

# A Cross-sectional Assessment of Extension Specialists' Evaluation Training Needs

O. Omotilewa<sup>1</sup>, O. Adedokun<sup>2</sup>, J. Corum<sup>3</sup>

## Abstract

Extension specialists play a crucial role in designing, implementing, and assessing evidence-based Extension programs and outreach to address community needs, yet their evaluation training needs remain underexamined. This study reports the findings of a needs assessment conducted to identify priority evaluation training needs of Extension specialists at the University of Kentucky (UK) to inform targeted capacity-building efforts. Using a cross-sectional survey, UK Extension specialists rated their training needs across 25 evaluation topics. Findings revealed seven priority training needs including determining the economic value of programs using return-on-investment or cost-benefit analyses; developing measurable long-term outcomes to assess program impact; conducting follow-up surveys; developing evaluation plans to address what, why, when, and how to evaluate program outcomes/impact; developing effective quantitative tools; analyzing quantitative program evaluation data; and using data visualization to communicate evaluation findings. Further analysis showed that 21 of the 25 evaluation topics clustered into four core areas: quantitative evaluation methods, evaluation outcomes, program planning and reporting, and qualitative evaluation methods. In addition, the results indicated that training needs varied by program area and years of employment. These findings highlight the importance of using data-driven approaches to identify Extension specialists' priority evaluation training needs and to inform tailored capacity-building efforts.

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1. Odunayo Omotilewa, Post-doctoral Scholar, Department of Community and Leadership Development, University of Kentucky, [odunayo.omotilewa@uky.edu](mailto:odunayo.omotilewa@uky.edu),  <https://orcid.org/0009-0008-4516-7804>
  2. Omolola A. Adedokun, Assistant Professor, Department of Community and Leadership Development, University of Kentucky, [lola.adedokun@uky.edu](mailto:lola.adedokun@uky.edu),  <https://orcid.org/0000-0002-0705-2976>
  3. Jacqueline Corum, Agriculture Extension Associate, Department of Community and Leadership Development, University of Kentucky, [jacqueline.corum@uky.edu](mailto:jacqueline.corum@uky.edu),  <https://orcid.org/0009-0001-4491-6673>

## Introduction and Problem Statement

The importance of evaluation capacity for agricultural development cannot be overemphasized. The overarching goal of agricultural development is to improve agricultural practices and livelihoods. However, there has been growing pressure for publicly funded agricultural development research and outreach organizations, including the United States Cooperative Extension Services, to demonstrate their impact (Kelsey 2018; Turner et al., 2022). Agricultural development funding agencies demand accountability and clear evidence of how programs have improved the lives and livelihoods of communities and participants (Kelsey, 2018). Yet, many of agricultural development and Extension organizations struggle to demonstrate credible evidence of program effectiveness due to gaps in the evaluation competencies of their personnel (Halbritter et al., 2021; Kelsey, 2018; Turner et al., 2022; Wright et al., 2025).

Within the United States Cooperative Extension Services, Extension specialists are critical to the knowledge translation process. At the University of Kentucky (UK) Extension, the term “specialists” typically refers to campus-based, tenure- and non-tenure track faculty specialists, non-faculty specialists, and program associates. As content experts, specialists develop and deliver programming and provide in-service training to enhance county-based Extension agents’ capacity to implement evidence-based programming that improves the lives and livelihoods of the communities they serve. (Guion et al., 2007; Rodgers et al., 2012). The role of specialists demands strong research and program evaluation skills, including program planning, implementation, evaluation, and interpretation of research findings (Guion et al., 2007), given their job requires the ability to design high-quality programs and generate credible evidence of program impact (Ghimire & Martin, 2013; Hernandez, 2025; Hetherington et al., 2019; Israel et al., 2009; McClure et al., 2012; Narine & Ali, 2020).

Previous studies have conducted needs assessments to identify Extension professionals’ evaluation training needs and used the findings to guide evaluation capacity building efforts (Diaz et al., 2020; Donaldson et al., 2023; Franz & Archibald, 2018; Hernandez, 2025; Hetherington et al., 2019; Narine & Ali, 2020). However, most of these studies focused primarily on the evaluation needs of county-based Extension agents (Lamm et al., 2011; McClure et al., 2012; Narine & Harder, 2021; Strong & Harder, 2011; Vengrin, 2016) while the evaluation needs of Extension specialists remain underexplored. The few studies (e.g., Hernandez, 2025; Narine & Ali, 2020) that have assessed specialists’ evaluation training needs identified how to measure program outcomes and impact, collecting and reporting qualitative and quantitative data, data analysis, and evaluation planning as priority areas of need for specialists.

To address this gap, we conducted a survey to identify the priority evaluation training needs of UK Extension specialists with the goal of using the data to inform the development of targeted professional development initiatives aimed at strengthening their evaluation capacity.

## Theoretical and Conceptual Framework

Evaluation Capacity Building (ECB) is a “systematic and intentional process designed to strengthen individuals’ and organizations’ abilities to conduct quality program evaluation and apply evaluation findings” (Bourgeois et al., 2023; Hetherington et al., 2019). The primary focus of ECB is to build knowledge and skills needed to support program evaluation among targeted groups (Bourgeois et al., 2023; Franz & Archibald, 2018). In Cooperative Extension Services, ECB has been widely used to strengthen professionals’ evaluation competencies that can be applied across program contexts, improve program implementation, and generate credible evidence (Franz & Archibald, 2018; Hetherington et al., 2019). Prior research suggests that Extension professionals vary in their evaluation skills (Franz & Archibald, 2018; Hetherington et al., 2019; Narine & Ali, 2020), highlighting the importance of identifying their unique evaluation need. In addition, resources are limited, and being able to determine the most important training needs of specialists is essential for focusing ECB efforts on what matters the most. As a result, we conducted a needs assessment to identify the priority evaluation training needs of Extension specialists.

To operationalize the ECB approach, we used Witkin’s three-phase needs assessment model as a methodological framework to examine the evaluation training needs of UK Extension specialists (Altschuld & Watkins, 2014; Witkin, 1984). Witkin viewed needs assessments as consisting of three sequential phases: pre-assessment, assessment, and post-assessment. The pre-assessment phase, also known as the exploratory phase, focuses on gathering existing information to understand a situation and to determine whether a formal needs assessment is needed. The assessment phase involves collecting new information to have a deeper understanding of the needs identified in the pre-assessment phase. This phase typically involves conducting literature reviews, collecting data, analyzing data, and documenting findings. The final phase, post-assessment, focuses on using the documented findings to develop strategies that address the identified needs.

In the pre-assessment phase of this study, we reviewed anecdotal information from informal listening sessions with UK Extension professionals that suggested gaps in their program evaluation and reporting skills. These findings necessitated a formal needs assessment to identify specialists’ evaluation training needs with the aim of using the results to guide targeted ECB efforts. During the assessment phase, we reviewed existing literature on Extension professionals’ evaluation competencies and evaluation capacity building (e.g., McClure et al., 2012; Narine & Ali, 2020) to identify essential evaluation skills or topics for Extension professionals. We then incorporated these topics into a survey designed to gather information from UK Extension specialists. We also reviewed literature (e.g., McClure et al., 2012) on strategies that could be used to address the identified needs. In the post-assessment phase, we used the needs assessment findings to identify priority areas of need for UK Extension specialists and to inform ECB strategies. For example, we shared the findings with the UK Extension Evaluation Advisory Committee, comprising Extension agents, specialists, and

administrators, who confirmed that the results align with their perspectives on specialist evaluation training needs.

## Purpose

In line with Witkin's approach, this study aims to address three research questions:

1. What are the top priority program evaluation training needs of UK Extension specialists? The goal of this question is to identify which evaluation training needs should be prioritized to guide targeted capacity-building efforts.
2. What are the categories of evaluation training needs among specialists? This question aims to examine if the 25 evaluation items assessed can be statistically categorized into a smaller subset of key evaluation skills (i.e., identify underlying constructs), with the goal of determining which topics can be combined into a single training session.
3. How do the underlying constructs vary by education level, program area, and years of Extension service? This question aims to assess whether there is a need for differentiated training among specialists.

## Methods

We used a cross-sectional survey design for data collection. All UK Extension specialists were invited to complete a voluntary evaluation training needs assessment survey, which was distributed via a QR code during a state Extension meeting in March 2025. To ensure broader access, the survey link was also shared through the internal listserv, allowing those unable to attend the meeting to complete the survey. At the time of data collection, 60 Extension faculty and 48 specialists/associates were employed at UK Extension. Of these 108 employees, 75 completed the survey, yielding a response rate of 69.4%.

The survey included 25 items representing core evaluation topics focused on program and evaluation planning, measuring program impacts and outcomes, data collection and analysis methods, and evaluation reporting. The survey asked respondents to rate their need for education/training on these items on a five-point scale ranging from "very low need" (1) to "very high need" (5). We conducted reliability testing using Cronbach's alpha, and the 25 items demonstrated very strong internal consistency ( $\alpha = 0.93$ ). In addition to evaluating training needs, the survey also collected information on participants' demographic characteristics (e.g., gender and education) and employment characteristics (e.g., years of service and Extension program area).

We employed descriptive statistics (including frequency counts, percentages, means, and standard deviations) to summarize participants' demographic and employment characteristics and their ratings of the 25 evaluation items. We chose mean scores over medians as the measure of central tendency for two reasons. First, the response categories for the evaluation items ranged from 1 to 5; in line with Harpe (2015), rating items with "numerical response formats at least five categories in length may generally be treated as continuous data" (p. 842).

Second, all but two of the 25 evaluation items had the same median score of 3, thereby making the identification of top priority items based on median scores more complex. In this situation, the mean scores are more informative for ranking because they are derived from all available information or data points (i.e., sum of all responses to an item divided by total number of responses).

To address our first research question, we calculated the percentile rankings of the mean scores to identify specialists' priority evaluation training needs, defined as items scoring at or above the 75<sup>th</sup> percentile. To address the second research question, we conducted exploratory factor analysis to identify the underlying constructs, i.e., how the 25 evaluation items cluster together into core topics. For the third research question, we conducted independent samples t-test for comparisons involving two groups and ANOVA tests for comparisons involving more than two groups. When ANOVA results indicated statistical significance, we applied Dunnett's post hoc tests to identify specific group differences (Ruxton & Beauchamp, 2008). All analyses were performed using SPSS Version 29, with statistical significance set at  $p < 0.05$ .

## Findings

Table 1 presents the demographic and employment characteristics of specialists who responded to the survey. Majority of respondents identified as female (57%) and had a graduate or professional degree (84%). More than half (56%) reported being employed in their current positions for ten years or less. In terms of programmatic affiliation, approximately 63% were associated with Agriculture and Natural Resources (ANR), 15% with 4-H Youth Development, 21% with Family and Consumer Sciences (FCS), and 8% with Community and Economic Development (CED). The combined percentages exceed 100% because some specialists are affiliated with more than one program area.

**Table 1***Demographic Characteristics of Survey Respondents (N = 75)*

Variable	N	%
Gender		
Female	43	57.33
Male	31	41.33
Missing	1	1.33
Extension program area		
4-H Youth	11	14.67
ANR	47	62.67
FCS	16	21.33
CED	6	8.00
Other	4	5.33
Education		
4-year college	11	14.67
Graduate/professional	63	84.00
Missing	1	1.33
Years of employment		
0–5 years	27	36.00
6–10 years	15	20.00
≥ 11	33	44.00

### Specialists' Priority Evaluation Training Needs

Table 2 presents the evaluation items assessed, arranged in order of magnitude of mean scores. The items marked with an asterisk (\*) represent priority evaluation training needs in the top 75th percentile, with a mean score  $\geq 3.167$  out of a maximum of 5. As shown in Table 2, the analysis yielded seven priority topics: determining the economic value of programs using return-on-investment or cost-benefit analyses; developing measurable long-term outcomes to assess program impact; conducting follow-up surveys; developing evaluation plans to address what, why, when, and how to evaluate program outcomes/impact; developing effective quantitative tools; analyzing quantitative program evaluation data; and using data visualization to communicate evaluation findings.

**Table 2**  
*Specialists' Priority Evaluation Training Needs*

Item	<i>N</i>	<i>MDN</i>	Mean	<i>SD</i>
Determining the economic value of program(s) using return-on-investment or cost-benefit analyses	63	4.00	3.68*	1.01
Developing measurable long-term outcomes to assess program impact	64	3.00	3.50*	0.99
Conducting follow-up surveys to evaluate behavior change and/or program impact	64	3.00	3.36*	1.00
Developing evaluation plans to address what, why, when, and how to evaluate program outcomes/impact	66	3.00	3.29*	0.91
Developing effective quantitative data collection tools for program evaluation	64	3.00	3.20*	1.01
Analyzing quantitative program evaluation data	63	3.00	3.18*	0.99
Using data visualization to communicate evaluation findings	63	3.00	3.16*	1.00
Analyzing qualitative program evaluation data	63	3.00	3.14	0.97
Developing measurable medium-term program outcomes	64	3.00	3.14	1.04
Developing effective qualitative data collection tools	63	3.00	3.13	1.04
Aggregating impacts across multiple programs or multiple offerings of the same program	62	3.00	3.10	0.84
Using existing research to show or predict program impact	63	3.00	3.10	0.98
Interpreting evaluation data to demonstrate program impact	62	3.00	3.03	0.99
Developing measurable short-term program outcomes	64	3.00	3.03	1.11
Collecting real-time data from participants to get feedback on program outcomes	63	3.00	3.02	1.01
Identifying effective indicators of program impact	63	3.00	3.00	0.84
Using evaluation results to improve program implementation	62	3.00	3.00	0.83
Generating scholarly products	63	3.00	2.98	1.02
Developing success stories and/or impact statements to communicate program impact or evaluation findings	63	3.00	2.94	0.90
Navigating IRB processes for evaluation data collection and dissemination	63	3.00	2.94	1.13
Adapting an existing survey/questionnaire for evaluation of multiple programs	64	3.00	2.86	1.13
Creating logic models for program planning and evaluation	65	3.00	2.79	0.96
Developing/using online survey tools such as Qualtrics to collect evaluation data	63	3.00	2.76	1.10
Reporting program data in the Kentucky Extension Reporting System	63	3.00	2.51	1.03
Collecting program evaluation data from youth and children less than 12 years old	64	2.00	2.22	1.28

*Note.* *MDN* = Median; Items with a mean rating  $\geq 3.167$  (top 25%) are marked with an asterisk; *SD* = Standard Deviation.

### Underlying Constructs of Evaluation Training Needs

We conducted an exploratory factor analysis to identify the underlying categories in the survey items. Results verified that the sample size was adequate for a factor analysis, with a Kaiser-Meyer-Olkin (KMO) score of 0.78 and a statistically significant ( $p < .001$ ) Bartlett's test. Following varimax rotation, the results revealed four distinct categories of needs: quantitative evaluation methods, evaluation outcomes, program planning and reporting, and qualitative evaluation methods. Of the 25 items assessed, four (i.e., "collecting program evaluation data from youth and children less than 12 years old," "using existing research to show or predict program impact," "determining the economic value of program(s) using return-on-investment or cost-benefit analyses," and "developing/using online survey tools such as Qualtrics to collect evaluation data") did not load onto any of the four factors that emerged from the analysis. These items were excluded from Table 3. The four emergent themes cumulatively accounted for 62.3% of the total variance after extraction. Each theme comprises highly correlated items that measure a similar construct, as evidenced by their internal consistency (see Table 3). We also examined the relationships among all four themes and found no evidence of high correlations, indicating that each construct represents a distinct area of evaluation training need.

**Table 3**  
*Categories of Training Needs Identified Through Factor Analysis*

Training area	Item	Factor loading	$\alpha$
Quantitative evaluation methods	Developing effective quantitative data collection tools for program evaluation	0.52	0.89
	Conducting follow-up surveys to evaluate behavior change and/or program impact	0.63	
	Analyzing quantitative program evaluation data	0.60	
	Interpreting evaluation data to demonstrate program impact	0.63	
	Using evaluation results to improve program implementation	0.62	
	Aggregating impacts across multiple programs or multiple offerings of the same program	0.73	
	Using data visualization to communicate evaluation findings	0.56	
Evaluation outcomes	Developing evaluation plans to address what, why, when, and how to evaluate program outcomes/impact	0.59	0.87
	Developing measurable short-term program outcomes	0.75	
	Developing measurable medium-term program outcomes	0.86	
	Developing measurable long-term program outcomes	0.66	
	Identifying effective indicators of program impact	0.51	
Program planning and reporting	Creating logic models for program planning and evaluation	0.57	0.81
	Developing success stories and/or impact statements to communicate program impact or evaluation findings	0.75	
	Generating scholarly products	0.65	
	Reporting program data in Kentucky Extension Reporting System	0.84	
Qualitative evaluation methods	Developing effective qualitative data collection tools for program evaluation	0.54	0.83
	Adapting an existing survey/questionnaire for evaluation of multiple programs	0.74	
	Collecting real-time data from participants to get feedback on program outcomes	0.45	
	Analyzing qualitative program evaluation data	0.55	
	Navigating IRB processes for evaluation data collection and dissemination	0.58	

*Note.*  $\alpha$  represents subscale Cronbach's alpha.

### Differences in Underlying Constructs by Education, Program Area and Length of Extension Service

We conducted t-tests and ANOVAs to explore how the underlying constructs and the single items that did not load unto any factors differ by education, program area, and length of Extension service. We calculated participants' scores on each construct as an average of their aggregated responses to the items constituting that construct. Results of an independent samples t-test comparing training needs by education (i.e., those with bachelor's degrees vs those with graduate degrees) showed no statistically significant difference in categories of training needs and in the four items that did not load unto any factors (see Table 4).

**Table 4**

#### *Differences in Evaluation Training Needs by Education Level*

Training area	Bachelors		Graduate		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Quantitative evaluation methods	3.29	0.84	3.13	0.73	0.49
Evaluation outcomes	3.13	0.97	3.18	0.81	-0.12
Program planning and reporting	2.81	0.67	2.77	0.83	0.17
Qualitative evaluation methods	2.90	0.84	3.03	0.81	-0.42
+Youth evaluation data	2.38	1.06	2.20	1.31	0.37
+Predicting program impact	3.25	1.04	3.07	0.98	0.48
+Assessing program value	3.63	0.92	3.69	1.03	-0.19
+Online survey tool	2.25	0.71	2.84	1.13	-2.00

*Note.* \* =  $p < .05$ ; + = Items that did not load unto any factor.

Findings from ANOVA tests exploring differences across program areas (i.e., 4-H, ANR, CED, and FCS) revealed statistical differences that were confirmed by Dunnett T3 post-hoc analyses. Specifically, compared to their FCS counterparts, ANR specialists reported statistically significantly higher need for training on how to measure evaluation outcomes, program planning and reporting, and predicting program impact. However, compared to 4-H and CED specialists, ANR specialists reported a statistically significantly lower need for training on strategies for collecting evaluation data from youth and children (see Table 5).

ANOVA analyses investigating differences in evaluation training needs by years of employment revealed statistically significant differences in three training areas, and Dunnett T3 post-hoc analyses confirmed specific group differences. Specifically, specialists with 11 or more years of service reported a higher need for training in quantitative evaluation methods than those with 6 to 10 years of service. Also, specialists with 0 to 5 years of service reported a higher need for training in program planning and reporting than those with 6 or more years of service. Compared to their colleagues with 6 to 10 years of service, specialists with 5 or less years of Extension service as well as those with 11 or more years of service reported a higher need for training in developing/using online survey tools for evaluation data (see Table 6).

**Table 5**  
*Differences in Evaluation Training Needs by Program Areas*

Training areas	4-H	ANR	FCS	CED	F-Stat
	(n = 11)	(n = 35)	(n = 15)	(n = 4)	
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	
Quantitative evaluation methods	3.21 (0.66)	3.23 (0.84)	2.83 (0.43)	3.39 (0.90)	1.17
Evaluation outcomes	3.16 (0.82) <sup>a</sup>	3.48 (0.72) <sup>a</sup>	2.35 (0.59) <sup>b</sup>	3.45 (0.62) <sup>a</sup>	9.25*
Program planning and reporting	2.90 (0.68) <sup>a</sup>	2.89 (0.86) <sup>a</sup>	2.23 (0.57) <sup>b</sup>	3.19 (0.83) <sup>a</sup>	3.05*
Qualitative evaluation methods	3.02 (0.77)	3.11 (0.87)	2.81 (0.70)	2.80 (0.91)	0.53
*Youth evaluation data	3.36 (1.21) <sup>a</sup>	1.71 (1.12) <sup>b</sup>	2.43 (1.22) <sup>a</sup>	3.00 (0.00) <sup>a</sup>	6.91*
*Predicting program impact	3.09 (0.94) <sup>a</sup>	3.26 (0.96) <sup>a</sup>	2.46 (0.78) <sup>b</sup>	3.75 (1.26) <sup>a</sup>	2.97*
*Assessing program value	3.18 (1.40)	3.74 (0.96)	3.77 (0.73)	4.25 (0.96)	1.38
*Online survey tool	2.82 (0.75)	3.00 (1.16)	2.31 (1.11)	1.75 (0.50)	2.59

*Note.* \* =  $p < .05$ ; + = Items that did not load unto any factor; mean values sharing the same letter are not significantly different from each other as indicated by Dunnett T3 post hoc test.

**Table 6**  
*Differences in Evaluation Training Needs by Years of Service*

Training areas	0-5 years	6-10 years	11 ≥	F-Stat
	(n = 21)	(n = 13)	(n = 32)	
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	
Quantitative evaluation methods	3.25 (0.89) <sup>a</sup>	2.64 (0.52) <sup>b</sup>	3.28 (0.63) <sup>a</sup>	3.81*
Evaluation outcomes	3.36 (0.82)	2.86 (0.83)	3.17 (0.81)	1.50
Program planning and reporting	3.11 (0.91) <sup>a</sup>	2.42 (0.56) <sup>b</sup>	2.69 (0.75) <sup>a</sup>	3.39*
Qualitative evaluation methods	3.13 (0.88)	2.77 (0.65)	3.03 (0.81)	0.80
*Youth evaluation data	2.24 (1.26)	2.25 (1.29)	2.19 (1.33)	0.01
*Predicting program impact	3.10 (1.18)	2.92 (1.00)	3.17 (0.83)	0.27
*Assessing program value	3.71 (0.96)	3.75 (0.75)	3.63 (1.16)	0.07
*Online survey tool	2.62 (0.97) <sup>a</sup>	1.75 (0.75) <sup>b</sup>	3.27 (1.01) <sup>a</sup>	11.09*

*Note.* \* =  $p < .05$ ; + = Items that did not load unto any factor; mean values sharing the same letter are not significantly different from each other as indicated by Dunnett T3 post hoc test.

## Conclusions, Discussion, and Recommendations

Needs assessments are critical for identifying agricultural development practitioners' evaluation competencies (Halbritter et al., 2021) to inform the design of professional development opportunities aimed at building evaluation capacity at both individual and organizations levels (Wright et al., 2025). We conducted this study as an initial step in our ECB efforts to identify and address the most pressing evaluation training needs of UK Extension specialists. First, we explored the top-priority evaluation training needs of specialists with the goal of identifying evaluation training needs to be prioritized. Our analysis revealed seven priority areas (e.g., determining the economic value of programs using return-on-investment or cost-benefit analyses; developing measurable long-term outcomes to assess program impact; developing evaluation plans to address what, why, when, and how to evaluate program outcomes/impact; and using data visualization to communicate evaluation findings). Overall, these findings align with previous studies highlighting evaluation planning, design and methodological skills, such as developing program outcomes, creating evaluation instruments, data collection, analysis and reporting, as core evaluation training topics for Extension professionals (Benge & Beattie, 2021; Diaz et al., 2019; Diaz et al., 2020; Donaldson et al., 2022; Donaldson & Vaughan, 2022; Lamm et al., 2011; Silliman et al., 2016).

Our second research question explored how the 25 evaluation items group into underlying topical areas with the aim of determining which topics can be combined into single training sessions. Our results revealed four distinct categories of evaluation training needs: quantitative evaluation methods, measuring evaluation outcomes, program planning and reporting, and qualitative evaluation methods. The findings suggest that the items constituting each of these topical areas can be covered in the same evaluation training and/or resources. The four items that did not load onto any factors (e.g., determining the economic value of program(s) using return-on-investment or cost-benefit analyses and developing/using online survey tools such as Qualtrics to collect evaluation data) are each broad topics that can be covered in separate single training sessions. These findings align with Narine and Ali (2020), who also found that evaluation competencies can be grouped together, particularly those related to designing measurable program outcomes and conducting effective data collection and reporting.

Our final research question examined whether the underlying constructs vary by education level, program area, and years of Extension service, with the goal of assessing the need for differentiated training. The findings suggest that some groups of specialists may benefit from differentiated training. For example, ANR specialists may benefit from targeted training in measuring evaluation outcomes, program planning and reporting, and predicting program impact, whereas 4-H and CED specialists may benefit from targeted training in collecting evaluation data from youth. These findings align with those of Ghimire and Martin (2013) who reported that ANR educators expressed higher need for training needs in measuring program impact and learning outcomes.

The findings also suggest that both early and late career specialists may benefit from targeted training on developing and using online survey platforms. In addition, early career specialists may need further training in program planning and reporting, while late career specialists may benefit from training in quantitative evaluation methods. Of note, years of service do not align with tenure or promotion process at UK Extension. These findings align with those of Diaz et al. (2020) who reported that earlier-career Extension professionals have higher need for training in program impacts, long-term outcomes, data collection, and analysis.

While our findings have direct implications for evaluation capacity building efforts within UK Extension, we offer recommendations that may enhance capacity building in other Extension systems and agricultural development organizations by promoting the use of data-driven approaches to ECB among specialists. First, rather than providing evaluation training across multiple evaluation topics (e.g., the 25 items assessed in this study), Extension evaluators and administrators may conduct needs assessments to identify priority topics. This study identified seven priority areas for UK Extension specialists, thereby allowing for more efficient and focused use of resources. Second, we recommend consolidated evaluation-focused professional development opportunities that cover multiple related topics for the efficient use of training resources and help Extension specialists see connections among the topics and build on existing knowledge. Third, our findings highlighted the need for differentiated learning opportunities by programming area and years of service.

This study provides the first formal assessment of evaluation training needs among UK Extension specialists and highlights the importance of aligning ECB efforts with specialists' priority training needs. Yet this study is not without limitations. Although the survey received a good response rate (~ 69%), the overall sample size was small, which may limit the generalizability of the findings. Also, the study uses data from Extension specialists in the same university, thereby limiting the generalizability of the findings to other Extension organizations. In addition, the findings reflect only the perceived training needs for those who completed the survey, which may be subject to self-reporting bias.

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