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# Interpersonal Leadership Competencies of Extension Agents in Florida

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**Abstract**

*Extension's ability to purposively develop the capacity of its agents to effectively work with and lead people is limited by a lack of data that identifies for which competencies agents need training. Interpersonal leadership competencies are widely recognized as important for Extension professionals and the literature indicates they are linked with job satisfaction, motivation, and performance. The Borich method was used to identify priority training needs for Extension agents in Florida within the interpersonal leadership domain. A Principal Component Analysis revealed the interpersonal leadership competencies could be operationalized into two latent constructs, conflict management and group leadership. Competencies for which training is most needed were mostly part of the conflict management construct. The results can be used to intentionally design professional development programs, improve the state's competency model, and inform future research related to conflict in Extension.*

**Keywords:** competency; interpersonal leadership; extension; conflict management

## Introduction

In the development of human capital (Becker, 1994), competencies matter. Competencies are knowledge, skills, and abilities commonly associated with professions. Extension agents have many roles as local representatives of the land-grant university that require a variety of competencies (e.g., Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011; Fox & LaChenaye, 2015; Stone, 1997). Agents assess community needs; develop relationships and partnerships; provide and evaluate research-based educational programming; manage volunteers; serve on and lead countless internal and external committees, task forces, and boards; and more. The commonality across these roles is that they require agents to be competent working with and leading people. Yet, only sporadic research has examined the extent to which agents possess interpersonal leadership competencies which limits Extension's ability to purposively develop the capacity of its agents to effectively work with and lead people.

## Theoretical Framework and Literature Review

According to Kurz and Bartram (2002), "A competency . . . is a construct that represents a constellation of the characteristics of the person that result in effective performance in his or her job" (p. 230). McClelland (1973) posed a convincing argument for the use of competencies in professional development and their usage has become accepted practice for organizations. McClelland (1973) theorized that measuring competencies would be more valuable for determining an employee's potential for success than focusing solely on intelligence. Moreover, McClelland (1973, 1998) articulated four assumptions were necessary for using the competency approach: "(a)

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performance measures should be observable, (b) criteria should relate to life outcomes such as occupations and education, (c) competencies should be described and defined realistically, and (d) clearly articulated information on how to develop competencies should be made public" (Harder, Place, & Scheer, 2010, p. 45).

Of interest for this research were interpersonal leadership competencies. Mumford, Campion, and Morgeson (2007) proposed four categories of leadership competencies needed by all employees: cognitive, interpersonal, business, and strategic skills. Mumford et al. (2007) found interpersonal skills and cognitive skills were most important at all organizational levels. From a synthesis of the literature, Mumford et al. (2007) noted interpersonal skills relate to interacting with others, and include factors such as social perceptiveness, coordination of actions, negotiation skills, and persuasion skills. Similarly, Riggio and Lee (2007) indicated people skills play an important role in leader effectiveness.

Specific to Cooperative Extension, the 4-H Professional, Research, Knowledge and Competencies model (Byrne, 2017) integrates competencies associated with interpersonal leadership. Within the Access, Equity, and Opportunity domain reside competencies for interpersonal communication and demonstrating cultural awareness. Competencies in the Professionalism domain relate to demonstrating ethical behavior. Similarly, Moore and Rudd (2003) found a panel of administrative heads of agriculture agreed leadership skills such as building relationships and teams, teamwork, and cultural awareness and diversity were needed by Extension leaders. In addition, conflict resolution, communication, and emotional intelligence were identified as important skills for Extension leaders (Moore & Rudd, 2003).

The inclusion of interpersonal skills in adult leadership training is expected to produce positive results. Mikkelson, York, and Arritola (2015) found interpersonal skills such as communication effectiveness and relationship-oriented leadership had a positive impact on employee job satisfaction, motivation, and commitment. Similarly, Asree, Zain, and Razalli (2010) found interpersonal leadership competencies such as communication, active listening, conflict management, and embracing diversity were correlated to organizational responsiveness leading to an overall increase in performance. Earlier literature supports the positive relationship between interpersonal leadership competencies, job satisfaction, motivation, and organizational performance (Church, 1995; Fahy, 2000; Yukl, Gordon, & Taber, 2002). As such, there is a need to include interpersonal leadership competencies in professional development programs.

Collins and Holton (2004) indicated organizations should expect positive results from leadership development programs. These programs should target the "the right people at the right time" (Collins & Holton, 2004, p. 240). Therefore, the scope of such programs should be guided by a clear competency-based approach to employee capacity development and should be rooted in the overall mission of the organization. Leadership competency models are useful for summarizing effective leader behaviors (Hollenback, McCall, & Silzer, 2006). Leadership competency models provide a framework to guide leadership training for individual, interpersonal, and team development (Hollenback, McCall, & Silzer, 2006).

Benge, Harder, and Carter (2011) and Harder et al. (2010) found interpersonal leadership competencies such as communication and interpersonal skills were important competencies needed by pre-entry and early-career Extension agents in every program area. Specific to 4-H, competencies such as conflict management, communication, and multi-tasking were described as important by experienced agents (Harder & Dooley, 2007). At the administrative level, Moore and Rudd (2005) found Extension leaders rated emotional intelligence skills as the most important of six leadership skill areas, but that the greatest training need was for the development of conceptual

skills. In contrast, Hall and Broyles (2016) found the most important in-service training needs of agents related to conflict resolution and team leadership. However, Hall and Broyles noted leadership competencies of Extension agents were largely unexplored in the literature and therefore were unable to compare findings to other contexts with Extension. This study helps to address the knowledge gap of interpersonal leadership competencies in Extension.

## Purpose and Objectives

The purpose of this study was to determine the interpersonal leadership professional development needs of UF/IFAS Extension agents. Specific objectives were to: (a) explore the underlying constructs of interpersonal leadership competencies, (b) describe agents' perceived levels of ability to perform interpersonal leadership competencies, (c) describe the perceived levels of importance assigned by agents to interpersonal leadership competencies, and (d) compare ability and importance levels for each competency to determine priority training needs for UF/IFAS Extension agents.

## Methods

A descriptive design was used for the study. A census of the population was attempted in spring 2018. At the time of the study, there were 357 county, regional, and state level agents working for UF/IFAS Extension. An internal employee database provided the frame for the population.

The Institutional Review Board at University of Florida approved this research protocol as exempt. Data were collected using an online questionnaire. The questionnaire included interpersonal leadership competency items adapted from the UF/IFAS Extension Priority Competency Framework (Harder, 2015) and the 4-H Professional, Research, Knowledge, and Competencies model (Byrne, 2017). Six additional competency statements were included based on the recommendations provided by the leadership education expert who reviewed the instrument for content validity. The expert had nearly two decades experience directing adult leadership programs and teaching leadership education courses. The instrument also included questions about time management and work/life balance competencies, as well as three demographic items. These questions were not used for the purpose of this study.

The questionnaire format followed the Borich (1980) model to assess participants' perceptions of 17 competency statements. Participants were asked to rate their perceived ability in, and the perceived importance of each competency statement using the following response options: none, below average, average, above average, and essential (importance)/exceptional (ability). The Borich model was commonly used in the literature to assess agents' competencies and professional development needs (e.g., Culp & Kohlhagen, 2004; Hall & Broyles, 2016; McClure, Fuhrman, & Morgan, 2012).

The personalized e-mail function within Qualtrics was used to distribute the instrument to the target population. Potential participants ($N = 357$) received their first e-mail on April 25, 2018. Six e-mails bounced; three were able to be corrected. The first reminder was sent on May 7, 2018 and a subsequent and final reminder was sent on May 21, 2018. A total of 244 responses were received; four were then discarded from analysis due to missing data. The usable response rate was 67.23% ($n = 240$). Early and late respondents were compared as recommended by Lindner, Murphy, and Briers (2001). Early respondents were defined as agents who responded to the original invitation to participate in the study ($n = 182$), while late respondents were defined as agents who responded to the final reminder ($n = 58$). Results of an independent samples *t*-test indicated there

were no statistically significant differences for perceived importance and ability scores between early and late respondents.

The Cronbach's alpha for the 17 items assessing interpersonal leadership competencies was .94 which indicated acceptable internal consistency (Cronbach, 1951). However, a Principal Component Analysis (PCA) was used to extract underlying constructs of interpersonal leadership for the first objective. An exploratory PCA with an orthogonal rotation reduced the competency items into uncorrelated components (Field, 2014). The Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy determined whether extracted components were distinct and reliable, and the Bartlett's test of sphericity detected if the correlation matrix was equivalent to the identify matrix. A KMO value above .80 and a significant Bartlett's test indicated a valid PCA (Field, 2014). A scree plot was used to identify the ideal number of latent components of interpersonal leadership. Components with eigenvalues greater than 1.00 were retained and described based on the nature of items loaded onto each component.

For the purposes of data analysis, response options were coded: *none* = 0, *below average* = 1, *average* = 2, *above average* = 3, *essential/exceptional* = 4. Means were interpreted as follows: *none* = 0.0 - .49, *below average* = .50 – 1.49, *average* = 1.50 – 2.49, *above average* = 2.50 – 3.49, and *essential/exceptional* = 3.50 – 4.00. Means and standard deviations were reported for each competency item to address the second and third objectives.

The fourth objective was addressed through the calculation of a mean weighted discrepancy score (MWDS), as outlined by Borich (1980). MWDS scores are based on calculating the difference between how important a respondent believes a competency to be and how able the respondent perceives him/herself to be at performing that competency. The discrepancy score is then weighted based on how important the entire sample believes the competency to be, which helps to correct for potential errors in an individual's judgment. Finally, the mean of all the weighted discrepancies scores is calculated across the sample; this is the MWDS for a competency. Competencies were ranked by MWDS to determine priorities for professional development.

## Results

### Principal Component Analysis of Interpersonal Leadership Competencies

The Principal Component Analysis (PCA) shown in Table 1 was used to explore latent constructs of interpersonal leadership competencies. The PCA followed an orthogonal rotation and satisfied the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy test (*KMO* = .94) and the Bartlett's test of sphericity ($X^2 = 2294.16$, $p < 0.001$). Eigenvalues (> 1) and the scree plot indicated two components should be extracted. These two components explained 57% of the variation in the original construct for interpersonal leadership competencies. The latent components were described as Conflict Management (CM) and Group Leadership (GL). Items loaded on CM and GL respectively explained 30% and 27% of the variation in interpersonal leadership competencies. The Cronbach's alpha was .91 for CM and .88 for GL, indicating both constructs had acceptable internal consistency.

Table 1

*PCA of Interpersonal Leadership Competencies*

| Ability | Loading | |
|---|---|---|
| | CM | GL |
| *Conflict Management (CM)* | | |
| Apply cultural knowledge to address conflicts and negotiate common ground | 0.43 | 0.37 |
| Manage conflict effectively | 0.63 | 0.27 |
| Take others' perspectives into account | 0.74 | 0.21 |
| Understand role of conflict in relationships | 0.64 | 0.45 |
| Provide feedback in order to check for mutual understanding | 0.71 | 0.31 |
| React in a non-defensive manner | 0.77 | 0.26 |
| Engage in dialogue in a non-threatening way | 0.76 | 0.28 |
| Demonstrate an awareness of the impact of words and actions | 0.73 | 0.40 |
| Use active listening strategies | 0.67 | 0.35 |
| Utilize appropriate communication strategies in different situations | 0.52 | 0.51 |
| *Group Leadership (GL)* | | |
| Engage in crucial conversations | 0.42 | 0.66 |
| Apply knowledge of personality styles to work effectively with different people | 0.30 | 0.64 |
| Utilize leadership styles that are appropriate for followers' needs | 0.35 | 0.73 |
| Demonstrate a willingness to lead | 0.19 | 0.75 |
| Effectively facilitate groups | 0.23 | 0.78 |
| Demonstrate attributes of a positive role model | 0.37 | 0.62 |
| Build positive relationships with many different individuals and groups | 0.31 | 0.64 |

**Interpersonal Leadership Competencies: Importance and Ability**

Table 2 shows six of the seventeen competencies were perceived as essential by responding agents; the remaining eleven competencies had above average importance. A closer examination of the standard errors showed less variation in the competencies considered to be most essential compared to those of less importance. The most important competency was perceived by agents to be "Build positive relationships with many different individuals and groups" ($M$ = 3.61, $SD$ = .59) while the least important competency was "Apply cultural knowledge to address conflicts and negotiate common ground" ($M$ = 3.17, $SD$ = .83). Mean ability for the responding agents was perceived to be above average for sixteen competencies. Agents perceived themselves to be most able to "Build positive relationships with many different individuals and groups" ($M$ = 3.19, $SD$ = .65). Agents reported only average ability to "Engage in crucial conversations" ($M$ = 2.49, $SD$ =.78).

Table 2

*Interpersonal Leadership Competency Ratings*

| Competency | Importance | | Ability | |
|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* |
| Build positive relationships with many different individuals and groups | 3.61 | 0.59 | 3.19 | 0.65 |
| Take others' perspectives into account | 3.60 | 0.60 | 3.16 | 0.64 |
| Engage in dialogue in a non-threatening way | 3.55 | 0.63 | 3.03 | 0.70 |

| | | | | |
|---|---|---|---|---|
| Manage conflict effectively | 3.53 | 0.63 | 2.65 | 0.68 |
| Use active listening strategies | 3.51 | 0.64 | 2.88 | 0.77 |
| React in a non-defensive manner | 3.50 | 0.66 | 2.75 | 0.78 |
| Demonstrate attributes of a positive role model | 3.49 | 0.65 | 3.18 | 0.66 |
| Utilize appropriate communication strategies in different situations | 3.44 | 0.66 | 2.77 | 0.76 |
| Demonstrate an awareness of the impact of words and actions | 3.43 | 0.68 | 2.98 | 0.65 |
| Provide feedback in order to check for mutual understanding | 3.33 | 0.68 | 2.74 | 0.69 |
| Effectively facilitate groups | 3.32 | 0.72 | 2.77 | 0.72 |
| Utilize leadership styles that are appropriate for followers' needs | 3.30 | 0.76 | 2.63 | 0.68 |
| Engage in crucial conversations | 3.26 | 0.76 | 2.49 | 0.78 |
| Demonstrate a willingness to lead | 3.25 | 0.75 | 2.98 | 0.74 |
| Apply knowledge of personality styles to work effectively with different people | 3.24 | 0.81 | 2.71 | 0.80 |
| Understand role of conflict in relationships | 3.21 | 0.79 | 2.70 | 0.71 |
| Apply cultural knowledge to address conflicts and negotiate common ground | 3.17 | 0.83 | 2.56 | 0.63 |

*Note.* Scale anchors: *none* = 0, *below average* = 1, *average* = 2, *above average* = 3, *essential/exceptional* = 4.

Table 3 provides a summary of the MWDS for items relating to interpersonal leadership competencies. There were no negative MWDS. Results indicated the professional development needs of highest priority were "Manage conflict effectively" (MWDS = 3.10), "React to others in a non-defensive manner" (MWDS = 2.58), and "Engage in crucial conversations" (MWDS = 2.43). The least critical training needs were "Demonstrate attribute of a positive role model" (MWDS = 1.08) and "Demonstrate a willingness to lead" (MWDS = .71).

Table 3

*Mean Weighted Discrepancy Scores of Interpersonal Leadership Competencies*

| Competency | MWDS |
|---|---|
| Manage conflict effectively | 3.10 |
| React in a non-defensive manner | 2.58 |
| Engage in crucial conversations | 2.43 |
| Utilize appropriate communication strategies in different situations | 2.32 |
| Use active listening strategies | 2.28 |
| Utilize leadership styles that are appropriate for followers' needs | 2.22 |
| Provide feedback in order to check for mutual understanding | 1.98 |
| Apply cultural knowledge to address conflicts and negotiate common ground | 1.92 |
| Engage in dialogue in a non-threatening way | 1.82 |
| Effectively facilitate groups | 1.70 |
| Apply knowledge of personality styles to work effectively with different people | 1.65 |
| Understand role of conflict in relationships | 1.65 |
| Take others' perspectives into account | 1.58 |
| Build positive relationships with many different individuals and groups | |
| Demonstrate an awareness of the impact of words and actions | 1.53 |
| Demonstrate attributes of a positive role model | 1.08 |
| Demonstrate a willingness to lead | .71 |

*Note.* A positive score indicates the average ability across the group does not meet the level of importance for that competency item.

## Discussion/Conclusions/Recommendations

Principal Component Analysis was used to explore latent constructs of the interpersonal leadership competencies being investigated. *Conflict management* and *Group leadership* were identified as latent constructs. Practically, agents' ratings of the importance of the various interpersonal leadership competencies support the identification of these two constructs. Nine of the ten competencies perceived to be most important for agents belonged to the conflict management construct, suggesting agents perceived these competencies as both distinct and more important than the group leadership competencies. However, all competencies were rated as having above average or essential importance, consistent with previous literature espousing the value of conflict management, communication, and team leadership skills for Extension agents (Benge et al., 2011; Byrne, 2017; Hall & Broyles, 2016; Moore & Rudd, 2003).

Two conflict management competencies received the lowest importance ratings. There may be a need to improve the clarity of these items since they differed in ratings compared to other conflict management items; in retrospect, they do not appear to meet the standard of being defined and described realistically (McClelland, 1973, 1998). The first item, apply cultural knowledge to address conflicts and negotiate common ground, had the lowest loading on the conflict management component. The wording introduced the idea of being culturally aware, arguably related to but not the same as conflict management. The second conflict management item, understand role of conflict in relationships, was the only one of the conflict management competencies that referred to having knowledge instead of practicing a behavior. Corrections in the wording of both competencies are recommended for future studies to improve the precision of measuring conflict management competencies.

Encouragingly, agents felt they had above average ability in many of the competencies they believed to be most important. For example, building positive relationships with different individuals and groups was rated as the most important competency and had the highest mean for ability. Extension agents spend much of their time interacting with a variety of individuals, giving them both exposure to and the opportunity to develop this competency. UF/IFAS Extension follows a promotion and permanent status system; agents who lack the essential competency of being able to build positive relationships with different individuals and groups may find it very difficult to successfully achieve permanent status. Tracking agents' competency levels longitudinally could test this hypothesis.

On a similar note, agents tended to have positive perceptions of their own abilities. The competency for which agents tended to have the lowest perceived ability, engage in crucial conversations, still had a mean interpreted as average ability. Self-assessments are prone to estimation errors (Dunning, Heath, & Suls, 2004), but recall from the previous paragraph that UF/IFAS Extension agents must receive permanent status in order to remain gainfully employed. The means for ability may be positively skewed because agents who lack essential competencies are no longer in the UF/IFAS Extension workforce. This study did not focus on demographic characteristics of respondents. Future iterations should account for differences in agents' demographic background consistent with Collins and Holton's (2004) recommendation for leadership development programs to intentionally target participants.

Using the Borich (1980) model enabled the identification of priority training needs. Four of the five greatest needs were conflict management competencies: manage conflict effectively,

react in a non-defensive manner, utilize appropriate communication strategies in different situations, and use active listening strategies. Consistent with McClelland's (1973, 1998) recommendation to make public information on how to develop competencies, UF/IFAS Extension should review its professional development resources for the competencies of greatest need, ensure existing resources are clearly communicated and accessible to agents, and create new resources if appropriate. Hall and Broyles (2016) also found agents needed in-service trainings on conflict resolution. It is interesting that agents felt their most needed interpersonal leadership skills fell within the area of conflict management. In interviews with experienced 4-H agents, Harder and Dooley (2007) found conflict management was not a skillset most had expected to need as new agents. More research is needed to investigate the frequency and with whom agents are experiencing conflict.

Employee job satisfaction, motivation, commitment, responsiveness, and performance are all positively associated with the effective application of interpersonal leadership competencies (Asree et al., 2010; Church, 1995; Fahy, 200; Mikkelson et al., 2015; Yukl et al., 2002). Hollenback et al. (2006) promoted the use of leadership competency models to guide leadership training. The results of this study can be used to refine the competency model currently in use by UF/IFAS Extension. A competency model that more accurately reflects reality will not only help focus training but can be used to effectively communicate with prospective and new hires about the competencies needed for success. Developing the capacity of agents to demonstrate high levels of interpersonal competencies is anticipated to have positive outcomes for UF/IFAS Extension as an organization.

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