Contemporary Models of Early Childhood Intervention

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Frameworks for practicing evidence-based early childhood intervention and family support. Lecture prepared for the “Knowledge-Based Family Intervention in Long-Term Illness and Disability” Course, Swedish Institute of Health Sciences, Lund University, Lund, Sweden, September 5, 2011.
Outline

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   3. Integrated Framework Model

B. Integrated Framework Model
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C. Examples of Research on the Integrated Framework Model
   1. Interest-based child learning
   2. Strengthening parenting capacity
   3. Influences of family-centred practices
Advances in research and practice in early intervention, child development, and family support has led to the development of intervention-based models and theories that explicitly focus on the characteristics of practices that are evidence-based and, if used as intended, ought to have the same effects as found in research studies.
Three Intervention-Based Theories and Models

- Developmental Systems Model
- Unified Theory Approach
- Integrated Framework Model
Developmental Systems Model of Early Intervention

“The developmental systems model...is a framework for [providing] community-based early intervention services and supports for vulnerable children and families. A central feature of the [developmental systems] model is its focus on maximizing family patterns of interaction by addressing potential stressors related to risk and disability conditions” (pp. 1-2).

Developmental System Model

• Parenting roles
  - Quality of parent-child transactions
  - Family-orchestrated child learning
  - Child health and safety provided by the family

• Social network factors that affect parenting roles
  - Financial resources
  - Marital relationship
  - Family/friends/community network (supports)

• Role of early interventionists
  - Support family patterns of interaction that best promote children’s development

• Child development outcomes
Developmental Systems Model

Focuses on decreasing the child and family stressors that deter parents from engaging in positive parent-child interactions and providing children development enhancing learning experiences by:

• Decreasing parent and family stress
• Supporting positive parent-child interactions
Components of the Developmental Systems Model

Child Characteristics: Stressors
- Informational needs
- Interpersonal and family distress
- Resource needs
- Confidence threats

Family Patterns of Interaction
- Quality of parent-child transactions
- Family-orchestrated child experiences
- Health and safety provided by family

Outcomes
- Child development
Components of the Developmental Systems Model

Family Characteristics:
- Stressors
  - Personal Characteristics of Parents
    - Mental health
    - Intellectual ability
    - Child rearing attitudes and practices
  - Financial Resources
  - Social Supports
    - Marital relationship
    - Family/friend/community networks
  - Child Characteristics
    - Child temperament

Family Patterns of Interaction
- Quality of Parent-Child Transactions
- Family Orchestrated Child Experiences
- Health and Safety Provided by Family

Outcomes
- Child Development
Unified Theory of EI/ECSE Practice

“[The unified theory] is a theory of practice, which others have called a theory of change. The theory exists as a set of shared beliefs or shared exemplars...among practitioners and scholars, with each having a body of research and/or strongly held and commonly shared values...which constitute the tenets of a theory of practice.” (Odom & Wolery, 2003, p. 105).

Major Tenets of the Unified Theory Approach

• Families and programs are influenced by the broader contexts in which they are embedded
• Families and homes are primary nurturing contexts
• Strengthening relationships (e.g., parent-child, child-child, parent-practitioner) is an essential feature of early childhood intervention
• Adults mediate children’s experiences to promote learning
• Children learn through acting on and observing their environment
• Children’s participation in more developmentally advanced settings is necessary for successful and independent child engagement
• Early childhood intervention practices are individually and dynamically oriented
• Transitions across programs are enhanced by a developmentally instigating adult
Hypothesized Relationships Among the Unified Theory Tenets

**Extrafamily Factors**
- Contexts of Supports
- Early Childhood Intervention
- Strengthening Parent-Practitioner Relationships

**Family Influences**
- Nurturing Contexts
- Parent-Child Relationships
- Adult Mediated Child Learning

**Child Learning**
- Activity Setting Participation
- Acting and Observing

**Child Outcomes**
- Behavioural Development
Integrated Framework for Practicing Early Childhood Intervention and Family Support

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.* The integrated framework definition of early childhood intervention and family support differs from most other definitions by including informal experiences and opportunities as *interventions* contributing to improved functioning. It also differs from other approaches to intervention and provision of support by its explicit focus on *parent and family capacity building* as the primary means of supporting and strengthening child functioning (Dunst, 2004, pp. 1-2).

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Integrated Framework Components

- Theoretical Foundations
- Conceptual Foundations
- Operational Components
- Performance Standards
## Foundations of the Integrated Framework

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

The integrated framework is based on systems theory which views human learning and development in general, and child, parent, and family functioning more specifically, as multiply determined, where the factors influencing learning and development emanate from different settings and relations between the settings in which children, parents, and families are participating members.
Ecological System Theory (continued)

The activity settings that are sources of development-instigating and supportive experiences include, but are not limited to, the everyday activities that children experience as part of daily living, the opportunities afforded children and parents as part of parent/child interaction and play, the interactions parents have with friends or other parents, the guidance and advise made available during parenting groups or classes, the interactions parents have with early childhood practitioners, and so forth. In the context of the integrated framework, any and all support network members are considered potential sources of experiences, opportunities, advice, guidance, etc. influencing child, parent, and family learning and development.
Sources of Systems Influences

Organizational Policies

Intervention

Programs and Practices

Parent and Family Supports

Parent-Child Interactions

Child Learning and Development

Responsive Parenting

Parent Well-Being

Strengths-Based Practices

Family-Centred Principles

Help Giving Practices

Everyday Activities

Interest-Based Child Learning

Friends

Resource Based Practices

Spouse
Capacity-Building Paradigm

**Promotion Models**

Focus on enhancement and optimization of competence and positive functioning

**Empowerment Models**

Create opportunities for people to exercise existing capabilities as well as develop new competencies

**Strengths-Based Models**

Recognize the personal assets, skills, interests and talents of people, and help people use these competencies to strengthen functioning

**Resource-Based Models**

Define practices in terms of a broad range of community opportunities and experiences and both informal and formal supports and resources

**Family-Centered Models**

Engage families in informed choice and action where professionals are responsive to family desires and concerns
Key Practice Elements

• Capacity building help giving practices
• Child everyday learning opportunities
• Parenting supports and interactional styles
• Family and community (informal and formal) supports
Performance Checklists

Standards-based performance checklists are used to provide practitioners concrete examples of indicators for different practice characteristics of components of the integrated framework.

Major Elements of the Integrated Framework

Capacity-Building
Help Giving Practices

Child Learning Opportunities

Parenting Supports

Learning and Development

Family and Community Supports
Research at the Puckett Institute has focused on the kinds of everyday activities young children experience at different ages and the kinds of learning opportunities the activities provide the children. The research has also examined the effect of those learning opportunities on child outcomes.
The particular parenting styles and practices that parents and other caregivers use in interactions with young children which sustain child engagement in everyday activities and promote child competence has been a focus of our research and practice for more than four decades.
Overlapping Components of the Integrated Framework

Capacity-Building Help Giving Practices

Child Learning Opportunities

Parenting Supports

Learning and Development

Participatory Parenting Opportunities

Family and Community Supports

Different kinds of interventions have been implemented and evaluated in terms of the effects of providing participatory parenting opportunities designed to strengthen parenting competence and confidence.
Integrated Framework of Early Childhood Intervention and Family Support

- Child Learning Opportunities
- Parenting Supports
- Family and Community Supports
- Capacity-Building Help Giving Practices
- Parenting Styles and Instructional Practices
- Participatory Parenting Opportunities
- Learning and Development
- Family and Community Activity Settings
Examples of Research on the Integrated Framework Model

• Interest-based everyday child learning
• Strengthening parenting capacity
• Influences of family-centred practices on parenting capacity
Interest-Based Learning and Child Development

*Purpose*

Compare the relative effectiveness of interest-based child learning vs. adult-directed child learning on child development

*Study Participants*

50 infants, toddlers, and preschoolers with disabilities assigned to either the interest-based or family-directed interventions

*Outcome Measure*

Developmental Observation Checklist Scale (Language, Cognitive, Motor, Social)

*Methodology*

Linear growth curve modelling was used to assess differences in rates of child progress over the course of 20 weeks of intervention
Interest-Based vs. Family-Directed Interventions

**Interest-Based Intervention**
Child interests were first identified and the everyday activities that provided the best settings for interest-based child learning opportunities were used as the interventions. Parent responsiveness to child engagement in the activities was used to maintain and reinforce child behavioural competence.

**Family-Directed Intervention**
Parent-desired child behaviour were first identified and the everyday activities that provided the best settings for learning those behaviour were used as the interventions. Parent responsiveness to child engagement in the activities was used to maintain and reinforce child behavioural competence.
Relative Effectiveness of Two Contrasting Approaches to Natural Environment Intervention Practices

Child Interest-Based Intervention
Family-Directed Intervention

Cohen’s $d = 1.12$
Projected Benefits of Two Contrasting Approaches to Natural Environment Intervention Practices

- Child Interest-Based Intervention
- Family-Directed Intervention

MONTHS OF INTERVENTION (Projected)

MEAN CHILD DEVELOPMENTAL AGE
Caregiver Confidence and Competence Associated With the Use of Caregiver-Mediated Intervention Practices\textsuperscript{a}

\textit{Purpose}

Determine the extent to which the use of caregiver-mediated everyday child learning was associated with improvements in caregiver competence and confidence.

\textit{Study Participants}

Three mothers and one grandmother of preschool aged children with disabilities or developmental delays.

\textit{Outcomes}

Measures of parenting behaviour (competence) and parenting self-efficacy beliefs (confidence).

\textit{Methodology}

Multiple baseline design across study participants.

Caregiver-Mediated Early Intervention Practices

- Study participants used interest-based everyday activities as sources of child learning opportunities where the participants supported and encouraged child learning in the activities using responsive teaching procedures.

- Participants identified their children’s interests, the everyday activities that were sources of interest-based learning opportunities, and the caregiver behaviour that were used to engage and sustain child engagement in interest-based everyday child learning.

- An early childhood practitioner used participatory parenting experiences and opportunities to support and encourage the caregivers’ use of the interest-based practices.
Adoption and use of everyday activities as sources of interest-based child learning opportunities strengthened and promoted parents' skills in using the natural learning environment practices.

(Note. ES = Estimated Cohen’s d effect size for the baseline vs. intervention phases of the study)
Findings also showed that promoting caregivers’ use of everyday activities as sources of interest-based child learning opportunities had the effect of strengthening parenting confidence.

(Note. ES = Estimated Cohen’s $d$ effect size)
Relationships Between Family-Centred Practices, Practitioner Responsiveness, Parenting Self-Efficacy Beliefs and Parenting Confidence and Confidence

Purpose
Determine the extent to which family-centred practices was indirectly related to parenting capabilities mediated by practitioner responsiveness and parent self-efficacy beliefs

Study Participants
100+ parents of preschool-aged children involved in five different family resource programs

Measures
Family-centred help giving practices, practitioner responsiveness to parents’ requests for supports or assistance (needs), parent self-efficacy beliefs, and parenting competence and confidence

Methodology
Structural equation modelling was used to evaluate the paths of influence of family-centred practices on parenting capabilities mediated by practitioner responsiveness and parent self-efficacy beliefs
Model for Testing the Influences of Family-Centred Practices on Parenting Competence and Confidence
Standardized Parameter Estimates for the Relationships Among Measures

Indirect Effects of Family-Centred Practices

Fit Indices
CFI = 0.96

*p < .05  ** p < .001.
Finishing Up!

• Final lecturer comments and remarks
• Student questions, comments, challenges, etc.
• Lecturer-student discussion, conversation, dialogue, etc.
• Any other things to clarify or discuss?