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## Importance of the Access, Equity, and Opportunity Competencies Among 4-H Professionals

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### Abstract

*The 4-H Professional Research, Knowledge and Competencies (PRKC) is a professional development framework that can be used to identify competency gaps and training needs of 4-H professionals. The PRKC consists of 6 competency domains, 1 being access, equity, and opportunity (AEO). A tailored design method was used to gather data and sort the respondents between rural and urban community type. 4-H Extension agents serving urban communities perceived 12 out of the 14 AEO domain components as more important than agents serving rural communities did. The 2 AEO domain components that were not significantly different in perceived importance were values, norms, and practices and active listening. An essential element of the 4-H experience must include creating an environment where children and youth feel safe, included, and that they belong. The differences among 4-H youth development professionals' perceptions of the importance of the AEO domain components, based on their work location, warrants further review. Implications of this information could influence the competencies that Extension systems look for in hiring. Furthermore, educational workshops and trainings around AEO for existing youth workers may need to be evolved.*

Key words: PRKC, 4-H, professional development, competencies

### Introduction

The National Institute of Food and Agriculture (NIFA) and its land-grant partners recognize the importance of diversity and inclusion in the development and implementation of University Cooperative Extension programs. These Extension programs must be handled in a manner that treats every customer and employee with fairness, equality, and respect. This applies to all

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aspects of Extension programs including identifying needs, setting priorities, allocating resources, selecting and assigning staff, conducting programs, and getting feedback (USDA, 2010). The idea of providing access to a wealth of information produced by land-grant universities and to educate the people has moved Cooperative Extension from segregation towards the ultimate goal of full inclusion and equity in Extension programs to include ALL people on a nondiscriminatory basis (Pruitt & Hicks, 2022). The process to assure that all reasonable efforts are being made to include minorities and underserved audiences in Extension programs is known as Civil Rights Compliance Review (USDA, 2010).

The 4-H program is the largest youth development program in the United States (National 4-H Council, 2020) and is in 70 countries around the world (Global 4-H Network, 2020). A 4-H strategic goal, known as "4-H Grows: A Promise to America's Kids," states that, "4-H will reflect the population demographics, vulnerable populations, diverse needs, and social conditions of the country" and that inclusion, caring adults, and diverse leadership will be critical elements to achieve this goal (National Institute of Food and Agriculture, 2017b, p. 2). A foundational need is that 4-H youth development professionals have the capacity to create inclusive programs where all youth are welcome and can thrive. As the majority of 4-H youth participants live in urban areas (National 4-H Council, 2018), more attention needs to be directed toward understanding urban Extension programs and the need for specialized training and development for Extension professionals in urban communities.

### Literature Review

While the efforts to be intentional in reaching marginalized audiences is noteworthy, in its current construct it may, regrettably, have led to Extension workers seeing efforts to build equity and inclusion knowledge as more of a mandated process with a sole focus of demonstrating compliance. Pruitt and Hicks (2022) note that, "Extension operations should consider not only utilizing diversity strategies but couple such approaches with inclusion efforts." Without a basic understanding of the needs and context of protected classes, Extension personnel are likely to engage inadvertently in practices that have been identified as discriminatory (Soule, 2017). As Extension moves forward, it is important to consider a learning strategy that is diverse, inclusive, and equitable and adjusts the mindset or culture to broader understanding of the historical significance of events and trust issues that may create current barriers that prevent populations from accessing Extension programming and services. As one considers the multifaceted components of Cooperative Extension around the nation, Extension professionals need to be equipped with the knowledge and skills to enhance diversity, equity, and inclusion (DEI) in all Extension programs and in all communities.

### ***The 4-H Youth Development Program and Diversity Efforts***

The 4-H program of today is committed to serving all youth within communities. 4-H's infrastructure reaches nearly six million youth nationwide, including military youth; children of incarcerated parents; and economically disadvantaged youth, especially in rural communities (National 4-H Council, 2019). Nonetheless, the stereotype of 4-H as an organization of White, rural youth has been difficult to overcome. Since most communities tend to be homogeneous and the club model is usually based within the community, developing a diverse club membership can sometimes be difficult (Howard & Wahle, 2021). To accomplish its 2025 membership goal, 4-H must be deliberate in developing inclusive environments that welcome vulnerable and diverse youth populations. As a strategy, and under the umbrella of the Extension Committee on Organization and Policy (2020), 12 groups were formed with youth development professionals from around the nation. The groups, known as "Champions," concentrate on work to support vulnerable populations. These groups provided national-level direction by the 4-H Program Leaders Working Group (PLWG, 2020) and the Access, Equity, and Belonging Committee ([AEBC], 2020).

Today, fewer than half (43%) of 4-H participants live in rural areas; 30% are in cities and 27% in suburban areas. Yet only 18% of America's children live in rural areas (National 4-H Council, 2018). Moreover, the diversity of the United States' youth is not fully mirrored in 4-H. While 4-H demographics have shifted in recent years, the pace of change is not keeping up with the growth of minority population groups across the country. In 2018, for the first time, less than 50% of U.S. children under age 15 were White (Brookings, 2019). In 2014, the most recent year for which statistics are available, 66% of 4-H members were White (National 4-H Council, 2018).

Furthermore, while 4-H strives to be inclusive of all, the reality is that the bulk of membership within 4-H community clubs is often viewed with a heteronormative lens of participation (Rosenberg, 2015). This means, based on societal assumptions and social norming, there may be people who believe that the 4-H program does not include children who identify within the LGBTQ+ community. Although Howard et.al (2021) demonstrated evidence of LGBTQ+ individuals' involvement in 4-H for decades, the historic agrarian and rural background of 4-H origins, and a continued public perception that is similar, likely influence the perception that LGBTQ+ youth are not part of the 4-H experience (Elliott-Engel et al., 2020).

As outlined in the 4-H program history, there have been times when the 4-H program needed to shift its focus to allow for a more inclusive environment. The difficult reality is that the

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program sometimes faces volunteers who are not supportive of including all types of children or they do not feel equipped or educated enough to handle situations outside of what they are accustomed to (Howard & Wahle, 2021). For 4-H programs to be high quality, they require staff members that are trained well, positive, and knowledgeable about their work. The challenge, however, is finding ways to support the professionals who create and deliver the programs to youth (Astroth, 2007).

New networks such as the National Urban Extension Leaders and the Western Center for Metropolitan Extension and Research have embraced the challenge and have been instrumental in creating the space to have conversations about how Extension should be functioning to meet the needs of 21<sup>st</sup> century America (Harder & Wells, 2017). A high degree of ethnic and racial diversity enriches and challenges metropolitan communities (Farrell & Lee, 2011; Graham et al., 2014; Meissner & Vertovec, 2015). Extension can view both the benefits and difficulties of this circumstance as opportunities for engagement.

#### ***Diversity, Equity, and Inclusion Workforce Development and Hiring***

Normative beliefs of the Extension programmatic focus, as it relates to diversity and equity, may default to a view of the Extension worker's competency needs for rural America. Additionally, the Extension educator workforce development pipeline is not preparing a demographically representative population, leaving state administrators struggling to hire prepared professionals, especially those with in-culture competency (e.g., racial and ethnic minority and urban; Elliot-Engel et al., 2020). Recruiting and hiring practices need to be developed to attract the next generation of Extension professionals who have the skill set and passion to work on the complex issues found in urban areas against a backdrop of diversity. Hiring procedures need to be streamlined and improved to match staff and consultant skill sets appropriately to roles (Harriman & Daugherty, 1992). Additionally, mentoring and intentional retention systems will be critical to ensuring that the next generation stays engaged with Extension (Fox et.al, 2017).

#### ***Diversity, Equity, and Inclusion Competency Needs of Extension Professionals***

Extension professionals working in metropolitan areas need the same basic set of core competencies as any other Extension professional in other geographic settings. However, because of the unique community conditions previously described, these individuals and teams must have additional skills and attributes to effectively address the needs of metropolitan constituents (Fehlis, 1992; Fox, 2017; National Extension Urban Task Force, 1996; Webster & Ingram, 2007). Due to the magnitude of diversity in metropolitan areas, cultural competence is

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essential for all personnel. Although this is an expectation throughout Extension, the scope in urban areas intensifies the degree to which personnel must apply related competencies (Krofta & Panshin, 1989; Webster & Ingram, 2007). More recently, an overlying focus in Extension has been increasing the participation of urban minority youths in 4-H (Garcia et al., 2017).

## Conceptual Framework

Extension researchers have developed competencies that entry-level Extension agents will need for the future (Harder et al., 2010). Using the suggested competencies as a baseline, Bengé et al. (2011) conducted a study among University of Florida Extension faculty to identify pre-hire entry competencies of potential employees that should be considered. Interpersonal skills, specifically cultural sensitivity, is a highly ranked skill set sought in hires (Bengé et al., 2011). As such, this approach could lead to Extension employees who have an enhanced level of empathy and awareness of vulnerable population communities (Howard, et.al. 2021). Recognizing the focused effort of land grant universities around the nation to enhance Extension's presence in urban settings it is reasonable to ask the question, "what are the competency needs of rural Extension educators as it relates to Diversity, Equity, and Opportunity?" An assessment of the perceived value among the youth workers was a starting point to develop a baseline of understanding that could potentially shape a learning approach to enhance cultural competency skills for all youth workers within Cooperative Extension.

The 4-H Professional, Research, Knowledge and Competencies (PRKC) is a "framework for professional competencies that are vital to the success of the 4-H professional" (NIFA, 2017a, p. 4). The PRKC is a roadmap and guide for the development youth development workers, creation of job descriptions, career development, and learning plans and performance standards (Stone & Rennekamp, 2004). Originally developed in 1987 as the 4-H Professional Research and Knowledge Base ([PRK]; Hutchins, 1990; Rennekamp, 1987), the PRKC underwent reviews in both 2004 and 2017 (NIFA, 2017a; Stone & Rennekamp, 2004) yielding six current domains today:

1. Youth development – "Utilizing the knowledge of the human growth and development process to create environments that help youth reach their full potential" (NIFA, 2017a, p. 7).
2. Youth program development – "Planning, implementing, and evaluating programs that achieve youth development outcomes" (NIFA, 2017a, p. 10).
3. Volunteerism – "Building and maintaining a volunteer program management system for the delivery of youth development programs" (NIFA, 2017a, p. 13).

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4. Access, Equity, and Opportunity (AEO) – “Interacting effectively and equitably with individuals, and building long-term relationships with diverse communities. Culture is defined as the intersection of one’s national origin, religion, language, sexual orientation, socioeconomic class, age, gender identity, race, ethnicity, and physical and developmental ability” (NIFA, 2017, p. 16).
5. Partnerships – “Engaging youth in community development and the broader community in youth development” (NIFA, 2017, p. 21).
6. Organizational Systems – “Using systems to build capacity of the organization and its people to work with and on behalf of young people effectively” (NIFA, 2017, p. 25).

State 4-H programs and Extension professionals have utilized the PRKC since its creation in a variety of ways, such as conducting research, building professional development program and in-service trainings, and integrating through youth development theory. In one of the first studies, using the original PRK, Rennekamp (1987) examined the staff development needs of Extension 4-H agents. Rennekamp found that Extension professionals’ academic major affected their preparation to be a 4-H agent, signaling the need for change to hiring practices of 4-H agents. Minnesota 4-H created their youth development, educational design, and volunteerism specializations based on the PRK (Hutchins, 1990), and Western 4-H program leaders have been using the PRKC to create an on-going regional in-service training program (Astroth, 2002; Astroth & Lindstrom, 2008; Varrella et al., 2016).

Heck et al. (2009) used the PRKC to identify both competency strengths and weaknesses of California 4-H professionals, stating “on the whole we found it was useful in identifying areas in which staff members had expertise as well as those where they reported lower levels of confidence” (para. 32). Using personal effectiveness items from the PRKC, Harder and Narine (2020) found Extension professionals need training and development in all areas of personal effectiveness, such as managing time and getting adequate amounts of sleep. Stark et al. (2012) found that 4-H youth professionals spend the least amount of time in the AEO domain, and the most amount of time in the youth program development domain when compared to time spent in the other PRKC domains.

The PRKC domain that aligns with diversity and inclusionary efforts is AEO. The AEO domain, which consists of 74 unique competencies, is comprised of five topics and fourteen components which can be viewed in Table 1.

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**Table 1. AEO Topics and Components**

AEO Topic	AEO components for each topic
Sensitivity	<ul style="list-style-type: none"> <li>• Personal readiness for valuing diversity</li> <li>• Respect and honor for cultural and human diversity</li> </ul>
Awareness	<ul style="list-style-type: none"> <li>• Values, norms, and practices</li> <li>• Pluralistic thinking</li> <li>• Power, privilege, and policy</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Open attitude</li> <li>• Speech and written communication</li> <li>• Active listening</li> </ul>
Inclusive programming	<ul style="list-style-type: none"> <li>• Promotion of meaningful engagement</li> <li>• Program design</li> <li>• Program implementation</li> <li>• Collaboration</li> </ul>
Inclusive organizations	<ul style="list-style-type: none"> <li>• Policies and procedures</li> <li>• Community outreach</li> </ul>

**Purpose and Objectives**

The purpose of our study was to identify the perceived importance 4-H Extension agents place on the AEO domain of the PRKC based on whether they are in rural or urban communities. The objectives of our study were to

1. Describe the perceived importance 4-H Extension agents place on the AEO domain components.
2. Determine if significant differences existed in 4-H Extension agents' perceived importance of the AEO domain components based on whether they are located in rural or urban settings.

**Methods**

The findings presented in our article are part of a larger study assessing the professional development needs of NAE4-HYPD members using the PRKC. We received approval from the University of Florida Institutional Review Board (IRB) and the NAE4-HYDP Executive Board prior to conducting this study.



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The target population for our study consisted of NAE4-HYDP members who identified as active Extension professionals. We obtained a list of active association members from the executive board which included members' names, email addresses, state, and membership type ( $N = 4,281$ ). After removing lifetime and student members, we had 3,316. We split this remaining population into two groups using a systematic sampling procedure, because only half were completing the current survey and the other half were completing a different survey, which was part of the larger investigation. We conducted a census of the final targeted population ( $n = 1,658$ ) for the purposed of the current study.

To gather responses, we used the tailored design method (TDM) because it yields high response rates, develops trust with the respondents, reduces sampling error, and allows the researchers to follow survey procedures that have been researched and scientifically founded (Dillman et al., 2009). Furthermore, this approach minimizes nonresponse (Sivo et al., 2006). We sent a pre-notice message through the NAE4-HYDP newsletter to inform association members of the study and thank them in advance for their participation. We used Qualtrics to send four emails to each of the 1,658 study participants in our target population. A total of 432 questionnaires were completed, for an overall response rate of 26%. Table 2 provides a comparison of membership and respondents by their respective NAE4-HYDP region.

**Table 2. NAE4-HYDP Regional Membership and Respondent Comparison**

Region	NAE4-HYDP membership by region ( $N = 1658$ )		Respondents' NAE4-HYDP membership by region ( $n = 432$ )	
	$N$	%	$n$	%
Northeastern	202	12%	60	14%
Western	290	18%	91	21%
North Central	467	28%	147	34%
Southern	699	42%	134	31%

Our survey consisted of the 74 items from the AEO domain of the PRKC (NIFA, 2017) and one demographic question to determine whether they served a rural or urban community. Regarding the AEO domain, we used the Borich model (Borich, 1980) importance scale, which is a 5-point Likert-type scale, to measure the perceived importance of the AEO domain competencies. For the purposes of data analysis, response options were coded: 1 (*not important*), 2 (*of little importance*), 3 (*of average importance*), 4 (*very important*), and 5 (*absolutely essential*). Means were interpreted as follows: 1.0-1.49 (*no importance*), 1.50-2.49 (*below average importance*), 2.50-3.49 (*average importance*), 3.50-4.49 (*above average*

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*importance*), and 4.50-5.0 (*essential*). We defined “rural” as a community comprised of fewer than 50,000 residents, and “urban” as a community comprised of more than 50,000 residents.

Prior to conducting the study, the questionnaire was reviewed and assessed by a panel of four experts for construct and face validity (Ary et al., 2006). The panel consisted of 4-H Extension professionals at both the county and state levels, each member being from a different NAE4-HYDP region. The expert panel did not make any changes to the instrument. We formatted the questionnaire into an online survey using Qualtrics. We calculated Cronbach’s reliability coefficient (Cronbach’s alpha) to ensure the AEO domain components maintained internal consistency (Ary et al., 2006; Cronbach, 1951). The AEO domain was a valid instrument for assessing the perceived importance of AEO domain competencies of rural and urban 4-H Extension agents, which can be seen in Table 3. We did not find any previous studies that assessed the reliability of the AEO domain components to compare.

**Table 3. Reliability Levels of AEO Domain Components**

AEO domain components	Study alpha levels
Sensitivity	
Personal readiness for valuing diversity	0.87
Respect and honor for cultural and human diversity	0.81
Awareness	
Values, norms, and practices	0.87
Pluralistic thinking	0.80
Power, privilege, and policy	0.91
Communication	
Open attitude	0.86
Speech and written communication	0.92
Active listening	0.85
Inclusive programming	
Promotion of meaningful engagement	0.79
Program design	0.80
Program implementation	0.91
Collaboration	0.87
Inclusive organizations	
Policies and procedures	0.89
Community outreach	0.92

*Note.* Reliability levels  $\geq .80$  considered acceptable (Cronbach, 1951).

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We analyzed the data using SPSS version 26 statistical software package for Windows. We calculated descriptive statistics for the first objective and inferential statistics for the second and third objectives. We utilized *t*-tests to determine whether the difference between two means was statistically significant (Ary et al., 2006), using an alpha level of .05 for all statistical tests.

There were three limitations of this study. First, respondents may have misinterpreted the questions, which would result in decreased validity. Second, we assumed the respondents in the study provided honest and accurate answers. The third limitation was the low response rate of our study. To address this limitation, Linder et al. (2001) and Sivo et al., (2006) recommend comparing early to late respondents to minimize nonresponse error. We did not identify any significant differences between early and late respondents, signaling we can generalize the results of our study to the entire population (Linder et al., 2001; Sivo et al., 2006).

## Findings

### *Objective 1 Results*

Objective 1 was to describe the perceived importance 4-H Extension agents place on the AEO domain components. All the AEO domain components were perceived as being of above average importance, with none being perceived as essential. The AEO domain component perceived as most important was pluralistic thinking ( $M = 4.31$ ,  $SD = 0.58$ ), and the AEO domain component perceived as least important was power, privilege and policy ( $M = 3.99$ ,  $SD = 0.68$ ). Table 4 describes 4-H Extension agents' perceived importance of the AEO domain components.

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**Table 4. Index Means and Standard Deviations of 4-H Extension Agents' Perceived Importance of the AEO Domain Components**

	<i>M</i>	<i>SD</i>	<i>n</i>
Sensitivity			
Personal readiness for valuing diversity	4.15	0.52	432
Respect and honor for cultural and human diversity	4.21	0.63	432
Awareness			
Values, norms, and practices	4.14	0.54	432
Pluralistic thinking	4.31	0.58	432
Power, privilege, and policy	3.99	0.68	430
Communication			
Open attitude	4.25	0.54	430
Speech and written communication	4.21	0.56	428
Active listening	4.11	0.68	424
Inclusive programs			
Promotion of meaningful engagement	4.05	0.56	392
Program design	4.18	0.59	432
Program implementation	4.23	0.55	390
Collaboration	4.23	0.56	390
Inclusive organizations			
Policies and procedures	4.21	0.51	352
Community outreach	4.01	0.59	352

*Note.* Response options were coded from 1 (*not important*) to 5 (*absolutely essential*). We interpreted the means as follows: 1.0-1.49 (*no importance*), 1.50-2.49 (*below average importance*), 2.50-3.49 (*average importance*), 3.50-4.49 (*above average importance*), and 4.50-5.0 (*essential*).

**Objective 2 Results**

Objective 2 of our study was to determine if significant differences existed in 4-H Extension agents' perceived importance of the AEO domain components based on whether they were located in rural or urban communities. Table 5 describes the differences between rural and urban 4-H agents' perceptions of the importance of sensitivity components. *Personal readiness for valuing diversity* and *respect and honor for cultural and human diversity* were perceived as more important by 4-H agents serving urban communities than by 4-H agents serving rural communities.

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**Table 5. Differences Between 4-H Extension Agents' Perceived Importance of the AEO Domain's Sensitivity Components and the Rural/Urban Characteristic**

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Personal readiness for valuing diversity					
Rural	248	4.03	0.56	4.99*	.03
Urban	184	4.19	0.53		
Respect and honor for cultural and human diversity					
Rural	248	4.08	0.68	8.51*	< .01
Urban	184	4.32	0.54		

*Note.* Response options were coded from 1 (*not important*) to 5 (*absolutely essential*).

\* $p < .05$ .

Table 6 describes the differences between rural and urban 4-H agents' perceptions of the importance of awareness components. 4-H agents serving urban communities perceived *pluralistic thinking* and *power, privilege, and policy* as more important than 4-H agents serving rural communities. There was not a significant difference between urban and rural 4-H agents' perception of importance of the *values, norms, and practices* component.

**Table 6. Differences Between 4-H Extension Agents' Perceived Importance of the AEO Domain's Awareness Components and the Rural/Urban Characteristic**

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Values, norms, and practices					
Rural	248	4.06	0.60	3.64	.06
Urban	184	4.20	0.45		
Pluralistic thinking					
Rural	248	4.23	0.61	4.87*	.03
Urban	184	4.39	0.55		
Power, privilege, and policy					
Rural	248	3.88	0.66	4.24*	.04
Urban	184	4.06	0.62		

*Note.* Response options were coded from 1 (*not important*) to 5 (*absolutely essential*).

\* $p < .05$ .

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Table 7 describes the differences between rural and urban 4-H agents' perceptions of the importance of communication components. 4-H agents serving urban communities perceived *open attitude* and *speech and written communication* as more important than 4-H agents serving rural communities. There was not a significant difference between urban and rural 4-H agents' perception of importance of the *active listening* component.

**Table 7. Differences Between 4-H Extension Agents' Perceived Importance of the AEO Domain's Communication Components and the Rural/Urban Characteristic**

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Open attitude					
Rural	248	4.13	0.55	8.42*	< .01
Urban	184	4.33	0.49		
Speech and written communication					
Rural	248	4.10	0.59	5.60*	.02
Urban	184	4.26	0.49		
Active listening					
Rural	248	3.99	0.72	1.62	.20
Urban	184	4.11	0.64		
<i>Note.</i> Response options were coded from 1 ( <i>not important</i> ) to 5 ( <i>absolutely essential</i> ).					
* <i>p</i> < .05.					

Table 8 describes the differences between rural and urban 4-H agents' perceptions of the importance of inclusive programs components. 4-H agents serving urban communities perceived all four of the AEO Inclusive Programs component as more important than 4-H agents serving rural communities.

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**Table 8. Differences Between 4-H Extension Agents' Perceived Importance of the AEO Domain's Inclusive Programs Components and the Rural/Urban Characteristic**

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Promotion of meaningful engagement					
Rural	244	4.13	0.57	6.62*	.01
Urban	182	4.31	0.49		
Program design					
Rural	244	4.15	0.60	5.00*	.03
Urban	182	4.31	0.48		
Program implementation					
Rural	242	4.09	0.54	14.81*	< .01
Urban	174	4.34	0.40		
Collaboration					
Rural	242	3.88	0.61	8.12*	.01
Urban	174	4.11	0.56		

*Note.* Response options were coded from 1 (*not important*) to 5 (*absolutely essential*).

\* $p < .05$ .

Table 9 describes the differences between rural and urban 4-H agents' perceptions of the importance of inclusive organizations components. Both components of the AEO Inclusive Organization's domain were perceived as more important by 4-H agents serving urban communities than 4-H agents serving rural communities.

**Table 9. Differences Between 4-H Extension Agents' Perceived Importance of the AEO Domain's Inclusive Organizations Components and the Rural/Urban Characteristic**

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Policies and procedures					
Rural	242	4.09	0.54	14.81*	< .01
Urban	174	4.34	0.40		
Community outreach					
Rural	242	3.88	0.61	8.12*	.01
Urban	174	4.11	0.56		

*Note.* Response options were coded from 1 (*not important*) to 5 (*absolutely essential*).

\* $p < .05$ .

## **Discussion, Implications, and Recommendations**

An essential element of the 4-H experience must include creating an environment where children feel safe, included, and that they belong. The idea that everyone is welcome and will be provided an equal opportunity to grow and learn in the program is critical to a child's development and the 4-H mission (National 4-H Council, 2019).

Do 4-H Extension professionals serving urban communities need a varied skillset relative to their rural community colleagues? The results of our study are beyond the scope of this question; however, our results do shed light on this question in that from an employee perspective, the answer might be yes. Statistical analysis demonstrated that urban 4-H professionals perceive diversity competence as being more important than those serving rural communities do, and previously cited literature supports this claim (Fehlis, 1992; Fox, 2017; National Extension Urban Task Force, 1996; Webster & Ingram, 2007). Furthermore, we investigated 4-H professionals' perceptions of how they feel or think about these competencies, not if they actually know or have the ability to practice them. One's perception of what they think versus what they do has been shown to be different (Kerman et al., 2007), and in the case of our study, further examination is needed.

An interesting finding of our study is that the respondents rated the importance of the AEO components as above average and not essential for the 4-H professional. The current foundational model for Extension professional competencies (Harder et al., 2010) illustrates the need for cultural sensitivity and interpersonal skills, which aligns with the above average AEO competencies needed by 4-H professionals. However, Harder et al. (2010) did not break down the competency model by geographic location. Additionally, the current increase of attention and focus on AEO and DEI within Extension and higher education institutions highlights that the model might need to be updated. Additionally, further investigation is needed to understand what other Extension professionals' demographic characteristics, such as gender and years of experience, impact their abilities to practice AEO within their Extension programs.

The differences among 4-H youth development professionals' perception of the importance of the AEO domain components, based on their work location, warrants further review. Further research is needed to understand why and what differences exist between 4-H agents serving urban and rural communities, and we recommend qualitative research studies dive into these questions. Specifically, we feel both phenomenological and narrative qualitative inquires could help Cooperative Extension further understand and explain the reasons why differences exist between urban and rural competency needs. It would also be helpful for Cooperative Extension



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to initiate further inquiry of what diverse communities perceive competencies 4-H professionals need or should possess. Furthermore, investigating how diverse communities experience programming would add value and continue the work of our current study. Understanding these stories and experiences would help Cooperative Extension to better meet the needs all diverse communities. Additionally, a line of inquiry could also focus on other Extension professionals' DEI competency needs, such as agriculture or family and consume sciences Extension professionals.

The implications of employee DEI competencies and skillsets warrant further examination regarding hiring practices, onboarding initiatives, and ongoing professional development. The AEO components provide an early depiction of specific questions to ask interview candidates and newly hired employees. If urban communities truly need employees with greater DEI understanding and competency than rural communities, then Extension hiring managers can employ the AEO or a different DEI instrument. Likewise, Extension professionals working within the program and staff development realm can use the AEO or a different DEI instrument to determine competencies needed for newly hired and the seasoned Extension professionals. Additionally, NAE4-HYDP and other youth-serving organizations can use the results of this study employ targeted and intentional professional development efforts and resources, such as a workshop or resource repository, available to their members and employees. Furthermore, educational workshops and trainings around AEO for existing youth workers may need to be evolved.

## References

- Access, Equity, and Belonging Committee. (2020a). *Committee purpose*. <https://access-equity-belonging.extension.org/>
- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7<sup>th</sup> ed.). Thompson-Wadsworth.
- Astroth, K. A. (2002, July). *Western 4-H institute: Preparing the 4-H professional for success. Evaluation report I* (ED469010). Education Resources Information Center. [https://eric.ed.gov/?q=Astroth%2c+K.+A.+\(2002\).+Western+4H+Institute%3a+Preparing+the+4H+professional+for+success.+Evaluation+report+I.Retrieved+from+ERIC+database.+\(ED+469+010\).&id=ED469010](https://eric.ed.gov/?q=Astroth%2c+K.+A.+(2002).+Western+4H+Institute%3a+Preparing+the+4H+professional+for+success.+Evaluation+report+I.Retrieved+from+ERIC+database.+(ED+469+010).&id=ED469010)
- Astroth, K. (2007). Making the best better: 4-H staffing patterns and trends in the largest professional network in the nation. *Journal of Youth Development*, 2(2). <https://doi.org/10.5195/jyd.2007.343>

Importance AEO Domain (PRKC) for 4-H Professionals

- Astroth, K. A., & Lindstrom, J. (2008). Investing in professional development: Building and sustaining a viable 4-H youth workforce for the future. *Journal of Youth Development*, 3(2), <https://doi.org/10.5195/jyd.2008.303>
- Benge, M., Harder, A., & Carter, H. (2011). Necessary pre-entry competencies as perceived by Florida Extension agents. *Journal of Extension*, 49(5), Article 5FEA2. <https://tigerprints.clemson.edu/joe/vol49/iss5/3>
- Brookings. (2019, June 24). *Less than half of US children under 15 are white, census shows*. <https://www.brookings.edu/research/less-than-half-of-us-children-under-15-are-white-census-shows/#:~:text=William%20H.,-Frey&text=For%20the%20first%20time%2C%20non,U.S.%20Census%20Bureau%20estimates%20show>
- Borich, G. D. (1980). A needs assessment model for conducting follow-up studies. *Journal of Teacher Education*, 31(3), 39–42. <https://journals.sagepub.com/doi/pdf/10.1177/002248718003100310>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3<sup>rd</sup> ed.). John Wiley & Sons.
- Elliott-Engel, J., Amaral, J. R., Westfall-Rudd, D. M., & Rudd, R. D. (2020). Perspectives on LGBTQ+ inclusion and identity development from a College of Agriculture and Life Sciences. *North American College and Teachers of Agriculture Journal*, 64, 102–112. <https://www.nactateachers.org/index.php/volume-64-2020/2987-perspectives-on-lgbtq-inclusion-and-identity-development-from-a-college-of-agriculture-and-life-sciences>
- Extension Committee on Organization and Policy. (2020). *2020–2021 Cooperative Extension section leadership*. [https://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR\\_Library/ecop-directory/file](https://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR_Library/ecop-directory/file)
- Farrell, C. R., & Lee, B. A. (2011). Racial diversity and change in metropolitan neighborhoods. *Social Science Research*, 40(4), 1108–1123. <https://doi.org/10.1016/j.ssresearch.2011.04.003>
- Fehlis, C. P. (1992) Urban Extension programs. *Journal of Extension*, 30(2), Article 2FEA3. <https://archives.joe.org/joe/1992summer/a3.php>
- Fox, J. M., Ruemenapp, M. A., Proden, P., & Gaolach, B. (2017). A national framework for urban Extension. *Journal of Extension*, 55(5), Article 21. <https://tigerprints.clemson.edu/joe/vol55/iss5/21>
- Garcia, M., Piña, M., & Dromgoole, D. (2017). Including at-risk populations in urban 4-H afterschool programs. *Journal of Medical Diagnosis Methods*, 6(3). <https://doi.org/10.4172/2168-9784.1000252>
- Global 4-H Network (2020). *4-H around the world*. <http://global-4-h-network.com/4h-global/>

Importance AEO Domain (PRKC) for 4-H Professionals

- Graham, S., Munniksma, A., & Juvoen, J. (2014). Psychosocial benefits of cross ethnic friendships in urban middle schools. *Child Development, 85*(2), 469–483. <https://doi.org/10.1111/cdev.12159>
- Harder, A., & Narine, L. (2020). Personal health, role, and time management competency training needs of Florida Extension agents. *Journal of Extension, 58*(1). <https://tigerprints.clemson.edu/joe/vol58/iss1/19>
- 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. <https://doi.org/10.5032/jae.2010.03044>
- Harder, A., & Wells, O. (2017). Tampa Bay Extension agents' views of urban Extension: Philosophy and program strategies. *Journal of Human Sciences and Extension, 5*(2), 55–69. <https://www.jhseonline.com/article/view/709>
- Harriman, L. C., & Daugherty, R. A. (1992). Staffing Extension for the 21<sup>st</sup> century. *Journal of Extension, 30*(4), Article 4FUT1. <https://archives.joe.org/joe/1992winter/fut1.php>
- Heck, K., Subramaniam, A., & Carlos, R. (2009). Use of the PRKC tool in assessment of staff development needs: Experiences from California. *Journal of Extension, 47*(5), Article v47-3a7. <https://tigerprints.clemson.edu/joe/vol47/iss3/7>
- Howard, J., McCoy, T., & Wang, C. (2021). Nationwide perspectives and experiences of gay and bisexual male 4-H alums. *Journal of Human Sciences and Extension, 9*(3), 107–132. <https://www.jhseonline.com/article/view/1152>
- Howard, J., & Wahle, A. (2022). Reaching marginalized audiences through positive youth development programming: Challenges when influencing constituents do not agree that 4-H should be open to all. In N. I. Fields & T. J. Shaffer (Eds.), *Grassroots engagement and social justice through Cooperative Extension* (pp. 97–108). Michigan State University Press. <https://doi.org/10.14321/j.ctv2nwg92p.9>
- Hutchins, G. K. (1990). Agent specialization and the 4-H PRK model. *Journal of Extension, 28*(4), Article 4FEA3. <https://archives.joe.org/joe/1990winter/a3.php>
- Kerman, A., Williams, M. E., & Meunier, J. (2007). Perception versus reality. *Journal of Health Psychology, 12*(6), 871–882. <https://doi.org/10.1177%2F1359105307082449>
- Krofta, J., & Panshin, D. (1989). Big city imperative: Agenda for action. *Journal of Extension, 27*(3), Article 3FEA1. <https://archives.joe.org/joe/1989fall/a1.php>
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education, 42*(4), 43–53. <https://doi.org/10.5032/jae.2001.04043>
- Meissner, F., & Vertovec, S. (2015). Comparing super diversity. *Ethnic and Racial Studies, 38*(4), 541–555. <https://doi.org/10.1080/01419870.2015.980295>
- National Extension Urban Task Force. (1996). *Urban Extension: A national agenda*. <http://district4.extension.ifas.ufl.edu/UrbanExtension/PDF/Urban%20Extension,%20A%20National%20Agenda.pdf>

Importance AEO Domain (PRKC) for 4-H Professionals

- National 4-H Council. (2018). *4-H pathways report*. Extension Committee on Organization and Policy. <https://static1.squarespace.com/static/58e51ba6db29d619dcb73826/t/5e21e6567ecee047b5536076/1579279994567/4-H+Pathways+Report-PROOF6.pdf>
- National 4-H Council. (2019). *National 4-H Council annual report*. <https://fourhstaging.wpengine.com/wp-content/uploads/2021/03/National-4H-Council-2019-Annual-Report.pdf>
- National 4-H Council. (2020). *What is 4-H?* <https://4-h.org/about/what-is-4-h/>
- National Institute of Food and Agriculture. (2017a). *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>
- National Institute of Food and Agriculture. (2017b). *Strategic plan: 4-H youth development a 2025 vision*. <https://nifa.usda.gov/sites/default/files/resources/National%204-H%20Strategic%20Plan%202017.pdf>
- Program Leaders Working Group. (2020). *4-H programming partnerships*. <https://nifa.usda.gov/sites/default/files/resource/4-H%20Programming%20Partnerships.pdf>
- Pruitt, N., & Hicks, L. (2022). Moving beyond the minimum standard: Nondiscrimination policy and procedures. In *striving for grassroots engagement: Community education, social justice, cultural competence, and the role of Cooperative Extension*. Michigan State University Press.
- Rennekamp, R. A. (1987). *The relationship between selected antecedent characteristics and the perceived educational needs of Extension agents with 4-H youth development responsibilities* [Doctoral dissertation, The Ohio State University]. University Microfilms International. [https://etd.ohiolink.edu/apexprod/rws\\_etd/send\\_file/send?accession=osu1487585645577237&disposition=inline](https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=osu1487585645577237&disposition=inline)
- Rosenberg, G. N. (2015). *The 4-H harvest: Sexuality and the state in rural America*. University of Pennsylvania Press.
- Sivo, S. A., Saunders, C., Chang, Q., & Jiang, J. J. (2006). How low should you go? Low response rates and the validity of inference in IS questionnaire research. *Journal of the Association for Information Systems*, *7*(6), 351–414. <https://business.ucf.edu/wp-content/uploads/sites/4/2014/11/How-Low-Should-You-Go..Low-Response-Rates-and-the-Validity-of-Inference-in-IS-Questionnaire-Research.pdf>
- Soule, K. E. (2017). Creating inclusive youth programs for LGBTQ+ communities. *Journal of Human Sciences and Extension*, *5*(2), 105–125. [https://docs.wixstatic.com/ugd/c8fe6e\\_7797678bb8774b74ab884816fb073abc.pdf](https://docs.wixstatic.com/ugd/c8fe6e_7797678bb8774b74ab884816fb073abc.pdf)
- Stark, C., Vetter, R., Gebeke, D., Lardy, G., & Eighmy, M. A. (2012). The 4-H youth development professionals workload relationship to job satisfaction. *Journal of Youth Development*, *7*(3). <https://doi.org/10.5195/jyd.2012.126>
- Stone, B., & Rennekamp, R. (2004). *New foundations for the 4-H youth development profession: 4-H professional research, knowledge, and competencies study, 2004*. Conducted in cooperation with

Importance AEO Domain (PRKC) for 4-H Professionals

the National 4-H Professional Development Task Force. National 4-H Headquarters, CSREES, USDA.

United States Department of Agriculture. (2010). *USDA compliance review guide*.

<https://nifa.usda.gov/civil-rights-compliance-program>

Varrella, G. F., Luckey, B. P., Baca, J. S., & Peters, C. (2016). Growing our own: A longitudinal evaluation of a professional development program for early-career 4-H professionals. *Journal of Extension*, 54(5), Article 22. <https://tigerprints.clemson.edu/joe/vol54/iss5/22>

Webster, N., & Ingram, P. (2007). Exploring the challenges for extension educators working in urban communities. *Journal of Extension*, 45(3), Article 3IAW3.

<https://archives.joe.org/joe/2007june/iw3.php>