysis: A model for examining the role of culture in development. In A. Göncü (Ed.), *Children's engagement in the world: Sociocultural perspectives* (pp. 99-127). Cambridge University Press.
- Friedman, B. D., & Allen, K. N. (2010). Systems theory. In J. R. Brandell (Ed.), *Theory and practice in clinical social work* (pp. 3-20). SAGE Publications.
- Gershoff, E. T., Mistry, R. S., & Crosby, D. A. (Eds.). (2016). Societal contexts of child development: Pathways of influence and implications for practice and policy. Cambridge University Press.
- Graue, M. E., & Walsh, D. J. (1998). *Studying children in context: Theories, methods and ethics*. SAGE Publications.
- Hanley, B., Tasse, M. J., Aman, M. G., & Pace, P. (1998). Psychometric properties of the Family Support Scale with Head Start families. *Journal of Child and Family Studies,* 7(1), 69-77. https://doi.org/10.1023/A:1021354008653
- Kermani, H., & Brenner, M. E. (2009). Maternal scaffolding in the child's zone of proximal development across tasks: Cross-cultural perspectives. *Journal of Research in Childhood Education*, 15(1), 30-52. https://doi.org/10.1080/02568540009594774
- Laszlo, A., & Krippner, S. (1998). Systems theories: Their origins, foundations, and development. In J. S. Jordan (Ed.), *Systems theories and a priori aspects of perception* (pp. 47-74). Elsevier Science.
- Lerner, R. M. (1991). Changing organism-context relations as the basic process of development: A developmental-contextual perspective. *Child Development*, *27*, 27-32. https://doi.org/10.1037/0012-1649.1027.1031.1027
- Littlewood, K. A., Swanke, J. R., Strozier, A., & Kondrat, D. (2012). Measuring social support among kinship caregivers: Validity and reliability of the Family Support Scale. *Child Welfare*, *91*(6), 59-78. https://www.jstor.org/stable/48623368
- Mehl, M. R., & Conner, T. S. (Eds.). (2012). *Handbook of research methods for studying daily life*. Guildford Press.
- Murry, V. M., E., H. N., Witherspoon, D., Berkel, C., & Bartz, D. (2015). Children in diverse social contexts. In M. H. Bornstein, T. Leventhal, & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Ecological settings and processes* (pp. 416-454). John Wiley & Sons.
- National Academies of Sciences, Engineering, and Medicine. (2016). *Parenting matters:* Supporting parents of children ages 0-8. The National Academies Press. http://nap.edu/21868

- Newland, L. A. (2015). Family well-being, parenting, and child well-being: Pathways to healthy adjustment. *Clinical Psychologist*, 19(1), 3-14. https://doi.org/10.1111/cp.12059
- Nugent, J. K. (2002). The cultural context of child development: Implications for research and practice in the twenty-first century. In J. Gomes-Pedro, J. K. Nugent, G. Young, & T. B. Brazelton (Eds.), *The Infant and family in the twenty-first century*. Routledge.
- Osher, D., Cantor, P., Berg, J., Steyer, L., & Rose, T. (2020). Drivers of human development: How relationships and context shape learning and development. *Applied Developmental Science*, *24*(1), 6-36. https://doi.org/10.1080/10888691.10882017.11398650
- Raab, M., & Dunst, C. J. (2004). Early intervention practitioner approaches to natural environment interventions. *Journal of Early Intervention*, *27*, 15-26. https://doi.org/10.1177/105381510402700102
- Raab, M., & Dunst, C. J. (2007). *Influence of child interests on variations in child behavior and functioning*. Winterberry Press, 1(21), 1-21.
- Raab, M., Dunst, C. J., & Hamby, D. W. (2013). Relationships between young children's interests and early language learning. *Everyday Child Language Learning Reports,* 5, 1-14. http://www.cecll.org/download/ECLLReport 15 Interests.pdf
- Raab, M., Dunst, C. J., Johnson, M., & Hamby, D. W. (2013). Influences of a responsive interactional style on young children's language acquisition. *Everyday Child Language Learning Reports*, 4, 1-23. http://www.cecll.org/download/ECLLReport_24_Responsive.pdf
- Renninger, K. A., Hidi, S., & Krapp, A. (Eds.). (1992). *The role of interests in learning and development*. Lawrence Erlbaum Associates.
- Richardson, R. A. (2011). Developmental contextualism. In R. J. R. Levesque (Ed.), Encyclopedia of adolescence. Springer. https://doi.org/10.1007/978-1-4419-1695-2 11
- Richter, L. (2004). The importance of caregiver-child interactions for the survival and healthy development of young children: A review. World Health Organization, Department of Child and Adolescent Health and Development. http://apps.who.int/iris/bitstream/10665/42878/1/924159134X.pdf
- Richter, N., Bondu, R., Spiess, C. K., Wagner, G. G., & Trommsdorff, G. (2018). Relations among maternal life satisfaction, shared activities, and child well-being. *Frontiers in Psychology*, 9(739). https://doi.org/710.3389/fpsyq.2018.00739.

- Rogoff, B., Mistry, J., Göncü, A., & Mosier, C. (1993). Guided participation in cultural activities by toddlers and caregivers. *Monographs of the Society for Research in Child Development*, *58*(8),I-179. https://doi.org/210.2307/1166109
- Rogoff, B., Alcala, L., Coppens, A. D., Ruvalcaba, O., Silva, K. G., & (Eds.). (2014). Learning by observing and pitching in to family and community endeavors. *Human Development*, *57*(2-3), 69-170. https://doi.org/110.1159/000359915.
- Skinner, E. (1995). Perceived control, motivation, and coping. Thousand Oaks, CA: Sage.
- Spagnola, M., & Fiese, B. H. (2007). Family routines and rituals: A context for development in the lives of young children. *Infants and Young Children, 20*(4), 284-299. https://doi.org/210.1097/1001.IYC.0000290352.0000232170.0000290355a
- Taylor, T. J., & Woods, M. (Eds.). (2005). *Early childhood studies: An holistic introduction* (2nd ed.). Hodder Arnold Publishers.
- Trivette, C. M., Dunst, C. J., & Hamby, D. W. (2010). Influences of family-systems intervention practices on parent-child interactions and child development. *Topics in Early Childhood Special Education*, 30(1), 3-19. https://doi.org/10.1177/0271121410364250
- Vandermaas-Peeler, M., Way, E., & Umpleby, J. (2002). Guided participation in a cooking activity over time. *Early Child Development and Care, 172*(6), 547-554. https://doi.org/10.1080/03004430215104
- Wachs, T. D. (2000). *Necessary but not sufficient: The respective roles of single and multiple influences on individual development*. American Psychological Association. https://doi.org/10.1037/10344-000
- Wozniak, R. H., & Fischer, K. W. (Eds.). (1993). *Development in context: Acting and thinking in specific environments*. Erlbaum.
- Zwozdiak-Myers, P. (Ed.) (2007). *Childhood and youth studies*. Learning Matters/SAGE Publications.

Table 1Average Weighted Effect Sizes for the Relationships Between the Different Family Systems Intervention Model Components and Different Parent, Family, and Child Outcomes

Intervention Model Components and Different Parent, Family, and Child Outcomes						
Intervention Model Components	k	N	r	95% CI	Z-test	p-value
Family Needs Studies ^a	_				0.1-	0.5.5
Parenting Stress	7	554	46	57, -33	8.15	.000
Parenting Burden	7	1199	42	56,26	5.97	.000
Parenting Beliefs	4	152	.30	.04, .52	3.63	.000
Family Well-Being	3	425	.30	.11, .39	6.57	.000
Child Behavior Functioning	4	1100	.28	.17, .38	8.00	.000
Family Resources Studies						
Parenting Stress	20	4170	42	47,37	15.66	.000
Parenting Burden	8	1102	33	42,24	7.74	.000
Family Stress	10	2495	35	43,26	8.43	.000
Parenting Beliefs	11	1039	.24	.12, .35	4.35	.000
Parenting Practices	14	3294	.29	.23, .35	9.33	.000
Family Well-Being	5	190	.35	.19, .48	5.94	.000
Child Engagement	11	1319	.27	.18, .36	6.28	.000
Child Behavior Functioning	6	566	.35	.22, .46	6.89	.000
Family Support Studies						
Parenting Stress	62	5687	21	25,17	9.63	.000
Parenting Beliefs	13	1106	.22	.16, .28	7.80	.000
Parenting Practices	13	1421	.21	.17, .23	12.86	.000
Parenting Burden	26	2936	14	18,10	7.12	.000
Parent Well-Being	24	1962	.17	.09, .23	4.80	.000
Family Strengths Studies						
Parenting Stress	6	705	37	57,12	3.80	.000
Parenting Burden	6	702	27	50,02	2.74	.000
Parenting Practices	14	4808	.43	.28, .56	5.69	.000
Parenting Beliefs	8	1324	.35	.30, .40	15.53	.000
Parent Well-Being	7	520	.54	.30, .71	5.07	.000
Family Well-Being	10	2545	.54	.43, .63	9.52	.000
Child Well-Being	11	1603	.27	.19, .35	7.19	.000
Family-Centered Practices						
Studies						
Parenting Stress	23	1543	28	3225	11.97	.000
Parenting Beliefs	20	945	.15	.11, .18	5.07	.000
Parent Well-Being	7	554	.19	.25, .32	8.07	.000
Family Well-Being	10	1543	.26	.23, .30	8.32	.000
Child Behavior Functioning	10	308	.19	.09, .22	5.98	.000
Child Well-Being	14	401	.28	.19, .41	5.76	.000

NOTE. k = Number of effect sizes, N = Number of study participants, r = Average weighted correlation coefficient, and CI = Confidence interval.

^aThe family needs scales were scored so that higher scores indicated fewer needs (concerns and priorities).

Bionote

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