

# Determining Human Development Competency Training Needs of FCS Extension Professionals

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# Introduction - Extension work

## Challenges:

- Diverse set of job responsibilities
- Clientele needs may differ significantly by county/region
- Educators' degrees often not directly related to the work employees are doing
- Can lead to burnout



# Introduction - Competencies

- The knowledge, skills, and other characteristics related to high performance.
  - Competency models - provide a framework for the specific knowledge, skills, and characteristics that are necessary for a specific field.
- Useful in providing direction for training Extension employees.
- Assessments can help employers target training to address the needs of employees.
- Targeted training contributes to:
  - Increased employee success
  - Decreased employee turnover



# Introduction - Self-Efficacy

- An individual's expectation that they are able to execute the necessary actions to produce a certain outcome.
- Benefits of self-efficacy:
  - positively related to work design characteristics and job satisfaction
  - can improve innovativeness in implementing programs among FCS agents

*Note: This presentation highlights only the Human Development knowledge areas, concepts, and competencies.*

# Research Questions

- Difference between FCS agents' and specialists' perceived importance of Human Development competencies relative to agents' success on the job?
- FCS agents' perceived ability of Human Development competencies?
- Related Human Development competency training needs?



# Methods

1. Obtained UT Extension FCS competency assessment tool
  - a. Identified four knowledge areas
    - i. Financial Education
    - ii. Health & Safety
    - iii. Human Development
    - iv. Nutrition & Food Safety
  - b. Areas are comprised of concepts, which are divided further into 140 total competencies
2. Developed two surveys, adapted from the UT Extension tool
  - a. First survey: All Mississippi State University (MSU) Extension FCS personnel asked to report their perceived importance (I) of the Human Development knowledge areas, concepts, and competencies.
  - b. Second survey: Only FCS agents asked to assess their perceived ability (A) for each Human Development competency.

# Analyses

## 1. Pearson's Chi Square test in the Crosstabs procedure

- Used to analyze the relationship between the specialists' and agents' perceived importance of the competencies within each Human Development concept

## 2. Descriptive statistics

- Used to report agents' perceived ability for each Human Development competency

## 3. Rank-Order Method

- New method of analysis similar to Borich method



# Rank-Order Method

1. Wilcoxon Signed-Rank Test is performed
  - Identifies the number of occurrences when respondents' perceived ability (A) of a competency either exceeds, is equal to, or is less than their perceived importance (I) of the competency.
2. The number of occurrences within each of the three categories is converted to a percentage.
3. A relative weight is assigned to each category, based on three assumptions.
  - If  $A < I$ , training is required.
  - If  $A > I$ , training is not required.
  - If  $A = I$ , professional competency is sufficient.



# Research Question 1 Results

Is there a difference between FCS agents' and specialists' perceived importance of human development competencies relative to agents' success on the job?

There was a significant difference between how specialists and agents perceived the importance of family stress and crisis ( $p=.037$ ), child development ( $p=.035$ ), and relationship building ( $p=.06$ ).

This figure shows which competency Agents and Specialists indicated was the most important.

Concept	Pearson Chi-Square Asymptotic Significance (2-sided)	Competency	Extension Agents	Extension Specialists
Family Stress and Crisis	0.037	Understands the causes of normal family stress	11	4
		Recognizes the major causes of family crises	10	0
		Is aware that there are special needs in families	1	1
Child Development	0.035	Can describe risk & protective factors associated with positive and negative developmental outcomes	7	5
		Can identify the components associated with quality child care settings ranging from infancy to teens	15	0
Relationship Building	0.06	Understands basic interpersonal communication and conflict management practices	14	2
		Recognizes the strengths of positive intercultural and intergenerational relationships	2	1
		Can identify strategies for enhancing positive self-concept and social skills	6	1
		Can identify characteristics of positive couple relationships	5	0

# Discussion - FCS agents' and specialists' perceived importance of Human Development competencies








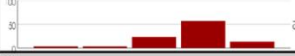




Competency	Specialists	Agents
Risk and protective factors (Concept: <i>Family Stress and Crisis</i> )	100% (5/5) reported this as the most important competency within this concept	32% (7/22) identified this as the most important competency within this concept
Causes of normal family stress (Concept: <i>Child Development</i> )	80% (4/5) reported this as the most important competency within this concept	50% (11/22) identified this competency as the most important competency within this concept
Basic interpersonal communication and conflict management practices (Concept: <i>Relationship Building</i> )	50% (2/4) reported this as the most important competency within this concept	52% (14/27) identified this as the most important competency within this concept

There appears to be a meaningful difference between specialists' and agents' perceived importance of competencies within the family stress and crisis and child development concepts.

# Research Question 2 Results

What is FCS agents' perceived ability of human development competencies?

Most agents' perceive their ability across the Human Development competencies to be average or just above average.

Perceived Ability	Competency	Concept
	Understands the causes of normal family stresses	Family Stress & Crisis
	Recognizes the major causes of family crises	
	Is aware that there are special needs in families	
	Can describe risk & protective factors associated with positive and negative developmental outcomes.	Child Development
	Can identify the components associated with quality child care settings ranging from infancy to teens.	
	Able to identify community resources to meet the needs of families.	Parenting
	Understands how to meet children's basic nutritional, health, and safety needs.	
	Understands the importance of meeting children's need for love and acceptance.	
	Understands the developmental stages of children.	
	Understands appreciate guidance techniques for children.	
	Understands the importance of parents taking care of self	
	Understands the importance of advocacy for children and families.	

Well Below ← Average → Well Above

# Discussion - FCS agents' perceived ability of human development competencies

Agent's self-perceived knowledge across competencies was about average.

- There is room for growth, indicating a relative need for additional in-service training.
- Agents' perceived competence may be different than their actual competence as measured by a knowledge assessment.

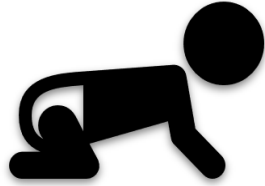
# Research Question 3 Results

Which Human Development competencies warrant training based on relative need?

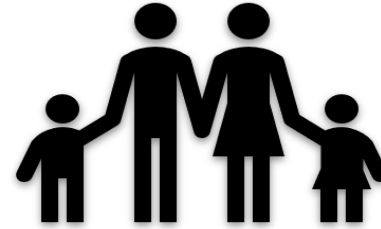
Competency	Wilcoxon Sign Count				Wilcoxon Counts converted to %						
	Negative	Positive	Tie	n	A<I	A>I	A=I	A<I (-1)	A>I (1)	A=I (0)	RSS
Describing risk and protective factors associated with positive and negative developmental outcomes	18	5	7	30	60	16.67	23.33	-60	16.67	0	-43.33
Identifying the components associated with quality child care settings ranging from infancy to teens	17	5	8	30	56.67	16.67	26.67	-56.67	16.67	0	-40
Being aware that there are special needs in families	11	11	4	26	42.31	42.31	15.38	-42.31	42.31	0	0
Understanding the importance of advocacy for children and families	10	10	10	30	33.33	33.33	33.33	-33.33	33.33	0	0
Understanding the developmental stages of children	8	9	13	30	26.67	30	43.33	-26.67	30	0	3.33
Understanding appreciate guidance techniques for children	9	11	10	30	30	36.67	33.33	-30	36.67	0	6.67

Six of the 22 competencies had either negative RSS, equivalent RSS or slightly positive RSS indicating a relative need for additional training.

# Discussion – Relative need for human development competencies training



The two competencies with a negative RSS, meaning agents' perceived ability ( $A$ ) is less than ( $<$ ) their perceived importance ( $I$ ) of the competency, were the two child development competencies. It appears that child development is a concept in which targeted in-service training for agents is warranted.



Of the remaining four competencies with either equivalent ( $A = I$ ) or slightly positive ( $A > I$ ) RSS, three of the four are competencies within the parenting concept. This would indicate that parenting is another concept in which additional in-service training may be warranted.

# Limitations

- Respondents forced to rank order the competencies in comparison with one another, rather than ranking the importance of each competency independently.
- Small sample size, (N = 30 agents) limits the generalizability of the findings.
- The analysis method utilized in this study is a mathematical equation, not a statistical test.
- Utilized an assessment of self-perceived competence rather than an objective measure to assess actual knowledge/competence.

# Implications and Future Directions

- Implications

- Allows Specialists to make data-driven decisions regarding which competencies to prioritize in competency-based, professional development in-service training opportunities for Agents.
- Data from this research affect how Mississippi State Extension specialists plan and implement competency-based in-service training for FCS agents in the future.

- Future Directions

- Following up with an assessment of agents' actual knowledge of the competencies as a more objective and likely accurate indicator of how to prioritize in-service training.





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