

# **Knowledge & Skills of Early Childhood Intervention Doctoral Consortium Scholars at Program Entry**

Emily Jackson & Lauren Mangold

Leadership Education in Neurodevelopmental and Related Disabilities (LEND)

UConn Center for Excellence in Developmental Disabilities

# Research Questions

**RQ 1:** How do doctoral scholars participating in an early childhood consortium for personnel preparation report their knowledge and skills in target competencies at program entry?

**RQ 2:** What learning experiences do scholars predict will increase self-efficacy perceptions (confidence and competence)?

# Definition: Self-Efficacy

- “Beliefs in one's capability to organize and execute the courses of action required to manage prospective situations”
- Factors loading onto self-efficacy construct include performance (competence) and energy (confidence)
  - Competence: “what individuals knew about their ability [...] based on the individual’s previous experience of the task”
  - Confidence: “a judgement which influenced whether an individual was willing or not to undertake an activity” including risk assessment

# Definitions: Knowledge & Skills

- Knowledge is internal cognition
  - “body of facts, principles, theories and practices that is related to a field of work or study”
- Skills are external actions
  - “ability to apply knowledge [...] to complete tasks and solve problems”

# Background

- IDEA Part C
  - Aim: comprehensive, interagency systems of services & supports
  - Funds earmarked for personnel preparation
- Early Childhood Intervention Doctoral Consortium (ECiDC)
  - OSEP funds 28 fellowships
  - Interdisciplinary
  - 10 participating IHEs
  - Administered through UConn UCEDD

# Method: Survey Construct & Instrument

- Literature review: self-efficacy in personnel preparation
- Investigator-developed pilot survey measure of baseline knowledge and skills
  - Operationalize competencies specified in handbook for multi-component ECiDC program along a 3-point Likert scale
- Proposed outcomes
  - Assess participants' self-efficacy (confidence and competence) for achieving desired program outcomes
  - Assess participants' preparedness (knowledge and skills) to fulfill program competencies and learning needs

# Sample Survey Item

Major Area	Competency Area		Knowledge	Skills
<b>Population Specific Pedagogy:</b> Designs, implements and evaluates systematic, evidenced based interdisciplinary interventions with families and professionals to facilitate the development and learning of infants and young children with intellectual and developmental disabilities (IDD) in the home and inclusive community and classroom environments.	<b>Family-Centered Practice</b>	<b>Competence</b>	I know the impact of family systems, including the role of at least 10 different cultures, on child development and interventions.  <b>1</b> Disagree <b>2</b> Neutral <b>3</b> Agree	I have taught someone else about the impact of family systems including the role of at least 10 different cultures, on child development and interventions.  <b>1</b> Disagree <b>2</b> Neutral <b>3</b> Agree
		<b>Confidence</b>	I address the impact of family systems (including the role of culture) on child development and interventions.  <b>1</b> Disagree <b>2</b> Neutral <b>3</b> Agree	I advocate for the principles of family centered practice in all interactions with or about diverse families with infants or young children with IDD across multiple settings.  <b>1</b> Disagree <b>2</b> Neutral <b>3</b> Agree
		What experiences would best support your learning in this area?		

# Method: Participants & Attrition

- Inclusion criteria
  - Complete at least 80% of the individual items on the instrument
  - Matriculated in the original ECiDC Year 1 cohort in Fall 2020
- Exclusion criteria
  - Discontinued program as of April 2021



## Method: Survey Distribution

- Survey piloted by doctoral students outside of cohort
  - Addressing clarity and construct
- Survey will be introduced in ECI DC cohort meetings
- Distributed to cohort via email and invited to complete survey

# Results

- Analyze survey data
  - Quantitative data from Likert scales
  - Qualitative data from probe questions
- Identify areas of strength and weakness
- Inform curriculum development and learning experiences
  - Better reflect the needs of scholars

# Discussion

- Serves as a baseline measure
- Allows for metric to track growth
- Limitations
  - Participants must reflect on experience prior to beginning the program
  - Small sample
- Could apply similar measures to other training grants

# References

Bandura, A. (1997). *Self-efficacy : the exercise of control*. W.H. Freeman.

Bruder, M.B. (2016). Personnel development practices in early childhood intervention. In B. Reichow, B. Boyd, E.E. Barton, & S.L. Odom, (Eds.), *Handbook of early childhood special education*. New York: Springer.

Bruder, M. B., Dunst, C., Maude, S. P., Schnurr, M., Van Polen, A., Frolek Clark, G., Winslow, A., & Gethmann, D. (2020). Practitioner appraisals of their desired and current use of the 2014 Division for Early Childhood recommended practices. *Journal of Early Intervention*, 42(3), 259-274. doi: 10.1177/1053815119886105

Bruder, M. B., Dunst, C. J., Mogro-Wilson, C., & Stayton, V. (2013). Predictors of confidence and competence among early childhood interventionists *Journal of Early Childhood Teacher Education*, 34(3), 249-267. doi:10.1080/10901027.2013.816806

Dunst, C.J., Bruder, M.B., Maude, S.P., Schnurr, M., Van Polen, A., Clark, G.F., Winslow, A., & Gethmann, D. (2020). Predictors of practitioners' use of recommended early childhood intervention practices. *International Education Studies*, 13(9), 36-47.

# References, continued

Dunst, C. J., & Bruder, M. B. (2014). Preservice professional preparation and teachers' self-efficacy appraisals of natural environment and inclusion practices. *Teacher Education and Special Education, 37*(2), 1210132. doi:10.1177/0888406413505873.

European Commission. (2008). European Qualifications Framework Series. Publications Office of the European Union, Luxembourg.

Individuals with Disabilities Education Act, 20 U.S.C. Chapter 33 Subchapter III § 1435 (2004). Retrieved from <https://www.law.cornell.edu/uscode/text/20/1435>

Stewart, J., O'Halloran, C., Barton, J. R., Singleton, S. J., Harrigan, P., & Spencer, J. (2000). Clarifying the concepts of confidence and competence to produce appropriate self-evaluation measurement scales. *Medical education, 34*(11), 903-909.

University of Connecticut A J Pappanikou Center for Excellence in Developmental Disabilities (2020). Early Childhood Intervention Doctoral Consortium: Scholar Handbook 2020-2021.