

## **Personal Health, Role, and Time Management Competency Training Needs of Florida Extension Agents**

### **Abstract**

The personal effectiveness of Extension agents is a topic continuously researched, yet problems persist, suggesting that not enough is yet known to improve the situation. We undertook a study to determine the personal effectiveness competency training needs of agents in Florida, specifically looking at time management and work–life integration competencies. Data were collected via an online survey of University of Florida Institute of Food and Agricultural Sciences Extension agents. Agents needed training for all areas of personal effectiveness, but particularly for how to manage time and how to get adequate amounts of sleep. Additionally, organizational practices and culture should be considered as part of the solution for improving personal effectiveness.

**Keywords:** [competencies](#), [Borich](#), [time management](#), [personal effectiveness](#), [work–life balance](#)

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## **Introduction**

Sir Richard Branson, billionaire founder of the wildly successful Virgin Group empire, has been quoted as saying, "Put your staff first, customers second, and shareholders third" (Raymundo, 2014, para. 6). Consistent with this approach, many Extension organizations have employed dedicated staff development professionals. The emergence of the National Association of Extension Program and Staff Development Professionals within the past 10 years speaks to the growing momentum to strategically improve Cooperative Extension from the inside out. Considerable research has been conducted examining the training needs of Extension professionals, often measuring competencies (e.g. Boyd, 2004; Cooper & Graham, 2001; Koundinya et al., 2018). Measuring employees' competencies allows Extension to create data-driven strategies that focus on the most critical areas for professional development.

Similarly, Stone and Bieber (1997) stated, "By identifying strategic competencies and determining training priorities to address high profile issues, we can deliver new and meaningful benefits to our clientele more quickly while demonstrating the value of the Cooperative Extension System to a broader public" (para. 11). Arguably, the persistent problems surrounding time management and work–life balance qualify as high-profile organizational issues contributing to Extension's retention (Kutlilek, Conklin, & Gunderson, 2002) and burnout (Russell et al., 2019) issues. For example, Vines et al. (2018) found that new agents struggled to separate their work and nonwork roles and felt challenged to prioritize personal needs due to excessive

work hours. Research is needed to explore agents' abilities to perform competencies associated with time management and work–life balance. As stated by Ricciardi (2005), "when an organization achieves its most critical outcomes, it does so through the behaviors of its members" (p. 488).

## Theoretical Framework

The competency-based training approach to professional development is influenced by the work of McClelland (1973). A noted psychologist, McClelland (1973) took exception to the use of intelligence and aptitude tests as predictors of future job success. Instead, McClelland (1973) theorized that assessing competencies was a superior approach over traditional intelligence testing, in part because competencies are directly related to successful job behaviors. Further, competencies can be effectively communicated, measured, and learned. A contemporary definition of competencies was offered by Athey and Orth (1999), who described them as "a set of *observable* performance dimensions, including *individual* knowledge, skills, attitudes, and behaviors, as well as *collective* team, process, and organizational capabilities, that are linked to *high performance*, and provide the organization with *sustainable competitive advantage*" (p. 216). Later research by McClelland (1998) and others (e.g., Harchik et al., 2001; Mulcahy & James, 2002) conducted in diverse contexts demonstrated that the use of competency-based training can lead to improved job performance. Our research is built on McClelland's (1973, 1998) assertions that assessing competencies is a valid and worthwhile approach to conducting professional development.

## Conceptual Framework

The 4-H Professional, Research, Knowledge, and Competencies (PRKC) framework (Byrne, 2017) provides a conceptual model for describing important competencies needed for agents to function effectively in their Extension roles. Some competency topics, such as youth development, are 4-H specific. However, others are applicable across program contexts. One such topic is referred to in the 4-H PRKC as personal effectiveness. Personal effectiveness comprises three components: (a) time management, (b) work–life integration, and (c) interpersonal skills. For example, "the ability to delegate tasks in order to manage time efficiently" (Byrne, 2017, p. 25) was identified as a time management competency. We included only the time management and work–life integration competencies in our study due to duplication of competencies in the work–life integration and interpersonal skills components of the 4-H PRKC.

## Purpose and Objectives

The purpose of our study was to determine the personal effectiveness professional development needs of University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Extension agents. Specific objectives were (a) to explore the underlying constructs of personal effectiveness competencies, (b) to describe the perceived levels of importance assigned by agents to personal effectiveness competencies, (c) to describe agents' perceived levels of ability to perform personal effectiveness competencies, and (d) to compare the mean weighted discrepancy scores (MWDSs) of the competencies to determine priority professional development needs for UF/IFAS Extension agents.

## Methods

We used a nonexperimental design for our study. At the time of the study, 357 county, regional, and state-level agents worked for UF/IFAS Extension in agriculture, natural resources, horticulture, 4-H and families,

and community resource development program areas. We attempted a census of the population in spring 2018 using an internal employee database. The institutional review board at University of Florida approved our research protocol as exempt.

We collected data using an online questionnaire. The questionnaire included personal effectiveness competency items adapted from the 4-H PRKC model (Byrne, 2017). Following the Borich (1980) approach for assessing competency needs, we asked participants to rate perceived importance of each competency and perceived ability in each competency using the following response options: *none*, *below average*, *average*, *above average*, and *essential* (importance)/*exceptional* (ability). The instrument also included questions about leadership competencies as well as three demographic items, but we do not report data for those items herein. A study limitation is the use of self-assessment, which may not accurately reflect reality.

We collected data in April and May 2018 using the Qualtrics personalized email function. An invitation and two reminders were sent. A total of 244 responses were received; four were subsequently discarded from analysis due to missing data. The usable response rate was 67.23% ( $n = 240$ ). Results of an independent-samples  $t$ -test we conducted to address possible nonresponse error (Lindner, Murphy, & Briers, 2001) indicated that there were no statistically significant differences in perceived importance and ability scores between early respondents ( $n = 182$ ) and late respondents ( $n = 58$ ).

For the purposes of data analysis, we coded response options as follows: *none* = 0, *below average* = 1, *average* = 2, *above average* = 3, *essential/exceptional* = 4. Means were interpreted as follows: *none* = 0.00–0.49, *below average* = 0.50–1.49, *average* = 1.50–2.49, *above average* = 2.50–3.49, and *essential/exceptional* = 3.50–4.00. There were 13 items assessing personal effectiveness. To address our first objective, we extracted latent components of personal effectiveness using a principal component analysis (PCA). The PCA procedure is used to reduce a group of items with common variances into linear variables (Field, 2013). We opted to use the PCA because of a desire to explore whether the assignment of competencies to specific components within the 4-H PRKC was statistically reliable or there was a better way to group them as constructs. Items loaded onto each variable or component are usually highly correlated. To address our second and third objectives, we calculated means and standard deviations for each competency item. We addressed the fourth objective by comparing values for perceived importance and ability to calculate an MWDS (see step-by-step instructions in Borich, 1980) for each competency item and then ranked competencies by MWDS to determine professional development needs.

## Results

### PCA

Latent components of personal effectiveness, hereafter referred to as competency areas, were investigated through a PCA with an orthogonal rotation. The PCA model shown in Table 1 was appropriate, given a Kaiser-Meyer-Olkin measure of sampling adequacy of .874 and a chi-square value of 1,164.13 ( $p < .05$ ) for the Bartlett's test of sphericity. Guided by the scree plot, we extracted three competency areas with eigen values greater than 1. These components explained 60% of the variance in the original set of items. We labeled each competency area to describe the commonality of its items, resulting in areas identified as personal health management, role management, and time management. Accordingly, personal effectiveness

=  $f$  (personal health management, role management, time management). Personal health management, role management, and time management explained 24%, 20%, and 16%, respectively, of the variation in personal effectiveness. Further, each competency area had an acceptable internal consistency based on its corresponding Cronbach's alpha: personal health management = .71, role management = .80, and time management = .82.

**Table 1.**  
Principal Component Analysis Model of Personal Effectiveness

Competencies by area	Loading <sup>a</sup>		
	PHM	RM	TM
Personal health management			
Incorporate exercise into personal lifestyle	0.12	0.14	0.87
Incorporate healthy eating into personal lifestyle	0.07	0.19	0.84
Incorporate adequate sleep into personal lifestyle	0.24	0.32	0.48
Role management			
Manage demands of personal commitments	0.19	0.75	0.30
Manage demands of professional commitments	0.36	0.46	0.31
Apply stress management and reduction strategies	0.16	0.70	0.37
Manage personal boundaries effectively	0.16	0.73	0.15
Maintain a personal support network	0.24	0.71	-0.01
Time management			
Manage time effectively	0.76	0.17	0.13
Set deadlines to achieve program outcomes	0.78	0.22	0.09
Delegate tasks in order to manage time effectively	0.58	0.22	0.11
Prioritize activities based on their importance	0.74	0.16	0.10
Spend the right amount of time on the right activity	0.82	0.13	0.11
aPHM = personal health management. RM = role management. TM = time management.			

## Personal Work Management

Overall, the results shown in Table 2 indicate that agents perceived all personal effectiveness items to have above average importance. The most important competency of personal health management was "incorporate adequate sleep into personal lifestyle" ( $M = 3.51$ ,  $SD = .74$ ). With regard to ability, as compared to other competencies of personal health management, agents perceived that they were least able to "incorporate exercise into personal lifestyle" ( $M = 2.12$ ,  $SD = 1.00$ ). The most important competency of role management was "manage demands of professional commitments" ( $M = 3.47$ ,  $SD = .66$ ). Compared to other competencies of role management, agents perceived themselves to be least able to "apply stress management and reduction strategies" ( $M = 2.22$ ,  $SD = 0.82$ ). "Manage time effectively" was

the most important competency of time management ( $M = 3.65$ ,  $SD = 0.60$ ), yet agents perceived that they were least able to "delegate tasks in order to manage time effectively" ( $M = 2.31$ ,  $SD = 0.81$ ) compared to other time management competencies.

Table 2 also shows the MWDS for each personal effectiveness competency. The MWDS for every item was positive, indicating a need for training in all three competency areas. The competency "incorporate adequate sleep into personal lifestyle" (MWDS = 4.73) was assessed as the highest priority for professional development in the personal health management category and overall. In the area of role management, the greatest need for professional development was for the competency "apply stress management and reduction strategies" (MWDS = 3.66). In the realm of time management, "manage time effectively" (MWDS = 3.67) was the competency for which professional development was most needed.

**Table 2.**  
Descriptive Analysis of Agents' Perceptions of Competency Areas

Competencies by competency area	Importance		Ability		MWDS
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Personal health management					
Incorporate adequate sleep into personal lifestyle	3.51	0.74	2.17	0.96	4.73
Incorporate exercise into personal lifestyle	3.40	0.80	2.12	1.00	4.34
Incorporate healthy eating into personal lifestyle	3.39	0.76	2.37	0.88	3.48
Role management					
Manage demands of professional commitments	3.47	0.66	2.68	0.80	2.73
Manage demands of personal commitments	3.40	0.72	2.38	0.81	3.45
Maintain a personal support network	3.37	0.78	2.57	0.92	2.70
Apply stress management and reduction strategies	3.33	0.79	2.22	0.82	3.66
Manage personal boundaries effectively	3.31	0.77	2.53	0.84	2.59
Time management					
Manage time effectively	3.65	0.60	2.64	0.72	3.67
Prioritize activities based on their importance	3.60	0.63	2.97	0.72	2.19
Set deadlines to achieve program outcomes	3.54	0.69	2.76	0.75	2.72
Spend the right amount of time on the right activity	3.38	0.71	2.50	0.79	2.93
Delegate tasks in order to manage time effectively	3.27	0.83	2.31	0.81	3.12
<i>Note.</i> Scale anchors: none = 0, below average = 1, average = 2, above average = 3, essential/exceptional = 4.					

## Discussion

Our exploration of underlying constructs resulted in the identification of three competency areas within the topic of personal effectiveness. The time management competencies mirror the component by the same name in the 4-H PRKC (Byrne, 2017), with the only differences related to adjustments in the wording of the

competency statements for improved measurement. However, the 4-H PRKC clusters the remaining competencies within a component called work–life integration. In our study, we found it was more appropriate to separate those competencies into two distinct competency areas described as personal health management and role management. Personal health management competencies focus on behaviors that positively or negatively influence an agent's health. Role management competencies focus on competencies that influence an agent's capacity to manage multiple roles, such as working professional, spouse, parent, and/or caregiver. We recommend that Extension systems and researchers adopt the use of personal health management, role management, and time management as competency constructs for future work related to agents' personal effectiveness.

The personal effectiveness competencies measured all were perceived by the respondents to be at least of above average importance while agents expressed a lack of ability to reach an acceptable level of competence for all of them. Four competencies were considered essential, including three in the time management competency area, suggesting its overall importance for Extension work. Position descriptions for job vacancies should emphasize the need for time management competencies, and administrators responsible for hiring need to have a talent for identifying suitable candidates in this regard. By definition, competencies can be taught (McClelland 1973, 1998), but it likely would be more efficient for Extension organizations to hire individuals who possess the necessary skills to manage their time in a work environment that is not structured to do it for them as opposed to trying to train agents to develop that skill set while on the job. That said, additional time management training is clearly required to address the priority needs of agents already in the system.

The most pressing priority we identified was for agents to incorporate adequate sleep into their personal lifestyles, reflecting a challenge potentially caused by the long hours known to be endemic to Extension work (Vines et al., 2018). Sleep deprivation is known to have multiple negative consequences, including increased risk of human error–related accidents, slower response time, reduced learning of cognitive tasks, and deteriorated performance on tasks requiring divergent thinking (Durmer & Dinges, 2005). Further, "virtually all forms of sleep deprivation result in increased negative mood states, especially feelings of fatigue, loss of vigor, sleepiness and confusion" (Durmer & Dinges, 2005, p. 119). It is concerning to consider the impacts of sleep deprivation in the context of UF/IFAS Extension when it appears likely that many agents are suffering from a lack of adequate sleep. Research is needed to learn more about agents' apparent sleep deprivation and its causes so that interventions can be designed and tested to improve the situation.

Based on the work of Durmer and Dinges (2005) showing that cognitive performance declines with sleep deprivation, the safe assumption is that Extension leadership should not confuse *more* work with *better* work. Extension as an organization, Extension agents, and Extension clients might all benefit from agents performing fewer work hours, a shift that would require a policy change rather than a professional development intervention. In a recent report that synthesized labor literature, Stronge and Harper (2019) concluded the following about productivity:

Studies show that shorter working weeks (and/or greater worker control over working time) can mean fewer sick absences, fewer in-work accidents and mistakes, and higher worker motivation on the job, amongst other outcomes. Various case studies have demonstrated that a shorter working week can actually increase productivity per hour. (p. 26)

We are unaware of any state Extension system offering shorter working weeks, but research examining the impacts of alternate or flexible work schedules on agents' ability to perform personal health management competencies and their ability to serve clientele is warranted.

Our research focused exclusively on the UF/IFAS Extension system, but the challenges and training needs identified are likely familiar to agents and staff development professionals in other states. The results of our study should be used to develop targeted programming to increase agents' personal effectiveness competencies. Success in this area will help achieve the outcomes outlined by Stone and Bieber (1997) as a result of a strategic approach to professional development: new and meaningful benefits for clientele and improved demonstration of value for the public. These are goals worthy of investment.

### Author Note

Lendel K. Narine was a doctoral assistant in the Department of Agricultural Education and Communication at the University of Florida at the time of the research. He is currently employed as an Extension assistant professor at Utah State University in Logan, Utah.

## References

- Athey, T. R., & Orth, M. S. (1999). Emerging competency methods for the future. *Human Resource Management, 38*(3), 215–225.
- Borich, G. D. (1980). A needs assessment model for conducting follow-up studies. *Journal of Teacher Education, 31*(3), 39–42.
- Boyd, B. L. (2004). Extension agents as administrators of volunteers: Competencies needed for the future. *Journal of Extension, 42*(2), Article 2FEA4. Available at: <https://www.joe.org/joe/2004april/a4.php>
- Byrne, C. (Ed.). (2017). *Growing together: 4-H professional, research, knowledge and competencies 2017*. Retrieved from <https://nifa.usda.gov/sites/default/files/resources/4-H%20PRKC%202017%20Guide.pdf>
- Cooper, A. W., & Graham, D. L. (2001). Competencies needed to be successful county agents and county supervisors. *Journal of Extension, 39*(1), Article 1RIB3. Available at: <https://www.joe.org/joe/2001february/rb3.php>
- Durmer, J. S., & Dinges, D. F. (2005). Neurocognitive consequences of sleep deprivation. *Seminars in Neurology, 25*(1), 117–129. doi:10.1055/s-2005-867080
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage.
- Harchik, A. E., Anderson, M., Thompson, R., Forde, K., Feinberg, L. Rivest, S., & Luiselli, J. K. (2001). Evaluation of a participatory, competency-based model of staff training in a community habilitative setting. *Behavioral Intentions, 16*, 1–13.
- Koundinya, V., Baird, A., Klink, J., Wolfson, L., Frankenberger, J., Bonnell, J., & Power, R. (2018). Core competencies for successful watershed management practitioners. *Journal of Extension, 56*(1), Article 1RIB1. Available at: <https://www.joe.org/joe/2018february/rb1.php>
- Kutilek, L. M., Conklin, N. L., & Gunderson, G. (2002). Investing in the future: Addressing work/life issues

of employees. *Journal of Extension*, 40(1), Article 1FEA6. Available at:

<https://www.joe.org/joe/2002february/a6.php>

Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4). doi:10.5032/jae.2001.04043

McClelland, D. C. (1973). Testing for competence rather than for intelligence. *American Psychologist*, 28(1), 1–14.

McClelland, D. C. (1998). Identifying competencies with behavioral-event interviews. *Psychological Science*, 9(5), 331–339. doi:10.1111/1467-9280.00065

Mulcahy, D., & James, P. (2002). Evaluating the contribution of competency-based training: An enterprise perspective. *International Journal of Training and Development*, 4(3), 160–175. doi:10.1111/1468-2419.00105

Raymundo, O. (2014, October). Richard Branson: Companies should put employees first. *Inc.* Retrieved from <https://www.inc.com/oscar-raymundo/richard-branson-companies-should-put-employees-first.html>

Ricciardi, J. N. (2005). Achieving human service outcomes through competency-based training. *Behavior Modification*, 29(3), 488–507. doi:10.1177/0145445504273281

Russell, M. B., Attoh, P., Chase, T., Gong, T., Kim, J., & Liggins, G. L. (2019). Burnout and Extension educators: Where are we and implications for future research. *Journal of Human Sciences and Extension*, 7(1), 195–211.

Stone, B. B., & Bieber, S. (1997). Competencies: A new language for our work. *Journal of Extension*, 35(1), Article 1COM1. Available at: <https://www.joe.org/joe/1997february/comm1.php>

Stronge, W., & Harper, A. (Eds.) (2019). *The shorter working week: A radical and pragmatic proposal*. Hampshire, England: Autonomy Research Ltd.

Vines, K. A., Cletzer, D. A., Westfall-Rudd, D., Lambur, M., Hunnings, J. R., & Vines, N. T. (2018). Identifying needs and implementing organizational change to improve retention of early-career agents. *Journal of Extension*, 56(1), Article 1FEA2. Available at: <https://joe.org/joe/2018february/a2.php>

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