

Early Childhood Intervention Models and Parent and Child Outcomes

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Purpose

- Describe the utility of conceptual models for operationalizing early childhood intervention practices and their outcomes
- Illustrate how different model components place different emphasis on both child and parent experiences and opportunities and child and parent outcomes
- Summarize findings from studies investigating the characteristics and consequences of different components an integrated early childhood intervention and family support model

Early Intervention Models

Models provide frameworks for depicting the relationships among intervention practices (variables) and the expected or hypothesized outcomes of those practices. Models are useful for discerning the extent to which practices are consistent with conceptual or empirical foundations and how different model practices both independently and in combination are expected to have intended consequences

Early Conceptualizations of Early Intervention Models

<i>Theoretical Models:</i>	Piaget vs. Skinner
<i>Program Models:</i>	Home-Based vs. Centre-Based
<i>Team-Based Models:</i>	Multidisciplinary vs. Tran disciplinary
<i>Service Models:</i>	Direct vs. Consultative

Advances in Theories Informing Early Intervention

Early intervention has historically been informed by developmental and behavioural theories that were used to guide both assessment and intervention practices. Contemporary models of early intervention differ from earlier theories by focusing explicitly on the **experiences and opportunities** that can be used as interventions to promote child, parent and family development. Experiences and opportunities are emphasized because they are the foundations for advances in both assessment and intervention practices in early childhood intervention.

Contemporary Models of Early Intervention

- Developmental Systems Model
- Unified Theory Approach
- Integrated Framework Model

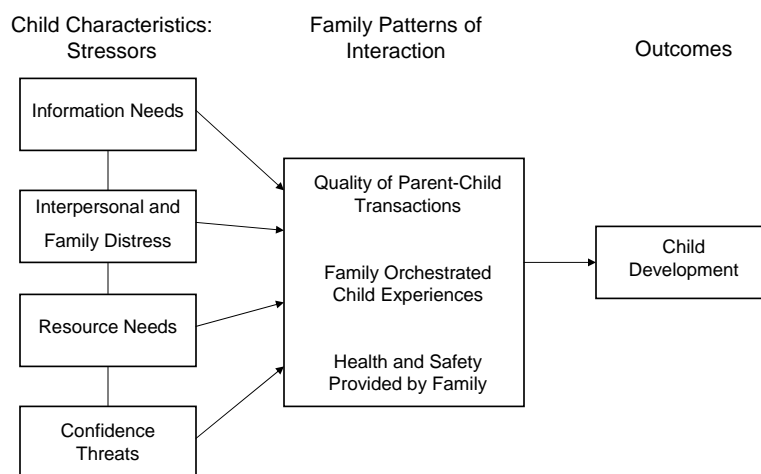
Developmental Systems Model^a

Michael Guralnick

- Parenting roles
 - Quality of parent—child interactions
 - Family-orchestrated learning experiences
 - Child safety and health
- Factors affecting parenting roles
 - Child characteristics
 - Family characteristics
 - Social network characteristics
- Child development outcomes
 - Cognitive
 - Social
 - Communication

^a Developmental systems model for early intervention. *Infants and Young Children*, 2001, 14(2), 1-18.

Guralnick's Developmental Systems Model Framework



Unified Theory Approach^a

Samuel Odom Mark Wolery

- Families and homes are primary nurturing contexts
- Strengthening relationships are an essential feature of intervention
- Children learn through acting on and observing their environment
- Adults mediate children's experiences to promote learning
- Child participation in everyday settings is necessary for development
- Intervention is individually and dynamically goal oriented
- Transitions across programmes are enhanced by a developmentally instigating adult
- Family and programmes are influenced by the broader contexts in which they are embedded

^a A unified theory of practice in early intervention/early childhood special education: Evidence-based practices. *Journal of Special Education*, 2003, 37, 164 – 173.

Seven Components of an Integrated Framework Model^a

Carl J. Dunst

- Child learning opportunities
- Everyday activity settings
- Caregiver instructional/interactional styles
- Parenting supports
- Participatory parenting opportunities
- Family and community supports
- Capacity building help-giving practices

^a An integrated framework for practicing early childhood intervention and family support. *Perspectives in Education*, 22 (2), 1 – 16.

Integrated Framework Definition of Early Intervention

Early childhood intervention and family support is defined as the *provision of support and resources to families of young children from members of informal and formal social network members that both directly and indirectly influence child, parent, and family functioning.*

Implementing the Integrated Framework Model

Practitioners use capacity-building help-giving practices to ensure parents have the necessary supports and resources to provide their children development-enhancing learning opportunities in everyday activity settings where parents' responsive and supportive interactional behaviour supports and strengthens both child and parent competence and confidence.

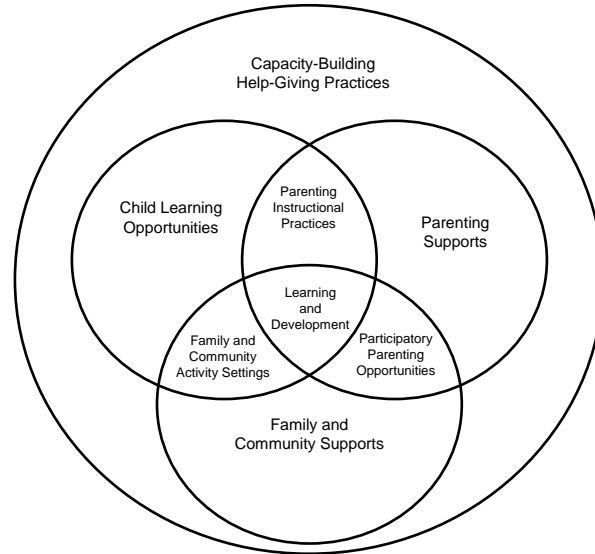
Foundations of the Integrated Framework

Foundations	Framework	Key Elements
Theoretical	Ecological Social Systems	Systems theory considers behaviour and development to be multiply determined by experiences and opportunities emanating from different settings and sources of support and resources.
Conceptual	Capacity Building Paradigms	Promotion, empowerment, strengths-based, resource-based, and family-centred models are used to ensure practices have capacity building characteristics and consequences.
Operational	Practice Elements	Interventions focus on child learning, family/community activity settings, parent supports, parent/child interactions, participatory parenting opportunities, family/community supports, and family-centred help-giving as the contexts for optimizing intervention benefits.
Performance	Standards and Benchmarks	Practice indicators describing the expected or operationally defined behaviour or conditions that are most likely to produce desired effects are used as standards for promoting use of evidence-based interventions.

Defining Features of Contrasting Approaches for Conceptualizing and Implementing Early Childhood Intervention and Family Support

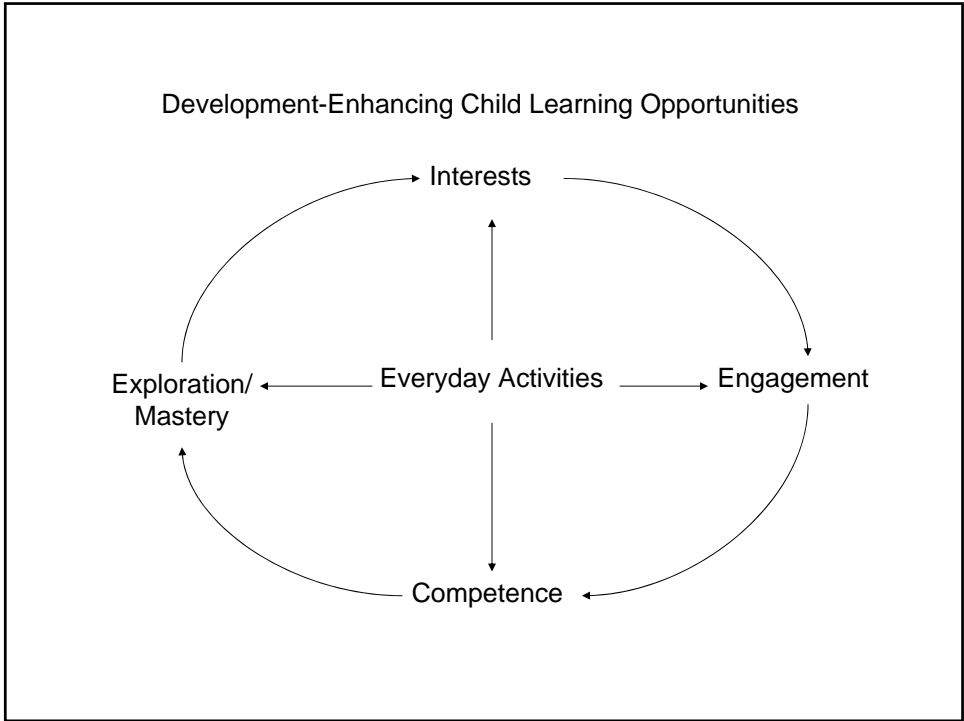
Capacity Building Paradigm	Traditional Paradigm
<i>Promotion Models</i>	<i>Treatment Models</i>
Focus on enhancement and optimization of competence and positive functioning	Focus on remediation of a disorder, problem, or disease, or its consequences
<i>Empowerment Models</i>	<i>Expertise Models</i>
Create opportunities for people to exercise existing capabilities as well as develop new competencies	Depend on professional expertise to solve problems for people
<i>Strengths-Based Models</i>	<i>Deficit-Based Models</i>
Recognize the assets and talents of people, and help people use these competencies to strengthen functioning	Focus on correcting peoples' weaknesses or problems
<i>Resource-Based Models</i>	<i>Service-Based Models</i>
Define practices in terms of a broad range of community supports, opportunities and experiences	Define practices primarily in terms of professional services
<i>Family-Centred Models</i>	<i>Professionally-Centred Models</i>
View professionals as agents of families and responsive to family desires and concerns	View professionals as experts who determine the needs of people from their own as opposed to other people's perspectives

Integrated Model of Early Childhood Intervention and Family Support



Child Learning Opportunities

Development-enhancing child learning opportunities are experiences that are interesting, engaging, and competency producing, and which result in a child's sense of mastery about his or her capabilities. These kinds of participatory learning opportunities include activities that provide children contexts for interest and competence expression and that encourage exploration and the development of a sense of accomplishment.



Everyday Activity Settings

Everyday activity settings include the many different experiences and opportunities afforded children as part of daily living, child and family routines, family rituals, special occasions and events, family and community celebrations and traditions, and so forth that are either planned or happen serendipitously, and which across time, constitute the life experiences of a developing child.

Sources of Everyday Learning Opportunities

Family Activities (Example)	Community Activities (Example)
Family Routines (Cooking)	Family Excursions (Car/bus rides)
Parenting Routines (Child's bedtime)	Family Outings (Visiting friends/neighbors)
Child Routines (Dressing/undressing)	Play Activities (Playgrounds)
Literacy Activities (Reading child stories)	Community Activities (Library/book mobile)
Play Activities (Lap games)	Outdoor Activities (Nature trail walks)
Physical Play (Rough housing)	Recreation Activities (Swimming)
Entertainment Activities (Dancing/singing)	Children's Attractions (Petting zoos/animal farms)
Family Rituals (Saying grace at meals)	Art/Entertainment Activities (Concerts/theater)
Family Celebrations (Holiday dinners)	Church/Religious Activities (Sunday school)
Socialization Activities (Having friends "over")	Organizations and Groups (Children's clubs)
Gardening Activities (Vegetable garden)	Sports Activities (T-Ball)

Parenting Interactional Styles

Parenting styles and instructional practices characterized by parent/caregiver responsiveness to child-initiated and child-directed behaviour, and caregiver behaviour that provides children opportunities for practicing emerging skills and elaborating on existing capabilities, are most likely to have competency-enhancing effects.

Responsive Caregiver Interactional Style^a

- Interpreting a child's behaviour as an intent to communicate
- Following a child's lead and especially attending to a child's interests
- Taking advantage of teachable moments as part of everyday activities
- Sensitivity to child behaviour cues
- Social responsiveness to child behaviour
- Joint attention and reciprocal parent--child interactions
- Positive affect during these interactions
- Scaffolding as a means to produce elaborations in child behaviour

^a Dunst, C.J. et al. (2010). Characteristics of naturalistic language intervention strategies. *Journal of Speech-Language Pathology and Applied Behaviour Analysis*. Invited paper.

Participatory Parenting Opportunities

Parents' support networks influence parenting behaviour and practices by providing emotional and instrumental support, encouraging or discouraging specific parenting attitudes and behaviours, and providing models and opportunities to adopt alternative or new parenting and child-rearing interactional styles.

Parenting Supports

Parenting supports include the information, advice, guidance, etc. that both strengthen existing parenting knowledge and skills and promote acquisition of new competencies necessary for parents to carry out child rearing responsibilities and provide their child(ren) development-enhancing learning opportunities.

Family and Community Supports

Family and community supports include any number and type of intrafamily, informal, community, and formal resources needed by parents to have the time and energy, and knowledge and skills, to engage in parenting and child-rearing activities.

Capacity Building Help-Giving Practices

Family-centred practices place families in central and pivotal roles in decisions and actions involving the child, parent, and family/community resources that are needed to strengthen existing capabilities and promote child, parent and family competence. Special emphasis is placed on family-centred participatory practices that build on existing family member competence and promote acquisition of new capabilities.

Competency-Enhancing Outcomes

- The outcomes and benefits used to judge whether early childhood intervention and family support is effective include a number of measures of child, parent, and family functioning and capacity building.
- *Early childhood intervention and family support practices are considered effective only to the extent that children, parents, and families become more capable and competent as result of early childhood intervention and family support practices*
- Competence is assessed in terms of both behavioural capabilities (strengthened or learned) and self-efficacy beliefs.
- Child, parent, and family active participation in different kinds of experiences and opportunities are considered the *sine qua non* condition necessary of strengthening confidence and competence

Selected Outcomes for Each Component of the Integrated Framework

Component	Outcome
Child Learning Opportunities	Engagement, competence, mastery
Everyday Activity Settings	Number of development-enhancing interest-based learning opportunities
Parenting Interactional Styles	Confidence, competence, and enjoyment
Participatory Parenting Opportunities	Engagement in supportive experiences
Parenting Supports	Knowledge and skills
Family and Community Supports	Well-being and self-efficacy
Capacity-Building Help-Giving Practices	Sense of empowerment

Research on the Integrated Model

Both primary and secondary (meta-analysis) studies have been conducted on different components of the integrated model to evaluate the extent to which hypothesized relationships are supported by different sets of data. The studies have included both micro-level and macro-level analyses, and have focused on the influences of different components of the model and how they are related to parent, family, and child behaviour and functioning.

Types of Primary Investigations

- Interest-based participation in everyday family and community activities and child development
- Parent and community member strengths as sources of participatory child learning opportunities
- Participation in everyday family and community activities and child and parent behaviour and functioning
- Engagement in participatory parenting opportunities and their effects on parenting interactions behaviour
- Influences of family and community supports on parent and family well-being

Research Syntheses and Meta-Analyses

- Interest-based child learning opportunities and child behaviour and development
- Responsive parenting styles and child development
- Informal and formal social supports and parent and family well-being
- Relationship between family-centred help-giving practices and parent, family, and child behaviour and functioning
- Influences of family-systems intervention practices on parent-child interactions and child development
- Family strengths, supports and resources, and family needs, and parent, family, and child outcomes

Examples of Integrated Framework Studies

Interest-Based Learning and Child Development^a

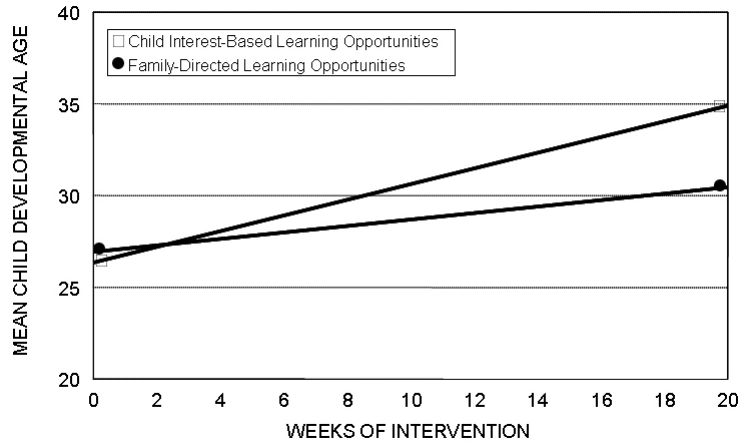
Purpose: Compare the relative effectiveness of interest-based learning vs. adult-directed learning

Study Participants: 50 infants, toddlers, and preschools with disabilities in six U.S. states (NC, CT, UT, NM, CA, WI)

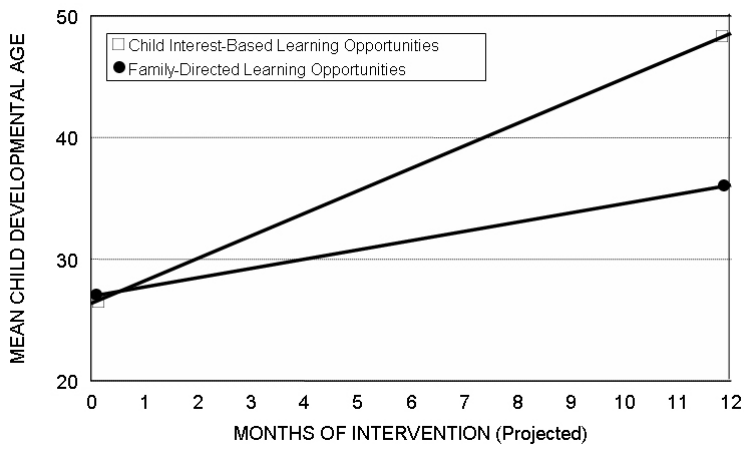
Outcome Measure: Developmental Observation Checklist Scales (Language, Cognitive, Motor, Social)

^aDunst, C.J., Trivette, C.M., & Cutspec, P.A. (2007). An evidence-based approach to documenting the characteristics and consequences of early intervention practices. *Winterberry Press Research Perspectives*, Vol. 1, No. 2.

Relative Effectiveness of Two Contrasting Approaches to Natural Learning Environment Intervention Practices



Projected Benefits of Two Contrasting Approaches to Natural Learning Environment Intervention Practices



Capacity-Building Family-Systems Intervention Practices^a

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Carol M. Trivette

Method: Four meta-analyses of the relationships between family-centred practices, family needs/concerns, family strengths, social supports/resources and parent, family, and child behaviour

Outcomes: Parent self-efficacy beliefs, parent well-being, parenting capabilities, family well-being, and child behaviour

Effect Size: Average weighted correlations between the family-systems and outcome variables

^a *Journal of Family Social Work*, 2009, 12, 119-143.

Meta-Analyses of the Family Systems Model Components

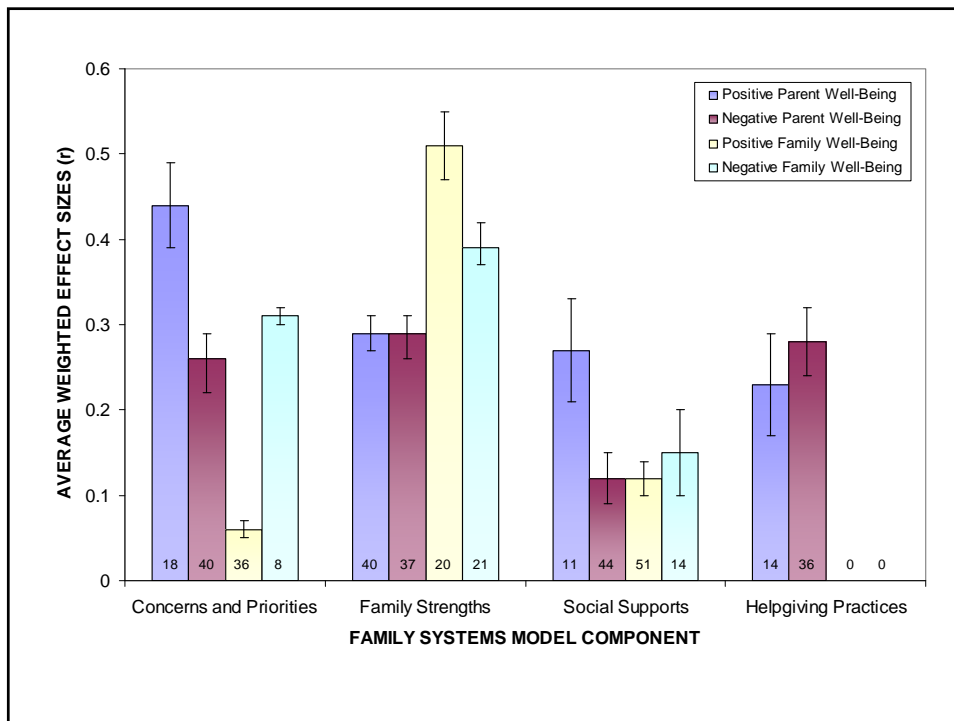
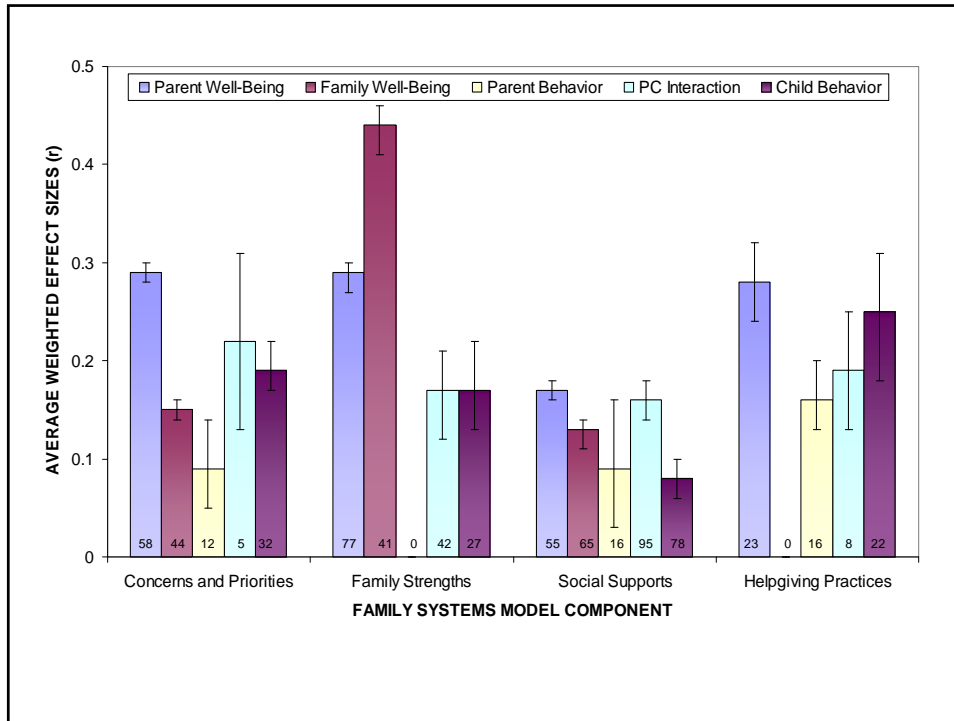
Model Component	Number of Studies	Number of Participants
Concerns and Priorities	32	7,781
Family Strengths	32	2,924
Social Supports	79	10,932
Help-giving Practices	52	12,211

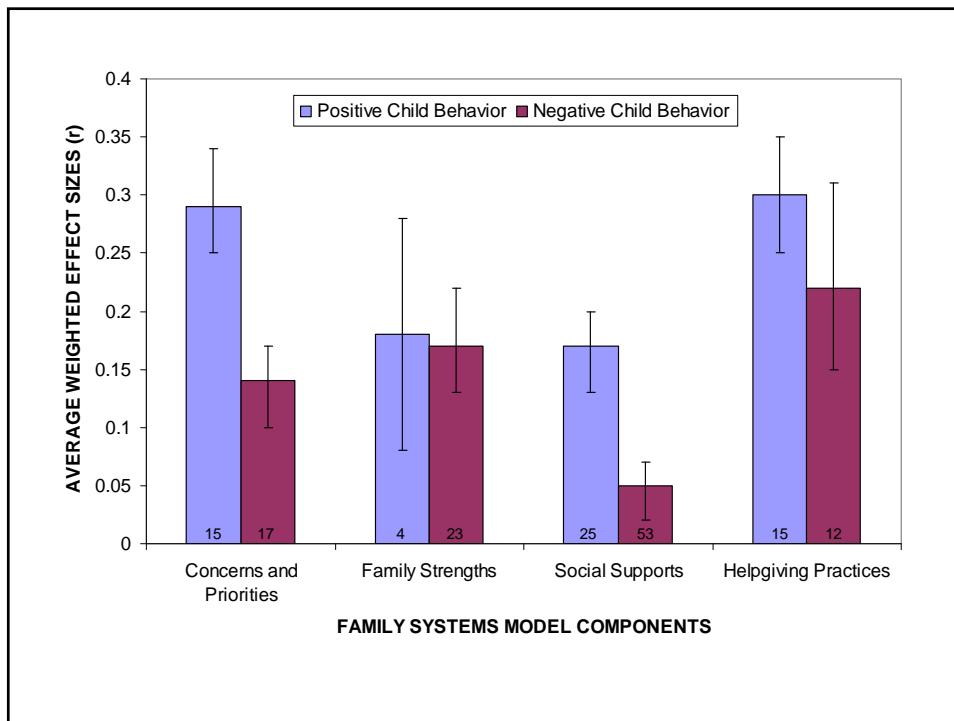
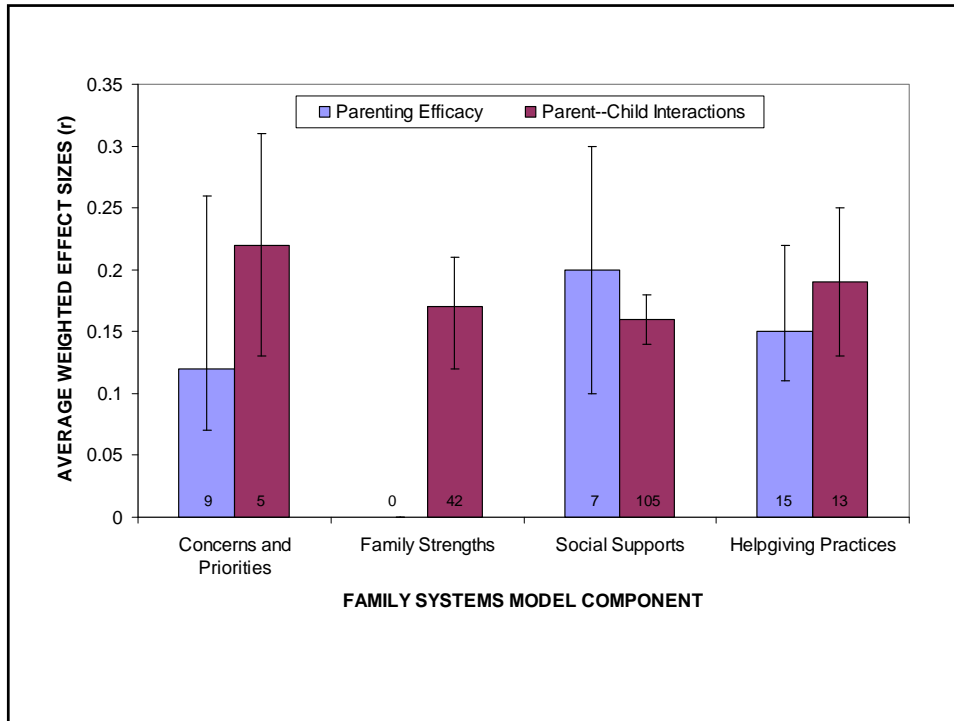
Independent Measures Used in the Synthesis Studies

Model Component	Independent Measures
Concerns and Priorities	Family Resource Scale, Family Needs Scale
Family Strengths	Family Functioning Style Scale, Family Hardiness Index
Social Supports	Family Support Scale, Support Functions Scale
Help-giving Practices	Help-giving Practices Scale, Measure of Process of Care, Family-Centred Practices Scale, Enabling Practices Scale (+9 other scales)

Dependent Measures Included in the Synthesis Studies

Outcome Domains	Outcome Measures (Examples)
Self Efficacy Beliefs	Family Empowerment Scale, Personal Assessment of Control Scale
Parent Well-Being	Psychological Well-Being Index, Parenting Stress Index, CES-D
Family Well-Being	Family Environment Scale, FACES, Self Report Functioning Scale
Parent/Family Coping	Coping Strategies Inventory, F-COPES, Ways of Coping Scale
Life Events	Parent Daily Hassles Scale, Family Inventory of Life Events
Parenting Behaviour	Parenting Competence Scale, Everyday Parenting Scale
Parent--Child Interactions	Parent--Child Relationship Scale, Parent Styles of Interaction Scale
Child Behaviour	Conners Parent Rating Scale, Child Behaviour Checklist
Child Development	Bayley Scale, Vineland, Battelle, Adaptive Behaviour Inventory for Children





Conclusions

- The integrated framework has proven useful in terms of understanding the key characteristics of early childhood intervention and family support practices
- The influences of the integrated framework practices are related to a number of outcomes albeit differentially
- The hypothesized relationships among the components of the integrated framework have, for the most part, been supported by primary and secondary research evidence
- The integrated framework has also proven useful as a way of determining the extent to which different kinds of practices used by early childhood intervention practitioners are likely to have positive effects and consequences