A National Examination of Extension Professionals' Use of Evaluation: Does Intended Use Improve Effort?

Alexa J. Lamm
Glenn D. Israel
University of Florida

As state and federal budgets tighten, Extension must be accountable for the use of public funds if it wants to maintain current funding levels. While those working within Extension know the long-term successes of Extension programs, data detailing these are limited. High quality evaluations must be developed to collect the data needed to exhibit public value. One way to encourage the collection of rigorous data is through the use of evaluation. Evaluation use creates an environment that encourages organizational thinking that can result in accountability reports adequate for funding decisions. This study examined how Extension professionals' engagement in evaluation is related to their perceptions of personal and organizational evaluation use. The findings show that a substantial percentage of Extension professionals are doing just enough evaluation to complete mandatory reports. The results of the study also showed that Extension professionals valued personal use of evaluation data over the organizational use. Extension professionals were more likely to conduct in-depth evaluations when it was used to inform stakeholders or for future programmatic planning than for accountability purposes. Professional development efforts should target the use of evaluation for personal programmatic improvement rather than accountability to encourage participation and evaluation competency development.

Keywords: Extension, evaluation, use, accountability, reporting, programmatic improvement

Extension is the largest nonformal adult education system in the United States (Franz & Townson, 2008). The national Extension system's reach is extremely wide, encompassing nearly 3,150 county extension offices, 105 land-grant colleges and universities, and includes the federal government through the United States Department of Agriculture's (USDA) National Institute of Food and Agriculture (NIFA) (Cooperative State Research, Education, and Extension Service, n.d.). The national Extension system must deal with unique challenges when being held accountable for the federal funds it receives, especially when proving its worth to the public. Extension professionals are required to report on the number of participants in their programs and how the programs have impacted participants' lives in order to remain accountable (USDA

NIFA, 2012). In order to do so, Extension professionals must engage in the practice of evaluation. However, previous research shows that accountability-driven evaluations emphasize looking back and judging programs by placing blame or praise, leaving little room for learning and programmatic improvement (Patton, 2008). If evaluation is to be used to understand processes and outcomes with the intent of further developing future activities, then the intent of evaluation cannot come from an accountability standpoint (Cronbach, 2000). Funders require that accountability measures be in place, including regular progress reports, because this is the information they use to guide future funding and policy decisions. Data collected in progress reports, however, are rarely adequate for making programmatic improvements because "accountability systems serve the purpose of providing an account of how things are going but not enough information to inform decisions or solve problems" (Patton, 2008, p. 121).

A solution to this problem may be focusing evaluation efforts on using results rather than collecting them merely for accountability purposes. In a broad sense, the future of an organization is heavily reliant upon its ability to adapt and learn from its employees (Burke, 2008). Using evaluation results to make programmatic improvements and decide on future direction can create an atmosphere that encourages organizational thinking and learning. Meadows, Randers, and Meadows (2004) stated "learning means the willingness to go slowly, to try things out, and to collect information about the effects of actions, including the crucial but not always welcome information that the action is not working" (p. 7). Evaluation reports focused on use can continue to provide accountability reports, which are adequate for decision making and meet state and federal requirements while enhancing organizational thinking.

Despite previous research stating evaluation is an important competency for Extension employees (Harder, Place, & Scheer, 2010), a culture supporting evaluation use within most state Extension systems has been limited (Radhakrishna & Martin, 1999). Extension professionals were pushed to measure short-term changes in the 1980s when the USDA was encouraged to provide data showing the value of Extension at the federal level (Warner & Christenson, 1984). Thirty years later, the majority of Extension professionals tend to use basic posttests given at the conclusion of their educational activities to assess the level of success they have had educating their participants (Franz & Townson, 2008). Posttests based on single activities generally collect low-level reactions or short-term knowledge and skills gains (Franz & Townson, 2008). Without collecting data over time, there is no way to measure intermediate and long-term outcomes, including behavior changes, and social, economic, and environmental (SEE) impacts of Extension programs, needed to show public value (Franz & Townson, 2008). Extension needs to enhance the evaluation efforts at both the state and federal level if there is a hope of showing the public value needed to continue current levels of governmental support (Anderson & Feder, 2007). By examining how Extension professionals evaluate their programs, and how their engagement in evaluation relate to use at the individual and organizational levels, a future direction for enhancing program outcomes and, in turn, accountability reports may be developed.

Patton's (2008) theory of utilization-focused evaluation was used as the theoretical framework for this study. According to Patton (2008), utilization-focused evaluators work with intended users of a program to determine their priorities early in the evaluation process. The intent is then used to inform the design of the evaluation process (Patton, 2008). This process includes any possible data collection, timing of the evaluation, data analysis, and reporting procedures (Patton, 2008). Gaining user input early is supposed to increase the chance the evaluation will result in the desired impact (Rossi, Lipsey, & Freeman, 2004). There are many definitions evaluators, program coordinators, and administrators can infer to use, as use can have different meanings depending upon the context in which it is being applied when evaluating (Patton, 2008). According to Patton (2008), these meanings include: (a) direct intended uses, (b) longer term uses, (c) primarily political uses, (d) misuses, (e) nonuses, and (f) unintended effects. This study focuses primarily on direct, intended use of evaluation within the context of Extension programming.

Patton (2008) identified three categories of direct intended use: instrumental use, conceptual use, and process use. Using findings to directly inform decisions in a way that they contribute to problem solving is considered instrumental use (Patton, 2008). Instrumental use links the results of the evaluation directly to a programmatic action making it an instrument of action. Past research has shown Extension professionals may use evaluation for instrumental use "as indicated by their tendency to believe evaluation is a critical tool for improving programs" (Lamm, Israel, & Harder, 2011, p. 53). In addition, several Extension instrumental use evaluations can be found in the recent literature highlighting the results of their evaluations (Menalled, Grimberg, & Jones, 2009; Neal, 2010).

Conceptual use is intended to inform organizational-level thinking about a program or policy (Patton, 2008). Conceptual use evaluations are primarily used to assist leaders in developing an understanding of a concept; however, no action or decision can be directly attributed to the results of conceptual evaluation use (Patton, 2008). Conceptual use evaluation contributes to offering data for future conceptual development of programs, but is not specific to a time or place in the same way as instrumental evaluation. The most common form of Extension conceptual use is in the form of needs assessments conducted to inform future practice (Culp & Kohlhagen, 2004; Lamm et al., 2011; Kaplan, Liu, & Radhakrishna, 2003). Lamm et al. (2011) found Extension professionals reported using their evaluation results to inform their decisions when establishing future programming efforts.

When an evaluator engages in process use it is for the purpose of learning from the evaluation process itself, engaging in problem solving based on the data provided during the evaluation process and not the end result of the evaluation (Lamm et al., 2011). Patton (2008) stated that "process use refers to cognitive, behavioral, program, and organizational changes resulting … from engagement in evaluation process and learning to think evaluatively" (p. 108). In process

use oriented evaluation, the evaluation process becomes a tool for making programmatic decisions. It assists the program planner in refining and defining what they want as an intended outcome of the program (Lamm et al., 2011).

According to Patton (2008), a focus on evaluation use can enhance programmatic evaluation behaviors resulting in the development of appropriate measures that can lead to higher levels of accountability. To this end, if Extension professionals perceive the evaluation process as valuable in that either they are using their evaluation results to improve their programs or their organization is using their evaluation results for a larger purpose than to just collect data for an annual report, they should be more likely to collect rigorously produced evaluation data (Lamm et al., 2011). The creation and use of accurate and reliable data that describes the quality and impact of educational programs and outreach efforts can greatly enhance future Extension programming and provide valuable data showing the programmatic worth of Extension programs to the public. Therefore, an understanding of how Extension professionals perceive evaluation use, and how those perceptions are related to evaluation behavior, can guide research-based recommendations on how to enhance Extension evaluation behaviors. The purpose of this study was to identify how Extension professionals' engagement in evaluation related to their perceptions of evaluation use. The guiding objectives for this study were to (a) describe extension professionals' level of engagement in evaluation, (b) identify Extension professionals' perceptions regarding both personal and organizational use of evaluation, and (c) examine the relationships between Extension professionals' level of engagement in evaluation and perceptions of personal and organizational use of evaluation.

Methods

Participants

The 1,795 field-based Extension professionals employed by the University of Arizona, University of Florida, University of Maine, University of Maryland, Montana State University, University of Nebraska, North Carolina State University, and University of Wisconsin made up the participants for this study. The Extension professionals working within these states were selected due to their representation of Extension system size, regional location, and diversity in personnel. Responses were received from 1,223 of the participants. Only 1,173 of the responses were complete, resulting in a response rate of 65.2%. Chi-square tests comparing respondents to nonrespondents and respondents to the entire population on specific demographic characteristics have been identified as an accurate way of accounting for response error (Rossi et al., 2004). When compared, differences between respondents and the entire sample were nonsignificant with a Chi-square value of 2.00 and a p value of .16, and differences between respondents and nonrespondents were nonsignificant with a Chi-square value of 1.72 and a p value of .19. Significance was based on a p value of <.05 established *a priori*.

Descriptive analysis of the demographic data showed there were 751 female (64.0%) and 422 male (36.0%) respondents. The majority (87.6%, $n = 1,027$) of respondents were Caucasian/White with African Americans representing 4.1% ($n = 48$). Hispanic, Native American, and Other categories were represented minimally. Most of the respondents (70.1%, $n = 822$) had obtained a master's degree while 19.0% ($n = 223$) had a bachelor's degree. Respondents represented all programmatic areas with 27.1% ($n = 318$) focusing on Family and Consumer Sciences/Nutrition, 23.4% ($n = 275$) on 4-H Youth Development, 24.6% ($n = 289$) on Agriculture, and 11.2% ($n = 131$) on Horticulture. Almost half (43.1%, $n = 505$) were in tenure-track positions, and 26.9% (n = 316) of the respondents had achieved tenure.

Instrumentation

The target population's access to the Internet allowed the researchers to use an online survey instrument (Dillman, Smyth, & Christian, 2009). The study's evaluation use survey instrument was originally developed by Lamm et al. (2011) to measure evaluation use within a specific state. This instrument consisted of three sections related to evaluation and its use along with a series of demographic items used to describe the respondents.

The first section measured the Extension professionals' engagement in evaluation. Respondents were asked to identify how they evaluated their *best* or *most important* program based on a list of essential competencies for program evaluators developed by Ghere, King, Stevahn, and Minnema (2006). To do so, participants marked whether or not they had engaged in 27 specific data collection or data analysis/reporting methods during the past year. To calculate an overall evaluation engagement score, each of the 27 methods in which the Extension professionals reported engaging were given a point. The total responses were summed to create an overall evaluation engagement score. The 27 methods included:
- Track respondents' gender
- Track respondents' race/ethnicity
- Posttest to evaluate activities
- Interviews to evaluate activities
- Interviews to evaluate entire program
- Posttest to evaluate entire program
- Interview to evaluate behavior change
- Collect artifacts
- Conduct both pretests and posttests to evaluate single activities
- Participant written accounts such as journals and/or log books
- Interviews to evaluate SEE changes
- Pretest/posttest to evaluate entire program rather than individual activity
- Test to evaluate behavior change
- Test to evaluate social, economic, and environmental (SEE) changes

- Comparison group used as a control
- Report actual numbers
- Summary of written accounts
- Report means or percentages
- Summary of artifacts collected
- Summary of interview results
- Examine change over time
- Comparing content of interviews for similarities and differences
- Member checking interview results
- Other form of data analysis and/or reporting
- Report standard deviations
- Compare groups
- Advanced inferential statistics

The second section requested respondents assess their personal perceptions of evaluation use by rating six items on a Likert-type scale. Response choices for this section were: 1 – *Not at all true for me*, 2 – *Slightly true for me*, 3 – *Somewhat true for me*, 4 – *Mostly true for me*, 5 – *Completely true for me*. Reliability for the personal evaluation use construct, as reported by the developers, was a Cronbach's alpha coefficient of .82 (Lamm et al., 2011).

The third section of the questionnaire requested respondents assess their perceptions of organizational evaluation use by rating five statements on a Likert-type scale. Response choices for this section were: 1 – *Strongly disagree*, 2 – *Disagree*, 3 – *Neutral*, 4 – *Agree*, 5 – *Strongly agree*. Reliability for the organizational evaluation use construct, as reported by the developers, was a Cronbach's alpha coefficient of .83 (Lamm et al., 2011).

Given the instrument was changed to be applicable to a national context, the instrument was reviewed by a panel of experts with backgrounds in Extension and evaluation for content, face validity, and survey design. The panel of experts represented four institutions to gain a national perspective: the University of Florida, North Carolina State University, Purdue University, and Oklahoma State University.

Procedure

The instrument was distributed online via e-mail invitation using the Tailored Design Method (Dillman et al., 2009). The process included an initial request to complete the survey and a series of weekly reminders. Each state involved in the study provided the list of Extension professionals' names, locations, and e-mail addresses to the researchers. The state lists were combined into a database of 1,795 Extension professionals. All correspondence related to the survey was sent by the researchers with approval from each state's Extension administration.

Prior to the initial invitation, each state Extension director sent out an e-mail to his/her system alerting the participants they would be receiving an important survey.

Data Analysis

The first two research objectives were addressed through descriptive statistics using SPSS. The third research objective, identifying relationships between Extension professionals' evaluation behaviors and their perceptions regarding the use of evaluation, were described by calculating Pearson's product-moment correlation coefficient using Davis' (1971) convention. Magnitude of the relationship is noted by Davis (1971) as $.01 \geq r \geq .09 = $ *Negligible*, $.10 \geq r \geq .29 = $ *Low*, $.30 \geq r \geq .49 = $ *Moderate*, $.50 \geq r \geq .69 = $ *Substantial*, $r \geq .70 = $ *Very Strong*. A level of significance of .05 was established *a priori*.

Results

Engagement in Evaluation

Respondents were initially asked, "Did you evaluate your most important program this past year (this includes tracking participation records)?" Exactly 13.6% ($n = 163$) of the respondents noted they did not engage in the practice of evaluation during the past year and were given a score of zero for engagement in evaluation. Those who did evaluate their most important programs were asked whether or not they had engaged in 27 specific data collection or data analysis methods during the past year. The responses were summed to create an engagement in evaluation score that ranged from 1 to 27. The mean engagement in evaluation score was 11.83 with a standard deviation of 6.20.

When engagement in evaluation items were reviewed, the largest number of respondents kept program participation records ($n = 966$, 82.4%), reported the number of customers attending a program ($n = 966$, 82.4%), and tracked their participants' gender ($n = 841$, 71.7%). All three are items required for state and federal reporting (Franz & Townson, 2008). Very few respondents used more rigorous evaluation techniques including the use of any type of inferential statistic ($n = 23$, 2.0%), using a comparison group as a control when evaluating ($n = 60$, 5.1%), or reporting standard deviations ($n = 133$, 11.3%). All three methods provide information that can be used to better understand the impacts of Extension programs, but go above and beyond state and federal reporting requirements.

Perceptions of Evaluation Use

Respondents were then asked to respond to six statements on a five-point summated-rating scale to measure their personal perceptions regarding the use of evaluation. Frequency responses for

each item can be seen in Table 1. The responses indicated that 84.7% of the respondents felt that it was mostly or completely true for them that evaluation is a critical tool for improving Extension programs. While over 80% of respondents reported they identified the needs and interests of their stakeholders prior to developing programs as mostly or completely true, just over 55% indicated it was mostly or completely true they report their results to their stakeholders, and just over 50% reported it was mostly or completely true that their evaluation results serve the information needs of their community stakeholders. Responses to the six perceptions of personal evaluation use items were summed and averaged to create an overall perception of personal evaluation use score ($M = 3.86$, $SD = 0.63$), showing that when combined, the items making up the personal perceptions regarding evaluation use were mostly true for the respondents.

Table 1. Respondents' Personal Perceptions Regarding Evaluation Use (N = 1,173)

Evaluation Use Items	Not at all true for me	Slightly true for me	Somewhat true for me	Mostly true for me	Completely true for me
I feel evaluation is a critical tool for improving Extension programs.	0.6%	2.9%	11.7%	38.4%	46.3%
I identify the needs and interests of my stakeholders prior to developing programs.	0.9%	3.1%	15.1%	49.3%	31.5%
I think it is important my evaluation results can be used by others within my state Extension system.	1.8%	6.1%	20.8%	40.4%	30.8%
I use evaluation results to make decisions about my programs.	0.9%	4.7%	22.2%	47.4%	24.6%
I report evaluation procedures and results to my community stakeholders.	2.8%	11.1%	30.1%	38.9%	16.9%
My evaluations serve the information needs of my community stakeholders.	3.2%	10.1%	35.0%	41.5%	9.9%

Note: Percentages may not add to 100% due to rounding.

Table 2 displays respondents' perceptions of organizational evaluation use. Respondents were asked to respond to a series of five statements using a five-point summated-rating scale. Over 70% of respondents agreed or strongly agreed their direct supervisor is interested in using their evaluation results, and 58.5% agreed or strongly agreed their state Extension director seeks evaluation information when making decisions. Only 53.5% agreed or strongly agreed they discuss evaluation approaches, challenges, and use in their Extension office; while over 20% reported they disagree or strongly disagree these discussions occur. Responses to the five organizational evaluation use items were summed and averaged to create an overall perception of

organizational evaluation use score ($M = 3.57$, $SD = 0.67$), showing that when combined, respondents agreed with the items.

Table 2. Participant's Perceptions of Organizational Evaluation Use (N = 1,173)

Evaluation Use Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My direct supervisor is interested in using my evaluation results.	3.1%	5.0%	19.4%	47.0%	24.2%
The state Extension director seeks evaluation information when making decisions.	1.7%	4.0%	34.2%	43.1%	15.4%
My direct supervisor clearly communicates how evaluation results will be used.	3.4%	9.0%	30.0%	40.0%	16.6%
There is a strong interest in using data to make decisions in my Extension office.	2.8%	11.8%	30.1%	44.0%	9.8%
Extension professionals discuss evaluation approaches, challenges, and use in my Extension office.	3.8%	16.6%	25.0%	45.9%	7.6%

Note: Percentages may not add to 100% due to rounding.

Relationships between Engagement in Evaluation and Perceptions of Evaluation Use

The individual engagement in evaluation scores were then analyzed with the personal perceptions and organizational use index scores to determine if relationships existed between perceived personal and organizational evaluation use and actual engagement in evaluation. Engagement in evaluation was moderately correlated with the personal perceptions index (see Table 3). Engagement in evaluation also had a low correlation with the organizational perceptions index.

Table 3. Correlations between Engagement in Evaluation and Perceptions of Evaluation Use

Perceptions of Evaluation Use	Engagement in Evaluation	
	r	Magnitude
Personal Perceptions	.38	Moderate
Organizational Perceptions	.17	Low

Note: Magnitude: $.01 \geq r \geq .09 = Negligible$, $.10 \geq r \geq .29 = Low$, $.30 \geq r \geq .49 = Moderate$, $.50 \geq r \geq .69 = Substantial$, $r \geq .70 = Very\ strong$.

Discussion

This study examined county-based Extension professionals' evaluation engagement related to their best or most important program. It also gave insight into how Extension professionals

perceive their personal use of evaluation in addition to Extension professionals' perceptions of how their state Extension system values the use of evaluation. The results show Extension professionals were engaged in a wide variety of evaluation efforts ranging from not evaluating their programs at all during the previous year to a few that are collecting pretest/posttest data with a control group that can be analyzed using inferential statistics. However, the Extension professionals on the extremes of either end of the evaluation spectrum were the exception and not the rule. Not surprisingly, most Extension professionals were simply keeping program participation records which aligns with a recent single-state study examining evaluation behaviors of Extension professionals (Lamm et al., 2011) and supports Franz and Townson's (2008) assertion that the majority of Extension professionals use posttests given at the end of their educational activities to assess the levels of success.

In general, respondents believed they used their evaluations more than their overall organization. The perceived personal use of evaluation had a stronger relationship with the respondent's evaluation behavior score than their perceived organizational use. This finding aligns with previous studies showing Extension professionals are more likely to evaluate because they feel the results can be used to improve their programs (Franz & Townson, 2008; Lamm et al., 2011).

The study was originally designed to identify the direct use of evaluation by Extension professionals. According to Patton (2008), direct use includes instrumental, conceptual, and process use. The results of this national study provided further evidence suggesting Extension professionals are using evaluation for instrumental use, but in a limited way. This conclusion is based upon the finding that Extension professionals believed evaluation is a critical tool for improving programs, which is congruent with previous research conducted within a single state (Lamm et al., 2011). Conceptual use was also evidenced by the results as Extension professionals felt they used evaluation to make decisions about their programs. These findings are encouraging as they indicated a professional commitment to delivering quality programs, including making improvements related to clientele concerns.

Given the current push by state and federal funders to evaluate programs for accountability purposes, it is not surprising to find the results of this study show Extension professionals believed their state Extension systems, as a whole, use evaluation for political purposes. This finding is consistent across the states represented in this study and in line with previous research (Lamm et al., 2011). Imposed use, a type of political evaluation use, refers to evaluations conducted in response to mandates issued by those in power (Patton, 2008). This definition includes state or federal reporting requirements. Perhaps the sense of imposed use of evaluation results by Extension professionals is a direct result of the state and federal requirements for Extension to report the number of people that are reached through programming, including their demographic characteristics for NIFA Civil Rights requirements. The number of Extension professionals who reported keeping program participation records and tracking gender, race, and

ethnicity instead of more rigorous evaluation methods such as pretests/posttests, interviews to evaluate long-term outcomes, and control groups are clear indicators of imposed, and therefore, political use.

Implications and Recommendations

While the necessity for political use of evaluation data will not diminish given the current and projected future economic climate, Extension evaluation specialists can assist Extension professionals in understanding how evaluation data can be used to reach personal programmatic goals while accomplishing reporting requirements. Evaluation-focused professional development efforts could be created and implemented with program development and enhancement in mind. For example, Extension professionals could be asked to bring a specific program outline or logic model with them to the training. Throughout the training, each Extension professional could then apply the evaluation techniques they are learning directly to their program and receive immediate feedback. They could develop surveys, pretests/posttests, and/or interview guides that are directly applicable to their program, be given examples of what their data would potentially look like, and then taught how to analyze it in a way that can be used to develop future recommendations for improvement. This way, Extension evaluation specialists can work collaboratively with Extension professionals in teaching evaluation skills while developing the right tools for their program, Extension professionals get hands-on experience relating evaluation tools to their specific area of interest, and then Extension professionals can return to their positions with tools they can use immediately that fit into their programmatic plans and meet accountability requirements.

It should be acknowledged that some Extension professionals may lack the evaluation expertise to engage in advanced evaluation, which was not measured by this study, and therefore, is a limitation. However, the number of Extension professionals that had achieved tenure in this study suggested that many Extension professionals have been employed in the system long enough that they would have gained evaluation expertise had they felt the need. To this effect, the results of this study suggest a substantial number of Extension professionals are doing just enough evaluating to get by. This contention is aligned with previous research, as it is generally acknowledged in the literature that Extension professionals nationwide use a low level of rigor when conducting evaluations (Franz & Townson, 2008). Keeping program participation records, using posttest only designs for educational activities, and conducting simple interviews are evaluation behaviors that require a minimal amount of effort, producing little information that can be used to improve future programs. These same techniques, however, are often good enough to satisfy accountability requirements. Perhaps Extension evaluation specialists need to emphasize Extension professionals' beliefs that evaluation is a critical tool to improve their Extension programs when developing and marketing evaluation-focused professional development efforts. Rather than focusing the agenda and congruent enrollment information on

collecting the data necessary for reporting purposes, professional development efforts could target the benefits of personal programmatic use of evaluation data. Doing so includes explaining and exhibiting how collecting data over time is worth the associated cost and time. Making this change could assist in altering the evaluation culture within the Extension system to one that supports evaluation use (Radhakrishna & Martin, 1999), further strengthening an environment supportive of developing an important Extension employee competency (Harder et al., 2010).

Extension professionals did perceive their direct supervisors as having a desire to use evaluation results; however, they did not report understanding how the results would be used. In addition, the Extension professionals only slightly agreed their state directors used their evaluation results when making decisions. The level to which an Extension professional felt his/her direct supervisor or state Extension director used his/her evaluation results only had a low level of correlation with his/her actual evaluation behaviors. This implies Extension professionals are going to do what they choose to do with regard to evaluation despite what those they interpret as leaders think or express. Opening up communication channels between Extension professionals and administration may assist Extension professionals in understanding evaluation use at the organizational level. Doing so could demonstrate the value of evaluation to the Extension organization beyond the role it plays in accountability, again enhancing the currently limited culture supporting evaluation use within most state Extension systems (Radhakrishna & Martin, 1999). If this occurs, perhaps Extension professionals would be inclined to evaluate their programs in a more rigorous manner.

The results of this study show barriers continue to exist when engaging Extension professionals in the practice of evaluation. However, reframing evaluation professional development opportunities towards personal use and encouraging open communication channels could assist in overcoming the barriers. More research needs to be done in order to gain insight into the specific issues surrounding the challenges of increasing the amount of evaluations conducted and the level of rigor in which they are conducted. This national study takes a high level view of evaluation practices, only brushing the surface on understanding the choices being made in regards to Extension evaluation. In-depth research exploring why specific Extension professionals have chosen to evaluate their programs with a high level of rigor, despite the majority that do not, would assist in developing an understanding of how barriers against evaluation use have been overcome, further enhancing an understanding of Extension evaluation practice.

References

Anderson, J. R., & Feder, G. (2007). Agricultural extension. In R. Evenson & P. Pingali (Eds.), *Handbook of agricultural economics.* Washington, DC: Agriculture and Rural Development Department, World Bank.

Burke, W. W. (2008). *Organizational change: Theory and practice* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Cooperative State Research, Education, and Extension Service. (n. d.). *Financial education through taxpayer assistance impact report.* Available at http://www.csrees.usda.gov/nea/economics/pdfs/05_motax.pdf

Cronbach, L. (2000). Course improvement through evaluation. In D. I. Stufflebeam, G. F. Madoux, & T. Kellaghan (Eds.), *Evaluation models*. Boston, MA: Kluwer Academic Publishers.

Culp, K., & Kohlhagen, B. S. (2004). Kentucky 4-H agents' perceptions of their levels of competency and frequency of use of volunteer administration function. *Journal of Agricultural Education*, 45(2), 1–13. doi:10.5032/jae.2004.02001

Davis, J. A. (1971). *Elementary survey analysis*. Englewood Cliffs, NJ: Prentice-Hall.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Franz, N. K., & Townson, L. (2008). The nature of complex organizations: The case of Cooperative Extension. In M. T. Braverman, M. Engle, M. E. Arnold, & R. A. Rennekamp (Eds.), *Program evaluation in a complex organizational system: Lessons from Cooperative Extension. New Directions for Evaluation, 120*, 5–14. doi:10.1002/ev.272

Ghere, G., King, J. A., Stevahn, L., & Minnema, J. (2006). A professional development unit for reflecting on program evaluator competencies. *American Journal of Evaluation, 27*(1), 108–123. doi:10.1177/1098214005284974

Harder, A., Place, N. T., & Scheer, S. D. (2010). Towards a competency-based Extension education curriculum: A Delphi study. *Journal of Agricultural Education*, *51*(3), 44–52. doi:10.5032/jae.2010.03044

Kaplan, M., Liu, S., & Radhakrishna, R. (2003). Intergenerational programming in Extension: Needs assessment as a planning tool. *Journal of Extension, 41*(4). Available at http://www.joe.org/joe/2003august/a5.php

Lamm, A. J., Israel, G. D., & Harder, A. (2011). Getting to the bottom line: How using evaluation results to enhance Extension programs can lead to higher levels of accountability. *Journal of Agricultural Education, 52*(4), 44–55. doi:10.5032/jae.2011.04044

Meadows, D., Randers, J., & Meadows, D. (2004). *Limits to growth*. White River Junction, VT: Chelsea Green Publishing.

Menalled, F. D., Grimberg, B. I., & Jones, C. A. (2009). Evaluation of agricultural professionals' perceptions and knowledge on sustainable agriculture: A useful step in the development of an online Extension program. *Journal of Agricultural Education*, *50*(4), 86–98. doi:10.5032/jae.2009.04086

Neal, J. W. (2010). The first 4 years of a warmwater recreational pond management web site in Arkansas. *Journal of Extension, 48*(3). Available at http://www.joe.org/joe/2010june/a4.php

Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Radhakrishna, R., & Martin, M. (1999). Program evaluation and accountability training needs of Extension agents. *Journal of Extension, 37*(3). Available at http://www.joe.org/joe/1999june/rb1.php

Rasmussen, W. D. (1989). *Taking the university to the people: Seventy five years of Cooperative Extension.* Ames, IA: Iowa State University Press.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach* (7th ed.). Thousand Oaks, CA: Sage Publications, Inc.

United States Department of Agriculture National Institute of Food and Agriculture (USDA NIFA). (2012). *AREERA state plans of work.* Available at http://www.csrees.usda.gov/business/reporting/planrept/plansofwork.html

Warner, P. D., & Christenson, J. A. (1984). *The Cooperative Extension Service: A national assessment.* Boulder, CO: Westview Press.

Alexa J. Lamm, Ph.D., is an Assistant Professor focused on Public Issues Education in the Department of Agricultural Education and Communication at the University of Florida.

Glenn D. Israel, Ph.D., is a Professor focused on Extension Education in the Department of Agricultural Education and Communication at the University of Florida.