

Preparing for the Future: Evaluating the Employability Skills of 4-H Extension Agents

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Introduction, Purpose, and Objectives

The longstanding mission of 4-H has been to educate youth on agriculture and prepare them for a bright future (NMSU, 2024). Unfortunately, many employers claim that youth entering adulthood are unprepared for entry-level positions and do not possess the employability skills necessary to be successful in the workplace (Institute of Student Employers, 2018; Robinson & Garton, 2008). This is particularly concerning due to the necessity of employability skills in the agricultural industry (Robinson & Garton, 2008). This issue is compounded by the difficulty of recruiting and retaining high-quality extension agents (Benge & Beattie, 2021). There are numerous national efforts to draw quality agents into the profession, including training programs, professional development, and incentives (Ellison, 2011; Garst et al., 2007). Turnover among extension 4-H agents could contribute to reduced employability skills in rural youth. Furthermore, the attrition among extension agents could be due to a lack of personal employability skills (Lakai et al., 2014). This study aimed to assess the employability skills of 4H extension agents in New Mexico. The following research objective guided the study:

- 1.) Describe the self-perceived employability skills of 4-H extension agents in New Mexico.

Conceptual Framework

This study was executed using the employability skills framework developed by the Perkins Collaborative Resource Network (PCRN, 2022). This network developed this conceptual model to depict the employability skills necessary for success in the workplace. Developing a deeper understanding of the employability skills of extension agents in New Mexico will assist in providing targeted training and professional development to retain and recruit highly qualified agents.

Methods

This study was guided by a descriptive correlational research design. A census was conducted using the 49 New Mexico extension agents with at least some 4-H duties within their county. Overall, we received 19 responses, with three responses missing critical data and being excluded from the descriptive statistics. We distributed the survey four times in weekly intervals to stimulate responses and improve the response rate (Dillman et al., 2014). This effort produced a 38.8% response rate.

The instrument in the study was developed utilizing the employability skills framework developed by the Perkins Collaborative Resource Network (PCRN, 2022). The employability skills framework consists of nine skill areas with 42 subskills. The participants were asked to rate their personal abilities within each subskill using a Likert scale ranging from 1 = *No Confidence*, 2 = *Somewhat Confident*, 3 = *Moderately Confident*, 4 = *Very Confident*, and 5 = *Extremely Confident*. The instrument reliability was assessed *post hoc* using Cronbach's alpha, which ranged from .75 to .93. According to Ary et al., 2010 these reliability coefficients meet the necessary threshold for a reliable instrument. The instrument's validity was assessed by a

committee of three New Mexico State University faculty and graduate students and was deemed acceptable. Additionally, past research instruments utilizing the employability skills framework have been assessed for reliability and validity and were deemed suitable (Norris et al., 2023). The data in this study was analyzed using SPSS version 28.0. The research objective was executed using descriptive statistics, including central tendencies and standard deviations.

Results

The research objective for this study was to describe the employability skills of 4-H extension agents in New Mexico. The employability skill areas in which 4-H agents rated their abilities the highest were Personal Qualities ($M = 4.37$, $SD = .54$), Interpersonal Skills ($M = 4.29$, $SD = .66$), and Critical Thinking Skills ($M = 4.25$, $SD = .55$). Skills such as reading, working independently, integrity, and working with others were rated the highest. The lowest-rated employability skill areas included Systems Thinking Skills ($M = 3.50$, $SD = .74$), Technology Use Skills ($M = 3.56$, $SD = .89$), and Resources Management Skills ($M = 3.81$, $SD = .63$). The lowest-rated individual skills were applying scientific and mathematical principles and improving and monitoring systems. The results of the analysis are reported in Table 1.

Table 1

Descriptive Statistics for the Employability Skills of Extension Agents

Skill Area	<i>M</i>	<i>SD</i>
Applied Academic Skills	3.83	.65
Critical Thinking Skills	4.25	.55
Resource Management Skills	3.81	.63
Information Use Skills	4.09	.62
Communication Skills	4.16	.58
Systems Thinking Skills	3.50	.74
Technology Use Skills	3.56	.89
Personal Qualities	4.37	.54
Interpersonal Skills	4.29	.66

Note. $n = 16$

Conclusions and Recommendations

The results of this study suggest that 4-H extension agents in New Mexico felt *Moderately Confident* to *Very Confident* in their personal employability skills. The skills ranked the lowest included using technology, modifying systems, managing resources, and applying math and science. While these results are similar to Norris et al. (2023), they are concerning, considering New Mexico's extension services goal is to help youth "...develop leadership and management skills, positive self-esteem, effective communication skills, a solid sense of personal responsibility and the ability to make sound decisions" (NMSU, 2024). This goal will likely require managing extensive resources, integrating technology to reach a broader audience, and evaluating and modifying existing systems to increase scope. These results guided us in recommending professional development for New Mexico 4-H extension agents on technology integration, program/system evaluation, and resource management. Additionally, research should be conducted to delineate employability skill gaps among extension agents further.

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