

# Role of Theory in Family-Systems Early Childhood Intervention Practices

Carl J. Dunst, Ph.D.

Orelena Hawks Puckett Institute

Asheville, North Carolina, USA

[www.puckett.org](http://www.puckett.org)

---

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

- A. Types of Theories
  - 1. Descriptive, explanatory and intervention theories
  - 2. Desired characteristics of intervention theories
- B. Ecological Systems Theory
  - 1. Bronfenbrenner's systems theory
  - 2. Systems influences on parenting and child behaviour and functioning
- C. From Theory to Practice
  - 1. Example using a system theory for intervention purposes
  - 2. Implications for practice
- D. A Test of a Systems Theory Tenet
  - 1. Parent's use and nonuse of professionally-prescribed intervention practices
  - 2. Lines of family systems research

## Three Types of Theories

- Theories for Description
- Theories for Explanation
- Theories for Intervention

## Descriptive Theories

Theories that describe behavioural or developmental change without any explicit attempt to identify factors associated with differences or variations in rates or patterns of change.

A stage theory such as Jean Piaget's that describe children's cognitive abilities at different levels of development is an example of a descriptive theory (in the absence of implicating assimilation and accommodation as sources of changes in development).

# Explanatory Theories

Theories that include explicit attention to the factors (independent variables) that influence or are related to differences or variations in outcomes of interest (dependent variables).

Albert Bandura's self-efficacy theory which attempts to identify both the antecedents and consequences of self-efficacy beliefs is an example of an explanatory theory.

## Intervention Theories

Theories that focus explicitly on the identification of dynamic or manipulative variables that can be used as interventions (experiences, opportunities, education, therapy, etc.) to influence or improve behavioural or developmental outcomes.

Constructivist theories that attempt to identify learning activities that are associated with a learner's knowledge and skill acquisition where those activities (experiences, opportunities, etc.) are used as interventions to affect changes in child development or parenting competencies are examples of intervention theories.

## Some Desired Characteristics of Intervention Theories

- Include the hypothesized relationships among intervention variables and outcomes of interest (dependent variables)
- The theory constructs can be operationalized in terms of intervention practices
- The theory and its operationalized variables are amendable to empirical investigation
- Should have practical applications for a wide range of family circumstances
- Can be understood and used as a framework for guiding the provision of interventions by practitioners from different disciplines

Example of Using A Theory to Inform  
Early Childhood Intervention and Family Support Practices

Urie Bronfenbrenner's Ecological Theory of Development



# Ecology of Human Development

“The ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by the relations...within and between these immediate settings, as well as the larger social contexts, both formal and informal, in which the settings are embedded.” (Bronfenbrenner, 1977, p. 514)

---

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.

## Bronfenbrenner's Perspective of Parenting Capacity

“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...Parents' evaluations of their own capacity to function, as well as their view of their child, are related to such external factors as flexibility of job schedules, adequacy of child care arrangements, the presence of friends and neighbours who can help out in large and small emergencies, the quality of health and social services, and neighbourhood safety. The availability of supportive settings is, in turn, a function of their existence and frequency in a given culture or subculture. This frequency can be enhanced by the adoption of public policies and practices that create additional settings and societal roles conducive to family life.”

(Bronfenbrenner, 1979, p. 7)

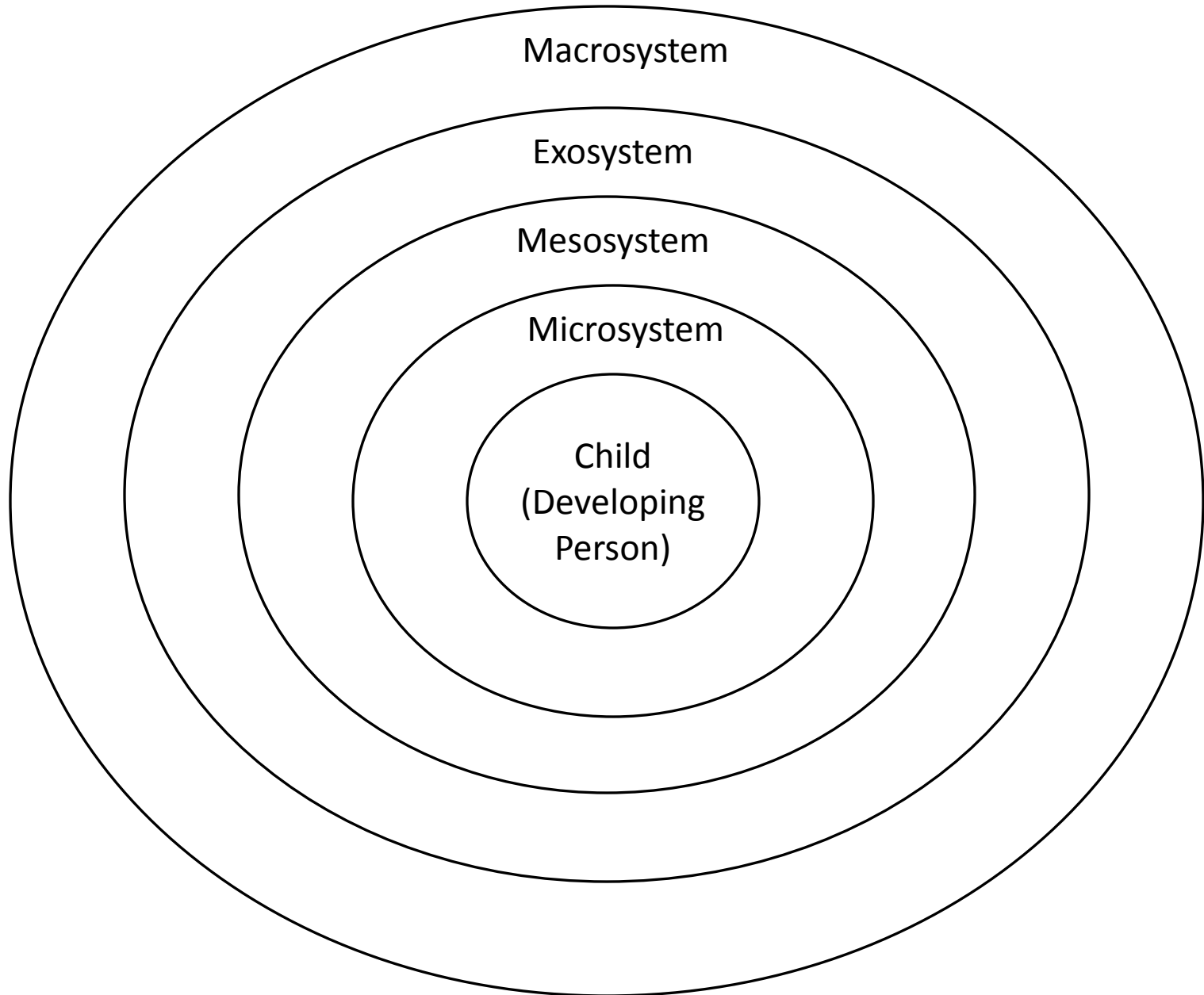
## Early Childhood Intervention in the Context of Social Systems Influences

“Intervention programs that place major emphasis on involving the parent directly in activities fostering the child’s development are likely to have constructive impact at any age, but the earlier such activities are begun, and the longer they are continued, the greater the benefit to the child. One major problem still remains...[Many] families live under such oppressive circumstances that they are neither willing nor able to participate in the activities required by a parent intervention program. Inadequate health care, poor housing, lack of education, low income and the necessity for full-time work...rob parents of time and energy to spend with their children.”  
(Bronfenbrenner, 1977, pp. 465-466).

---

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). New York: Brunner/Mazel

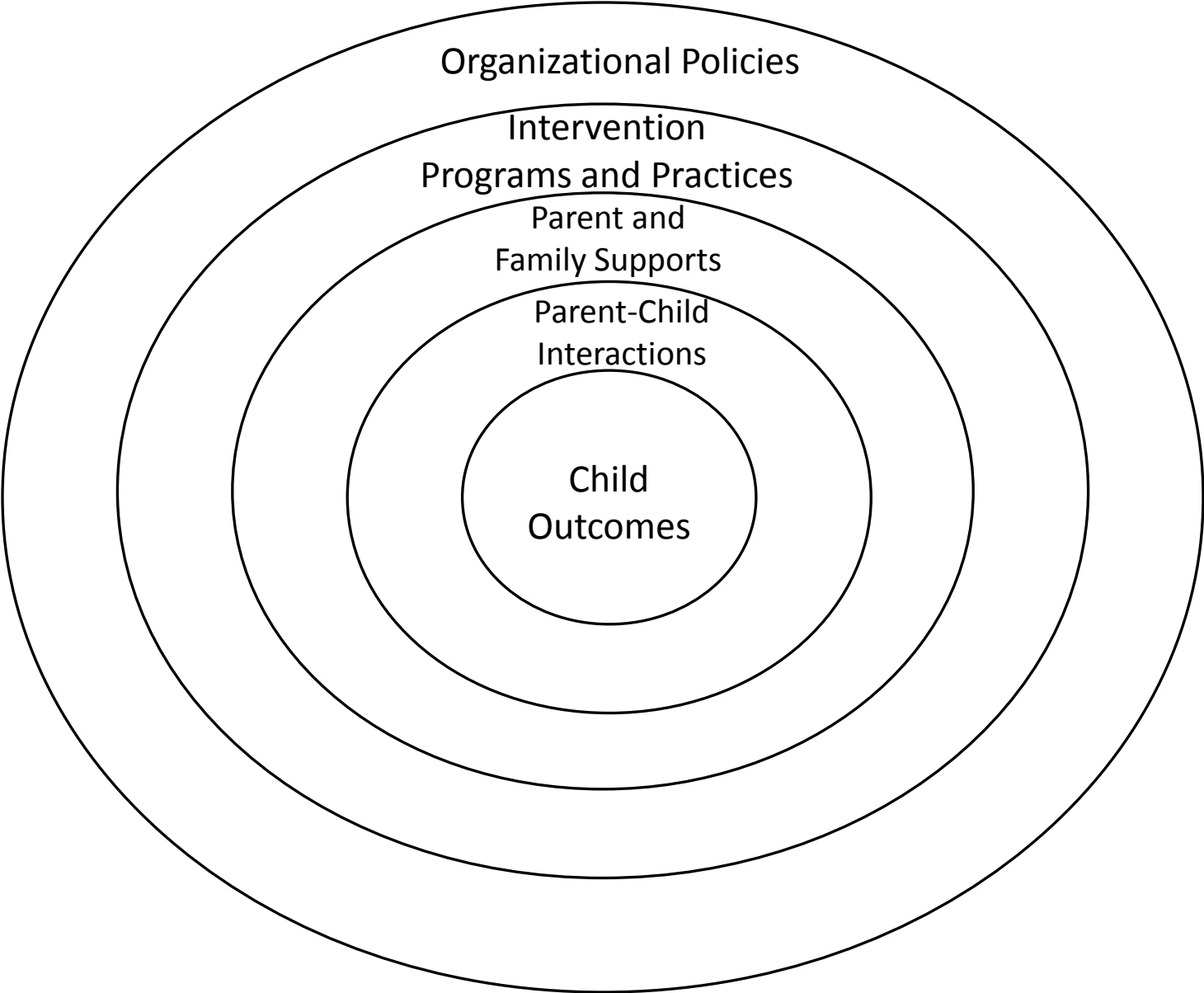
# Bronfenbrenner's Conceptualization of Nested Environments



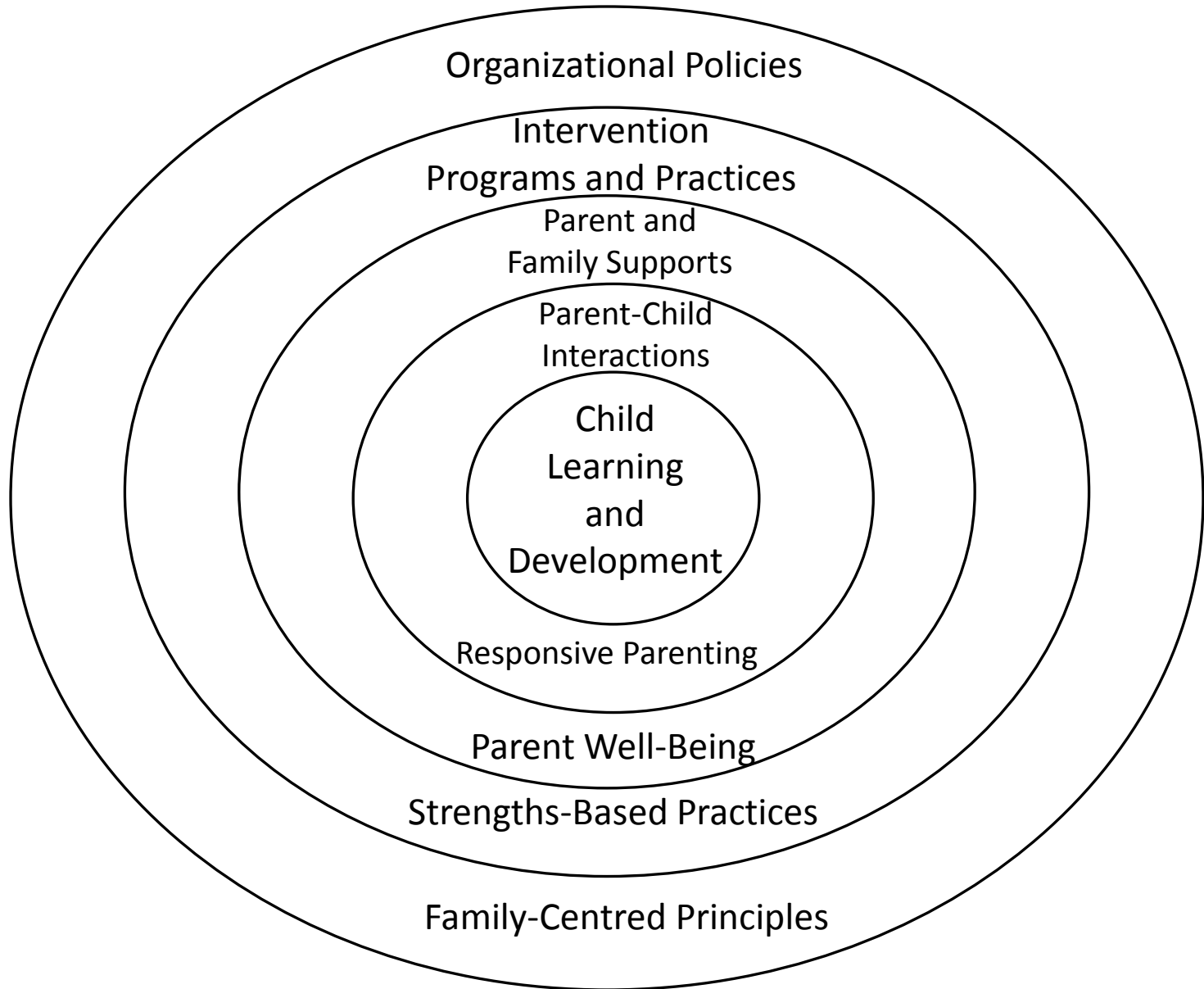
## Bronfenbrenner's Terms of Reference

- Microsystems are the (activity) settings in which an individual interacts with the social and non-social environment (e.g., parent-child interactions)
- Mesosystems are the relationships that exist among microsystems and how they influence one another (e.g., influences of spousal support on mother-child interactions)
- Exosystems are the informal and formal supports and resources that directly or indirectly affect what occurs in different microsystems (e.g., early childhood intervention practices)
- Macrosystems are the cultural, economic, and broader-based extrafamily factors that shape and influence how persons behave in more everyday activity settings (e.g., role of cultural beliefs in influencing parenting practices)

# From Theory to Practice



# From Theory to Research (continued)



## A Very Modest Test of A Ecology Systems Theory Tenet

- At the time I became Director of the Family, Infant and Preschool Program (Morganton, North Carolina), many staff complained about (and blamed) families for not carrying-out professionally prescribed early intervention practices. To the dismay of the staff, I suggested that perhaps the families did not value what we asked them to do or they had other priorities (needs) that competed with what we asked them to do.
- A small scale study was carried-out where Hope Leet and myself tested the tenet that the less adequate were family resources, the less a parent would implement professionally prescribed interventions.



# Relationship Between Adequacy of Family Resources and Parent Engagement in Professionally-Prescribed Interventions

## *Purpose*

Test the hypothesis that adequacy of family resources would be correlated with parent commitment to carrying-out professionally-prescribed interventions

## *Sample*

45 mothers of infants and toddlers with disabilities or developmental delays

## *Measures*

Family Resource Scale and an investigator-developed scale of parent commitment to carrying-out professionally prescribed interventions

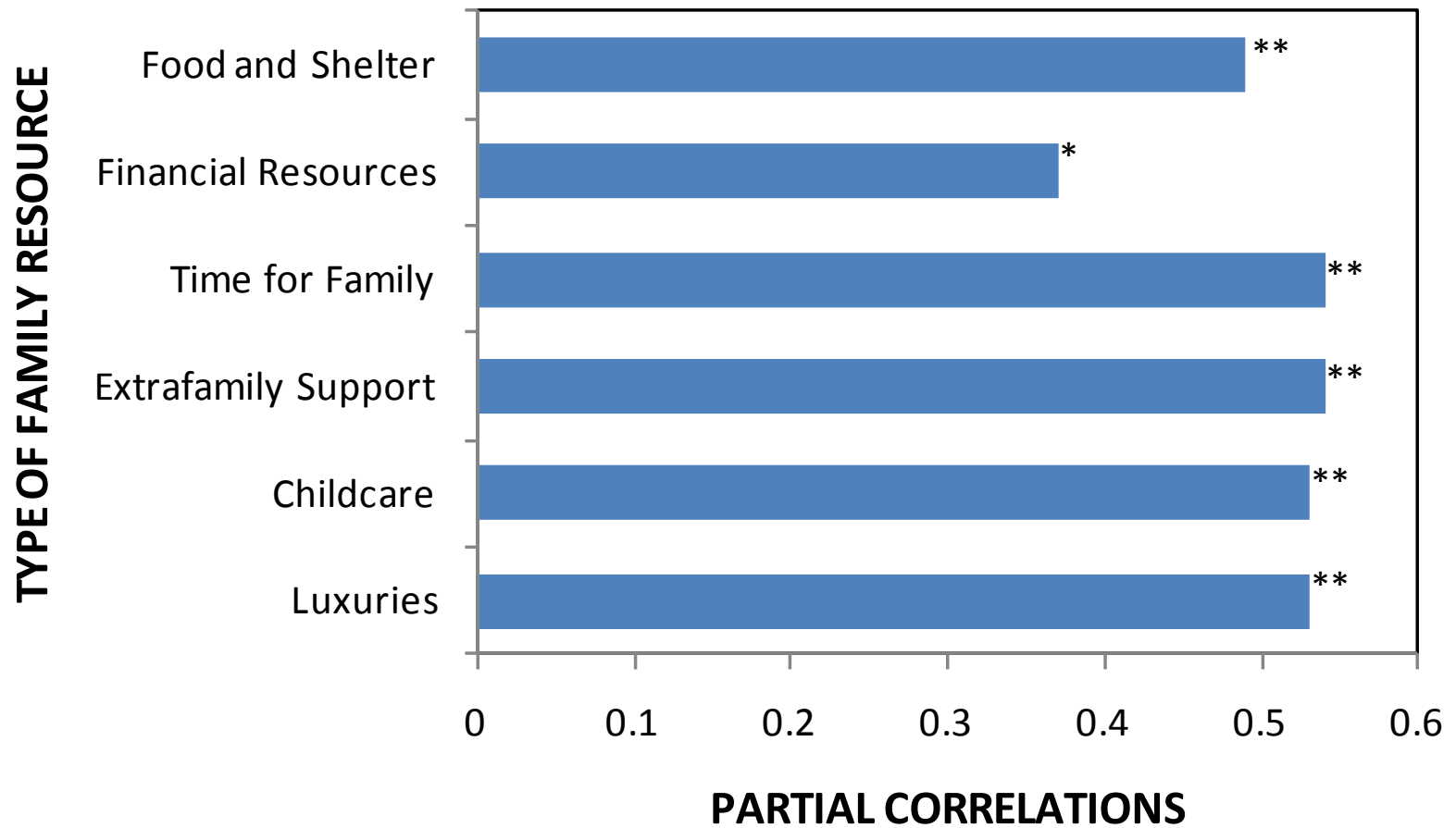
## *Method of Analysis*

Correlations between the two measures partialling out the effects of mothers' age, mothers' education level, family income, and family socioeconomic status

---

Dunst, C.J., & Leet, H. E. (1987). Measuring the adequacy of resources in households with young children. *Child: Care, Health and Development*, 13, 111-125.

## Partial Correlations Between Adequacy of Family Resources and Parent Commitment to Early Intervention



\* $p < .01$ . \*\*  $p < .001$ .

## Examples Lines of Systems Theory Research

The commitment to intervention study was the first investigation testing a tenet of systems theory. Other lines of research investigating systems theory hypothesized relationships have included, but have not been limited to:

- Relationship Between Family Needs and Parent/Family Priorities
- Relationship Between Social Support and Parent and Family Well-Being
- Influences of Family Strengths on Family Functioning
- Professional Help Giving Practices and Parent Empowerment

## Finishing Up!

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