Members' Perceptions Regarding Diversity and Inclusion within the American Association for Agricultural Education

Christopher M. Estepp¹, Lauren L. Cline², and Mary T. Rodriguez³

Abstract

Professional scientific societies, such as the American Association for Agricultural Education (AAAE), have not been immune to struggles with diversity, equity, and inclusion (DEI), even as it has come to the forefront of national conversation. In response to the 2017-2020 AAAE Strategic Plan, specifically goal one to build a more inclusive culture within the society, this study describes members' perceptions of organizational climate regarding diversity and inclusion within the AAAE organization. This manuscript reports the quantitative survey findings from the AAAE membership to determine perceptions of opportunities and barriers for participation in AAAE, as well as perceptions of AAAE's progress toward diversity and inclusion. Data are provided as a benchmark to describe the membership demographics of the organization. Member perceptions of opportunities to share diverse perspectives, become involved in leadership, and to be awarded and recognized by AAAE are varied. Many barriers to engagement in AAAE seem to create a dichotomy between persons who feel fully included and those who do not in the organization. Over half of the respondents do not consider AAAE's membership to be diverse. Perceptions of progress toward diversity and inclusion across the dimensions of sexual orientation, socio-economic status, disciplinary focus, gender/gender identity, faculty rank, race/ethnicity, institution type, and religious representation reveal some areas of success and opportunities for growth in the organization. The profession should be challenged to examine how our practices and scholarship may perpetuate exclusivity as AAAE works toward meeting the goal of building a more diverse and inclusive culture within the society.

Keywords: diversity, inclusion, equity, Agricultural Education, organizational climate

Author Note. This research is a result of work completed by the AAAE Strategic Planning Goal 1 team – Build a more inclusive culture within the society.

Introduction

Diversity, equity and inclusion (DEI) have been widely discussed topics in the United States for many years; however, recent events and the current political climate have pushed these ideas to the forefront of our national attention and polarized the American public (Gertz, 2018). DEI is not achievable when polarization occurs, because dichotomies are created which, "...elicit either-or, zero sum game approaches, and thus cannot ensure both-and approaches, approaches upon which diversity and inclusion, by definition, are based" (Gertz, 2018, p. 2). Gertz (2018) posited the aforementioned dichotomies are rooted in long-standing social frameworks, which create an us versus them mentality where the upward trajectory of one group is seen as

¹ Christopher M. Estepp is an Associate Professor of Agricultural Education in the Agricultural Education, Communications & Technology Department at the University of Arkansas, AFLS E-108, estepp@uark.edu

² Lauren L. Cline is an Assistant Professor of Agricultural Leadership in the Department of Agricultural Education, Communications & Leadership at Oklahoma State University, 444 Agricultural Hall, lauren.l.cline@okstate.edu

³Mary T. Rodriguez is an Associate Professor of Agricultural Leadership in the Department of Agricultural Communication, Education & Leadership at the Ohio State University, 200E Agricultural Administration Building, rodriguez.746@osu.edu

detrimental to other groups. Unfortunately, these divisive frameworks have become entrenched in many of our societal institutions (Arredondo & Bustamante, 2020; Cyr, 2018), resulting in the struggle for diversity, equity, and inclusion in areas such as business (Sherbin & Rashid, 2017), education (Ekins, 2017), government (Hudson, 2019), medicine (Booysen & Gill, 2020), and many other public arenas (Arredondo & Bustamante, 2020). Gertz (2018) proposed that for society to create environments where DEI can flourish, people must eradicate the underlying dichotomous frameworks.

Professional scientific societies have not been immune to struggles with DEI. Abernethy et al. (2020) suggested marginalization of groups within professional societies has historically occurred along the lines of race, ethnicity, gender, sexual orientation, gender identity, class, religion, country of origin, age, disability status, language, and parental or pregnancy status, and stated, "For centuries, science has been a nearly-exclusive domain of upper-class White men, with limited opportunities for marginalized people to either make or be recognized for notable scientific contributions" (p. 364). Furthermore, positions of leadership in professional societies, awards, invited lectures, and invitations to scientific panels still tend to favor individuals from majority groups (Abernethy et al., 2020; Sardelis & Drew, 2016; Silver et al., 2017; Stevens et al., 2008). The purpose of scientific societies is to expand scientific knowledge, help increase the scientific literacy of individuals, and inform public policymakers, by bringing together various groups of scientists working together toward these common goals (Mason et al., 2016). To achieve these purposes, it is paramount scientific societies embrace DEI principles.

According to Abernethy et al. (2020), diversity, equity, and inclusion in science are necessary for two reasons, first they represent a moral and ethical imperative—promoting diversity, granting equity, and supporting inclusion are appropriate and just actions within any society. Second, DEI leads to greater advances in science. Increased diversity among researchers has shown to produce myriad positive results within scientific societies, including higher research productivity, increased innovativeness, idea generation from multiple individuals within the society, greater scope and impact in the knowledge developed and studied, and growth in the number of new scientists addressing complex global issues (DeVilbiss, 2020).

While diverse groups of scientists have made strides in recent years and many professional societies now recognize the need for increasing DEI, many have failed to address the systemic advantages in place for majority individuals (Potvin et al., 2018; Stevens et al., 2008). Systemic advantages in professional societies have allowed majority groups to succeed over others, impede DEI, and are analogous with the dichotomous frameworks proposed by Gertz (2018), which must be dismantled if inclusion is to occur. As Abernethy (2020) submitted, "To work toward a more equitable scientific enterprise, we must examine whom the society is serving, both directly and indirectly, and the ways that cognitive and structural biases influence our activities" (p. 365). DeVilbiss et al. (2020) concurred and proffered all DEI principles must be the end goal, because, while diversity may increase the number of researchers in a discipline, without equity and inclusion, quality engagement will not occur if some individuals feel excluded or undervalued. Thus, the need exists to examine ways to create diverse, equitable, and inclusive scientific societies.

Background

This study sought to describe members' perceptions of organizational climate regarding diversity and inclusion within the American Association for Agricultural Education (AAAE) organization, thus, a brief history of AAAE and the AAAE strategic planning process are described to provide context. Started in 1929 as the *Ten-Year Teacher Trainers* (Ekstrom, 1968), the American Association for Agricultural Education was initially created as a society for men who trained teachers for school-based vocational agriculture programs across the United States. This society existed until 1950 when it was expanded to include more than those with a decade of experience training teachers, and became a section within the American Vocational Association (AVA) known as the Teacher Trainers in Agricultural Education. In 1960, the group voted to expand beyond existing as a section within AVA, and the American Association of Teacher Educators in Agriculture (AATEA) was formed. The AATEA existed until 1991 when the membership voted to change its name to the current American Association for Agricultural Education.

Until this time, the primary focus of the society was the scholarship of teacher preparation for employment in school-based vocational agriculture programs. This purpose remained until calls for reform within vocational agriculture (National Research Council, NRC, 1988; National Commission on Excellence in Education, 1983) recommended teacher-training programs across the U. S. expand to include academic subject matter taught within the context of agriculture. Consequently, other social sciences were added, including agricultural communications, agricultural leadership, and agricultural education in non-formal settings. As a result, a broader definition of agricultural education had emerged, and more than teacher trainers were engaging in the discipline's scholarship.

Subsequently, the AAAE Board of Directors embarked on a planning process in 2016 to create a preferred future, which would position AAAE as a relevant and dynamic association for its members, inclusive of scholars and literature bases in communication, leadership, adult education, international development, extension, evaluation and others – all within the contexts of agriculture and natural resources. Ed Osborne (University of Florida) facilitated the development process and proposed a planning approach endorsed by the AAAE leadership team. Active members in AAAE were surveyed and responded to a series of questions, which were used to develop new AAAE vision and mission statements. Additionally, members received a second survey designed to gather their perspectives on the strengths, weaknesses, opportunities, and threats within the organization.

To further aid the planning process, AAAE leadership was interested in gaining the perspectives of potential and former AAAE members. Thus, the list of AAAE faculty members was compared against faculty listed on university websites who had responsibilities in teacher education, communication, leadership, and/or extension education in a college of agriculture or similar campus entity to determine potential members. A total of 125 faculty members who were not dues-paying members of AAAE were identified. These faculty were surveyed to obtain data on their past participation in and familiarity with AAAE, reasons for not joining or discontinuing their membership in AAAE, perceptions of current and potential value of AAAE for them as faculty members, changes they would like to see in the organization, products and services they would like to see AAAE provide, and reasons for joining professional societies, in general.

Raw data reports derived from each survey, accompanied by a data summary report based on the results of each survey, were distributed to the AAAE leadership team. Seven members of the AAAE leadership team and three additional invited members participated in a strategic planning session facilitated by Ed Osborne during the Southern Region AAAE Conference in February 2017. Participants drew heavily from the survey data as they shaped the draft strategic plan. The draft strategic plan was distributed to all AAAE members for review and comment. Input received from AAAE members was reviewed and incorporated into a final draft strategic plan, which was distributed to the membership for consideration prior to the 2017 national conference. The 2017-2020 AAAE Strategic Plan was unanimously adopted by a quorum of members present at the 2017 AAAE Annual Research Conference.

The 2017-2020 AAAE Strategic Plan listed inclusivity as one of AAAE's core values and made it the focus of action goal one, which was to, "build a more inclusive culture within the society" (AAAE, 2017, p.1). Moreover, other calls have been made for increased DEI efforts across agricultural education. The National Research Council (NRC; 1988; 2009) called for greater participation of underrepresented students and teachers in secondary and postsecondary agriculture programs. Similarly, the Association of Public and Land-grant Universities (APLU; 2009; 2018) recommended colleges of agriculture recruit and prepare more women and underrepresented students to enter the agricultural workforce and graduate programs in the agricultural sciences. Lastly, the AAAE National Research Agenda (Roberts et al., 2016) challenged agricultural education researchers to examine the effectiveness of strategies for recruiting diverse individuals into agriculture and natural resource careers. While studies pertaining to DEI within agricultural education have been conducted, the majority have focused on racial/ethnic minority issues surrounding secondary agriculture students; undergraduate and graduate students; preservice agriculture teachers; and secondary agriculture teachers (Murray et al., 2020; Tubbs, 2015). Missing from the literature is research relating to DEI efforts among all underrepresented and marginalized groups and within the professional society for Agricultural Education—the American Association for Agricultural Education. In alignment with goal one of the 2017-2022 AAAE Strategic Plan, this article aims to provide a summary of the 2019 DEI survey administered to the members of AAAE by the planning team.

Conceptual Framework

The conceptual framework guiding this study was the 2017-2020 AAAE Strategic Plan, specifically goal one, which aimed to "build a more inclusive culture within the society" (AAAE, 2017, p. 1). Action items in goal one are explicitly related to advancing diversity, equity, and inclusion within multiple areas of social identity. To this end, we focused on *diversity* and *inclusion* within AAAE as our two variables of interest and operationally defined these terms using the Society for Human Resource Management (2008) definitions:

 Diversity was defined as the representation of different types of people in a group or organization, including people of different races, ethnicities, cultures, genders, sexual orientations, socioeconomic statuses, ages, physical abilities, religious beliefs, political beliefs, opinions, personal characteristics, values, beliefs, experiences, backgrounds,

- preferences, behaviors, and other ideologies (Society for Human Resource Management, 2008).
- Inclusion was defined as the achievement of a group or organizational environment in which all members are treated fairly and respectfully, have equal access to opportunities and resources, and can contribute fully to the organization's success with the capacity to make change (Society for Human Resource Management, 2008).

Purpose and Objectives

While research has examined DEI among various stakeholders in agricultural education, little work has been conducted regarding the topic within the AAAE organization. Consequently, the AAAE leadership team undertook the process of strategic planning for the organization, resulting in four strategic goals, the first of which was to "build a more inclusive culture within the society" (AAAE, 2017, p. 1). To achieve this goal a planning team was established, and in early 2019 the team administered a DEI survey to the members of AAAE; this manuscript reports the quantitative findings from the survey. Accordingly, the purpose of this study was to describe AAAE members' perceptions of organizational climate regarding diversity and inclusion within the AAAE organization. The objectives guiding this study were:

- 1. Determine members' perceptions of opportunities and barriers for participation in AAAE.
- 2. Examine members' perceptions of AAAE's progress toward diversity and inclusion.

Methods

To investigate AAAE members' perceptions of organizational climate within the AAAE organization relating to diversity and inclusion an exploratory quantitative research design utilizing survey methodology was followed (Privitera, 2017). A survey instrument was administered to all individuals listed on the AAAE membership directory as of March 13, 2020. The researcher-developed instrument was created for electronic administration through the Qualtrics survey platform. The instrument was composed of three sections including, (a) professional demographics (nine items); (b) organizational climate (19 items); and, (c) personal demographics (11 items). Face and content validity were assessed by a panel of experts, which included AAAE members from multiple universities who served on the AAAE Strategic Plan Goal #1 committee. Instrument reliability was not assessed since items were not summated to form constructs and the population was not accessible twice to measure test-retest reliability. To address the study objectives, five-point Likert-type scales were employed to measure participants' perceptions of opportunities and barriers (i.e. 1 = Strongly Disagree to 5 = StronglyAgree) and diversity and inclusion (i.e. $1 = Not \ diverse \ at \ all \ to \ 5 = Extremely \ diverse$). Progress toward diversity and inclusion by AAAE's membership and leadership was ranked across eight dimensions of diversity on a scale of 0 to 100 ($0 = No \ progress$; $100 = Full \ progress$). The eight dimensions in which progress was ranked were: gender/gender identity, sexual orientation, race/ethnicity, institution type, faculty rank, socioeconomic status, religious representation, and disciplinary focus. Rankings for each dimension were consolidated into four score domains from low progress to high progress and percentages were reported for each domain. Domain 1, which represented the lowest progress, consisted of rankings ranging from 0 to 25, followed by Domain 2 (26-50), Domain 3 (51-75), and Domain 4 (76-100). Percentages of responses for each domain were calculated. Data analysis was conducted using SPSS Version 23. Descriptive statistics were

calculated for the Likert-type items, including frequencies, percentages, means, and standard deviations.

Sample Survey Items

Table 1

Survey section	Sample items		
Professional Demographics	1. Which of the following most closely describes your position title?		
	2. Please provide the percentage breakdown for your appointment.		
	3. Please choose your discipline/area of expertise.		
Organizational Climate	1. What barriers limit your engagement in the AAAE organization?		
	2. How can we make the AAAE organization more accessible for you?		
	3. How diverse do you perceive the AAAE membership to be?		
	4. Rate the level of progress toward inclusion you perceive the AAAE leadership has reached for each dimension (gender/gender identity, sexual orientation, race/ethnicity, institution type, faculty rank, socio-economic status, religious representation, disciplinary focus).		
Personal Demographics	1. How would you best describe your race and ethnicity?		
	2. How would you best describe your gender/gender identity?		
	3. How would you best describe your current ability/disability status?		

Study Participants

The population for this study consisted of all members of the AAAE organization, including active, associate, and student members. An initial list of 898 members was obtained from the AAAE member directory on March 13, 2020. Sixty-eight individuals listed in the directory did not have a sufficient email address and were removed from the study, resulting in administration of the instrument to 829 individuals (N = 829). Participants were contacted by email a total of five times, including the initial contact and four reminders (Dillman et al., 2009). A response rate of 46.7% (n = 387) was achieved. Datasets, along with tables of results, are available online as a part of the 2017-2020 AAAE Strategic Plan reporting and can be found at: http://aaaeonline.org/dei_report/.

Results

Quantitative results are presented to address the study's objectives. Data describing opportunities and barriers for participation in AAAE are provided first, followed by data describing members' perceptions of the organization's progress toward diversity and inclusion.

The overwhelming majority of respondents were White/Caucasian (80.37%) followed by Hispanic/Latinx (6.54%), Black/African American (5.92%), and Asian (2.80%). Additionally, just over one-and-a-half percent (1.56%) listed a different race and/or ethnicity, while almost two percent preferred not to answer (1.87%). Regarding gender and gender identity, 50% of respondents identified as males and 39.71% identified as females. Almost eight percent of respondents identified as cisgender, while one respondent indicated their gender was not listed and one identified as agender; six respondents preferred not to answer. In relation to religious affiliation, over two-thirds of respondents identified with some form of Christianity and almost eight percent preferred not to answer. About 75% of respondents did not identify with any disability and 11 respondents preferred not to answer. The majority of respondents were tenure-track (66.17%), at 1862 land-grant institutions (54.71%), and in the areas of Agricultural Education (39.09%), Agricultural Leadership (13.09%), Extension Education (10.57%), and Agricultural Communications (9.06%). A complete report of personal and professional demographics can be found at http://aaaeonline.org/dei_report/.

Objective 1: Opportunities and Barriers for Participation

The first objective sought to determine AAAE members' perceptions of opportunities and barriers to participating in AAAE. Almost 60% of respondents (n = 193) strongly or somewhat agreed opportunities existed for them to pursue AAAE leadership at the regional level; however, regarding leadership opportunities at the national level, less than half (n = 144) strongly or somewhat agreed opportunities were available. Nonetheless, two-thirds of respondents (n = 205) strongly or somewhat agreed there were opportunities to serve the AAAE organization in some capacity. Regarding recognition in the organization, slightly more than half of respondents (n = 173) strongly or somewhat agreed there were opportunities for them to be awarded and/or recognized, while more than a quarter (n = 81) strongly or somewhat disagreed with this statement. When asked whether respondents felt their perspective was valued by AAAE members, almost half (n = 151) strongly or somewhat agreed, while about 28% (n = 88) strongly or somewhat disagreed.

Regarding barriers limiting members' engagement in AAAE, the most reported barrier was departmental/college/university finances, which was identified by about 37% (n = 144) of respondents. Additional items regarding finances showed almost two-thirds of respondents (n = 222) reported travel funding to attend regional AAAE conferences *extremely* or *somewhat* adequate, while about 26% (n = 90) found it to be *extremely* or *somewhat* inadequate. Travel funding to attend the national AAAE conference was found to be *extremely* or *somewhat* adequate by about 59% (n = 204) of respondents and *extremely* or *somewhat* inadequate by almost 31% (n = 106) of respondents. Furthermore, personal finances (24.70%; n = 96), child

care needs (8.80%; n = 34), elderly care needs (0.80%; n = 3), and other barriers (21.10%; n = 82) were noted as barriers to engagement. Additionally, a small percentage of respondents (n = 35) identified their discipline not being represented in AAAE as a barrier limiting their engagement. About 22% of respondents (n = 86) identified they experienced no barriers to engagement in the organization; however, almost the same percentage of respondents (21.60%; n = 84) identified feeling excluded in AAAE as a barrier limiting their engagement. A small percentage of respondents (n = 26) also reported AAAE events were *extremely* or *somewhat* inaccessible for persons with disabilities.

Objective 2: Progress toward Diversity and Inclusion within AAAE

The second objective examined AAAE members' perceptions of the organization's progress toward diversity and inclusion. Less than 10% of respondents (n = 32) perceived AAAE's membership to be *extremely diverse* or *diverse*, while about two-thirds of respondents (n = 218) considered AAAE's membership to be *slightly diverse* or *not diverse at all*. Regarding the AAAE membership's progress toward diversity in specific dimensions of diversity (see Table 2), more than two-thirds of respondents perceived high levels of progress (Domains 3 and 4) in the areas of diversity in sexual orientation (69.4%) and faculty rank (68.5%). Conversely, more than two-thirds of respondents perceived low levels of progress (Domains 1 and 2) toward diversity in the areas of race/ethnicity (77.1%), institution type (72.1%), and religious representation (68.0%). Slightly more than half perceived low levels of progress toward diversity in the areas of gender/gender identity (53.3%), socio-economic status (56.4%), and disciplinary focus (54.5%). The diversity dimensions with the highest percentage of rankings in Domain 1 were race/ethnicity (47.6%), religious representation (41.3%), and institution type (38.3%), while faculty rank (44.0%) and sexual orientation (43.6%) were the diversity dimensions with the greatest percentage of rankings in Domain 4.

 Table 2

 Ranked perceived progress toward diversity by AAAE membership

	Domain 1	Domain 2	Domain 3	Domain 4
	%	%	%	%
Gender/Gender Identity ^a	24.0	29.3	22.4	24.3
Sexual Orientation ^b	8.3	22.3	25.8	43.6
Race/Ethnicity ^c	47.6	29.5	13.7	9.2
Institution Type ^d	38.3	33.8	14.8	13.2
Faculty Rank ^e	8.8	22.6	24.5	44.0
Socio-economic Status ^f	26.8	29.6	18.6	25.1
Religious Representation ^g	41.3	26.7	14.2	17.8
Disciplinary Focus ^h	18.7	35.8	21.8	23.7

Note: Scale measured from $1 = No\ Progress$ to $100 = Full\ Progress$. Domain 1 represents rankings 0 to 25. Domain 2 represents rankings 26 to 50. Domain 3 represents rankings 51 to 75. Domain 4 represents rankings 76 to 100. Data are graphically represented in the dataset posted

on the AAAE website. Percentage totals for some dimensions may not equal 100 due to rounding error. ${}^{a}n = 317$; ${}^{b}n = 314$; ${}^{c}n = 315$; ${}^{d}n = 311$; ${}^{e}n = 318$; ${}^{f}n = 291$; ${}^{g}n = 281$; ${}^{h}n = 316$.

Similarly, respondents also reported their perceptions of progress AAAE leadership has made toward diversity across multiple diversity dimensions (see Table 3). Almost two-thirds of respondents perceived AAAE leadership has made high levels of progress (Domains 3 and 4) toward diversity in the area of sexual orientation (61.2%). The majority of respondents reported low levels of progress (Domains 1 and 2) toward diversity among the AAAE leadership in the dimensions of race/ethnicity (75.5%), institution type (74.1%), religious representation (68.5%), socio-economic status (62.2%), gender/gender identity (56.3%), disciplinary focus (56.0%), and faculty rank (55.5%). The dimensions with the highest percentage of rankings in Domain 1 were race/ethnicity (52.1%), institution type (49.3%), and religious representation (41.4%). Sexual orientation was the dimension with the highest percentage of rankings in Domain 4 at 35.1%. **Table 3**

Ranked perceived progress toward diversity by AAAE leadership

	Domain 1	Domain 2	Domain 3	Domain 4
	%	%	%	%
Gender/gender Identity ^a	27.8	28.5	22.2	21.5
Sexual Orientation ^b	12.0	26.8	26.1	35.1
Race/Ethnicity ^c	52.1	23.4	12.6	11.9
Institution Type ^d	49.3	24.8	12.8	13.1
Faculty Rank ^e	28.6	26.9	20.0	24.5
Socio-economic Status ^f	29.2	33.0	16.7	21.2
Religious Representation ^g	41.4	27.1	13.11	18.3
Disciplinary Focus ^h	23.9	32.1	20.8	23.2

Note: Scale measured from $1 = No\ Progress$ to $100 = Full\ Progress$. Domain 1 represents rankings 0 to 25. Domain 2 represents rankings 26 to 50. Domain 3 represents rankings 51 to 75. Domain 4 represents rankings 76 to 100. Data are graphically represented in the dataset posted on the AAAE website. Percentage totals for some dimensions may not equal 100 due to rounding error.

$$^{a}n = 288$$
; $^{b}n = 291$; $^{c}n = 286$; $^{d}n = 282$; $^{e}n = 290$; $^{f}n = 264$; $^{g}n = 251$; $^{h}n = 293$.

Finally, respondents reported their perceptions of the level of progress AAAE membership has made toward inclusion across various diversity dimensions (see Table 4). More than two-thirds of respondents perceived the AAAE membership has made high levels of progress (Domains 3 and 4) toward inclusion in the areas of sexual orientation (71.6%) and faculty rank (68.4%), while just over half perceived high levels of progress in the area of gender/gender identity (51.4%). Low levels of progress (Domains 1 and 2) toward inclusion by the AAAE membership were perceived by respondents in the areas of institution type (60.2%), religious representation (56.5%), race/ethnicity (56.4%), and socio-economic status (53.1%). The dimensions with the highest percentage of rankings in Domain 1 were the areas of religious representation (37.9%), institution type (33.0%), and race/ethnicity (31.6%). Progress toward

inclusion among the AAAE membership in the areas of sexual orientation, faculty rank, and gender/gender identity had the highest percentage of rankings in Domain 4 at 48.6%, 47.9%, and 33.1%, respectively. Just over half (52.4%) rated AAAE membership's progress toward inclusion for disciplinary focus in the middle two domains.

 Table 4

 Ranked perceived progress toward inclusion by AAAE membership

	Domain 1	Domain 2	Domain 3	Domain 4
	%	%	%	%
Gender/Gender Identity ^a	21.1	27.5	18.3	33.1
Sexual Orientation ^b	10.3	18.1	23.0	48.6
Race/Ethnicity ^c	31.6	24.8	17.0	26.6
Institution Type ^d	33.0	27.2	17.4	22.5
Faculty Rank ^e	11.8	19.8	20.5	47.9
Socio-economic Status ^f	25.8	27.3	20.4	26.5
Religious Representation ^g	37.9	18.6	15.4	28.1
Disciplinary Focus ^h	20.1	30.6	21.8	27.5

Note: Scale measured from $1 = No\ Progress$ to $100 = Full\ Progress$. Domain 1 represents rankings 0 to 25. Domain 2 represents rankings 26 to 50. Domain 3 represents rankings 51 to 75. Domain 4 represents rankings 76 to 100. Data are graphically represented in the dataset posted on the AAAE website. Percentage totals for some dimensions may not equal 100 due to rounding error.

$$^{a}n = 284$$
; $^{b}n = 282$; $^{c}n = 282$; $^{d}n = 276$; $^{e}n = 288$; $^{f}n = 260$; $^{g}n = 253$; $^{h}n = 284$.

Limitations

While the survey was administered as a census among AAAE members, only 46.7% responded, thus limiting the generalizability of the results. Additionally, this study only provides baseline demographic data and outlines the current perceptions of respondents, rather than identifying changes and progression in perceptions among AAAE members regarding diversity, equity, and inclusion through a cross-comparative analysis. Readers are encouraged to assess the findings to determine generalizability within their context and the AAAE organization at-large.

Conclusions

The results of this study showed AAAE is an organization consisting of mostly White/Caucasian, able-bodied, Christians who primarily work at 1862 land-grant institutions. One interesting finding, however, was the gender gap between males and females has narrowed. Given the organization's patriarchal history, the influx of females has helped improve diversity within AAAE. Nonetheless, representation from other diversity dimensions is still lacking within the organization.

Relating to equity and inclusion, about one half of respondents indicated they feel their perspective is valued within the organization, however, about one fourth do not. When the latter are combined with the quarter of respondents who were neutral in the belief their perspective is valued, this should be cause for concern, as almost half of respondents are not confident they have a voice within the organization. Furthermore, just under half of the respondents identified leadership opportunities within the organization at the national level, while slightly more perceived opportunities for leadership at the regional level. This is understandable as AAAE regional conferences, by nature, are smaller in size and scope than the national AAAE meeting. Beyond leadership opportunities, two-thirds of respondents recognized opportunities to serve in the organization. Lastly, over half of respondents perceived they have opportunities for awards and recognition for teaching and research efforts, but about a quarter did not.

Finances were the most identified barrier inhibiting engagement in AAAE. About one-third of respondents reported institutional finances (i.e. department, college, university) were a constraint, followed by personal finances, which almost a quarter of respondents identified as a barrier. Understandably, more respondents indicated greater financial barriers for travel to the national conference than travel to a regional meeting. Other perceived barriers to engagement in AAAE conferences included child and elder care issues, physical inaccessibility, and lack of disciplinary representation. One finding of concern was just over 20% of respondents reported feeling excluded from the professional society, while about the same number identified no barriers. A dichotomy appears to exist between persons who are fully included and those who are not.

The findings for Objective 2 indicate over half of the respondents do not consider AAAE's membership to be diverse. Respondents' perceptions of progress toward diversity and inclusion in AAAE revealed some areas of success and opportunities for growth in the organization. A majority of respondents considered progress toward diversity and inclusion among AAAE members and leadership to be highest in the dimension of sexual orientation. When considering progress toward diversity and inclusion among the dimensions of socioeconomic status and disciplinary focus in AAAE, moderate progress was perceived to have been made by at least half of the respondents. More nuance was observed in the perceptions of the respondents regarding diversity and inclusion in AAAE as it related to gender/gender identity and faculty rank. Although more than half of the respondents felt much progress had been made toward gender/gender identity inclusion, there was still little progress made toward gender/gender identity diversity among the AAAE membership and leadership. This finding is interesting, however, as results showed females now make up almost 40% of membership. The majority of respondents felt a high level of progress had been made in diversity and inclusion according to faculty rank among the membership. However, more than half still perceived diversity based on faculty rank among AAAE leadership to be limited.

Conversely, diversity and inclusion in regards to race/ethnicity, institution type, and religious representation among AAAE membership and leadership appeared to be the dimensions in which the organization has lacked progress. Most respondents agreed little progress toward racial/ethnic diversity and inclusion among the membership and leadership of AAAE has been accomplished. Respondents also indicated little progress has been made toward the association becoming more diverse and inclusive of different institution types. Likewise, respondents suggested the membership and leadership of AAAE may not reflect nor be inclusive of diverse religious representations.

Discussion and Implications

The conceptual framework for this study originated from the 2017–2020 AAAE Strategic Plan. According to the plan, the organization's core values include embracing inclusivity and collaboration, with the first goal being to "build a more inclusive culture within the society" (AAAE, 2017, p.1). We would like to recognize since we began this journey as a strategic goal team, many events have transpired moving DEI into a more prominent place in society. Accordingly, within the AAAE organization a workgroup pertaining to DEI has been formed; a special committee to examine DEI was appointed by the AAAE president, which subsequently released a report and recommendations; and, more scholarship regarding DEI has started to emerge within the agricultural education disciplines. However, as far as we are aware, this is the first study of its kind examining the DEI culture within the AAAE organization, and the strategic plan framework provided us a starting point to investigate the degree to which the core values and goals for inclusivity in the organization were being met.

Similar to many professional organizations, AAAE exists to promote the work of members, provide recognition through awards, and offer professional development opportunities. While this study has shown many AAAE members take advantage of the various opportunities and levels of participation, it is also apparent many do not. Why only two-thirds of AAAE members recognize opportunities to serve is unclear. Perhaps members who perceive their perspective is not valued or feel marginalized by the operational structures of the organization do not recognize or volunteer for opportunities in service and leadership. Greater articulation of the opportunities to serve at the regional and national levels is needed, and, since more AAAE members consider the leadership opportunities at the regional level to be more attainable, perhaps greater emphasis on regional conference and meeting planning to capitalize on this involvement should be made. Not surprising, when considering barriers to participation the financial constraints involved with travel, both institutional and personal, surfaced as the greatest barriers. Although only a small number of respondents indicated lesser constraints with traveling to a regional conference as opposed to a national conference, it is noteworthy. As discussions continue about the need, purpose, and importance of regional meetings, AAAE leadership needs to consider financially and from a leadership opportunity perspective, regional meetings remain more accessible to AAAE members.

Alarmingly, about a quarter of respondents indicated they did not feel included within AAAE; more investigation is needed to examine what this means and why these perceptions exist. Findings additionally revealed AAAE members have responsibilities as care providers for their children and elderly family members. While it may seem difficult to find practical solutions

for providing on-site care at conferences, implementation of such resources could be explored by examining how other professional conferences have provided similar accommodations. Nonetheless, the COVID-19 pandemic has shown greater emphasis can be placed on remote/virtual options for conference attendance. This would allow AAAE members with care responsibilities the opportunity to fully participate in meetings and conferences. To a large extent, AAAE members did not find physical accessibility to meetings and conferences to be a barrier, however, it remains important for meeting planners to ensure conference hotels, meeting rooms, tours, and special events are viewed from the perspective of those with disabilities, because while ADA compliance may be met, all organizational activities should be accommodating and inclusive of the accessibility needs of all individuals.

Although results suggested some progress toward diversity and inclusion within AAAE has been achieved, it is apparent there is still more to be done by the organization. The perceived level and amount of progress toward diversity and inclusion was varied. Among the dimensions of sexual orientation, socio-economic status, and disciplinary representation, progress toward diversity and inclusion in the organization appears to be moving forward. In other dimensions, such as gender/gender identity and faculty rank, inclusivity among AAAE members appears to be progressing, even though diverse representation among membership and leadership is not perceived as adequate. There was a consensus AAAE is making little progress toward diversity and inclusion in the organization as it relates to membership and leadership in the dimensions of race/ethnicity, institution type, and religious representation. The demographic results of this study would affirm these perceptions as it relates to diversity. AAAE leadership and conference planners should closely examine how conferences may be more inclusive by considering members' race/ethnicity, institution type, and religion during conference planning.

As the results of this study are considered, we must seek to understand more about the influences impacting diversity, equity, and inclusion, or lack thereof, within the organization. Although AAAE was perceived to be progressing toward a more inclusive culture as it relates to sexual orientation, socio-economic status, and disciplinary representation, we acknowledge the limited response rate of our study may have resulted in a sampling bias. The question must be asked, even for these dimensions in which much progress is perceived, do those who feel underrepresented or marginalized within the organization agree with the findings? For certain dimensions, the topic may be considered taboo for a professional setting and therefore not discussed or shared, even in a confidential survey. Consequently, did all members feel empowered to voice their perceptions through this study, and if not, why? In fact, many respondents in this survey chose the "prefer not to answer" option regarding several personal demographic items. As the organization continues to commit itself to building a more inclusive culture, these are critical questions we must strongly contemplate as we gather data and feedback.

Moderate progress toward gender/gender identity inclusion in AAAE may be reflective of the progress anecdotally observed throughout agriculture and natural resources. However, the opportunity exists for the organization's membership and leadership to be more representative of genders. Similarly, AAAE should examine how leadership in the organization can be diversified across faculty rank levels. Historically, AAAE has functioned as a hierarchical organization, with leadership roles often filled by veteran faculty members. AAAE would benefit from

exploring varying leadership philosophies of its members to determine what a more inclusive organizational structure could look like, and how it could be developed and implemented. Additionally, examining how AAAE leadership opportunities are viewed by members, whether as positions or levels of engagement, would be helpful. Who is perceived to benefit the most from leadership experiences in the organization and are those groups given opportunities to engage adequately? How can leadership roles be based on members' tenure in the profession as well as their varying levels of expertise and skills? How are our doctoral programs preparing future faculty to engage with professional societies and at what levels? These are additional questions this study may guide the profession toward.

To address the limited progress AAAE has made toward diversity in the dimensions of race/ethnicity, institution type, and religious representation, the practices and norms of the organization, our departments, and home institutions must be honestly critiqued. Faculty in our profession reside at various institutions where scholarship may not be valued or supported as the main criteria for promotion and tenure, faculty appointment allocations may not include research, and budgets may be extremely limited, among myriad other factors. The profession must recognize not all institutions are equally supportive of or value scholarly efforts, which may impact faculty engagement in AAAE. Accordingly, how can AAAE broaden scholarly opportunities to entice greater engagement from faculty members at varying institutions, without reducing its commitment to research?

External perceptions of AAAE must also be considered and acted upon if the organization wishes to progress toward a more inclusive culture. If AAAE is not perceived as being diverse or inclusive in various domains, it can be assumed faculty within the profession who do not feel represented or welcomed may choose to pursue other professional organizations. The cultural barriers deterring a more diverse and inclusive membership should be further investigated.

As AAAE works toward meeting the goal of building a more diverse and inclusive culture within the society, the profession should be challenged to examine how our practices and scholarship may perpetuate exclusivity. Future research studies should aim for stratification and more purposive sampling, when needed, to ensure data and findings are representative of the diverse demographics of our populations. Additionally, it is recommended AAAE draft protocol to improve and replicate this study on a regular basis. It is paramount AAAE continues to monitor the culture of the membership as it seeks to become more inclusive. It would also be beneficial for AAAE to begin gathering and maintaining more accurate demographic membership data on an annual basis.

References

Abernethy, E. F., Arismendi, I., Boegehold, A. G., Colon-Gaud, C., Cover, M. R., Larson, E. I., Moody, E. K., Penaluna, B. E., Shogren, A. J., Webster, A. J., & Woller-Skar, M. M. (2020). Diverse, equitable, and inclusive scientific societies: Progress and opportunities in the Society of Freshwater Science. *Freshwater Science*, *39*(3), 363-376. https://doi.org/10.1086/709129

- AAAE. (2017). American Association for Agricultural Education (AAAE) 2017-2020 strategic plan. http://aaaeonline.org/resources/Documents/National/AAAE2017-2020StrategicPlan.pdf
- APLU. (2009). Human capacity development: The road to global competitiveness and leadership in food, agriculture, natural resources, and related sciences (FANRRS). Association of Public and Land-Grant Universities. https://eric.ed.gov/?id=ED511024
- APLU. (2018). The challenge of change: Harnessing university discovery, engagement, and learning to achieve food and nutrition security. Association of Public and Land-Grant Universities. www.aplu.org/ChallengeofChange
- Arredondo, A., & Bustamante, J. J. (2020). Whitespace, brown place: Racialized experiences accessing public space in an Arkansas immigrant community. *Sociological Inquiry*, 90(3), 443-467. https://doi.org/10.1111/soin.12273
- Booysen, L. A. E., & Gill, P. (2020). Creating a culture of inclusion through diversity and equity. In A. J. Viera & R. Kramer (Eds.), *Management and leadership skills for medical faculty and healthcare executives* (2nd ed., pp. 135-144). Springer.
- Cyr, L. (2018). Literature review: Interdisciplinary findings on diversity and inclusion. In S. H. K. Gertz, B. Huang, & L. Cyr (Eds.), *Diversity and inclusion in higher education and societal contexts: International and interdisciplinary approaches* (pp. 17-34). Springer.
- DeVilbiss, E. A., Weuve, J., Fink, D. S., Morris, M. D., Arah, O. A., Radoc, J. G., Datta, G. D., Abuelezam, N. N., Lopez, D. S., Johnson, D. A., Branas, C. C., & Schisterman, E. F. (2020). Assessing representation and perceived inclusion among members in the Society for Epidemiologic Research. *American Journal of Epidemiology, 189*(10), 998-1010. https://doi.org/10.1093/aje/kwz281
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method.* Wiley.
- Ekins, A. (2017). *Reconsidering inclusion: Sustaining and building inclusive practices in schools*. Routledge.
- Ekstrom, G. F. (1968). *Teacher educators in the federally supported programs of agricultural education*. U.S. Department of Health, Education and Welfare, Office of Education. Washington, D.C.
- Gertz, S. H. K. (2018). Saturation, to create a civilized space. In S. H. K. Gertz, B. Huang, & L. Cyr (Eds.), *Diversity and inclusion in higher education and societal contexts: International and interdisciplinary approaches* (pp. 1-16). Springer.
- Hudson, E. (2019). *Local government role in advancing equity and inclusion* [Unpublished Certified Public Manager Project]. Texas State University.

- Mason, N. A., Butler, M. W., & Owen, J. C. (2016). Membership trends in the American Ornithologists' Union and the evolving role of professional ornithological societies. *The AUK*, 133, 806-811. https://doi.org/10.1642/AUK-16-108.1
- Murray, K. A., Trexler, C. J., & Cannon, C. E. B. (2020). Queering agricultural education research: Challenges and strategies for advancing inclusion. *Journal of Agricultural Education*, 61(4), 296-316. https://doi.org/10.5032/jae.2020.04296
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. United States Department of Education. https://edreform.com/wp-content/uploads/2013/02/A_Nation_At_Risk_1983.pdf
- National Research Council. (1988). *Understanding agriculture: New directions for education*. National Academies Press.
- National Research Council. (2009). *Transforming agricultural education for a changing world*. National Academies Press.
- Potvin, D. A., Burdfield-Steel, E., Potvin, J. M., & Heap, S. M. (2018). Diversity begets diversity: A global perspective on gender equality in scientific society leadership. PLoS ONE. 13:e0197280.
- Privitera, G. J. (2017). Research methods for the behavioral sciences (2nd ed). SAGE.
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds.). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Department of Agricultural Education and Communication, University of Florida, Gainesville, FL.
- Sardelis, S., & Drew, J. A. (2017). Not "pulling up the ladder": Women who organize conference symposia provide greater opportunities for women to speak at conservation conferences. PLoS ONE. 11:e0160015.
- Sherbin, L., & Rashid, R. (2017, February, 1). Diversity doesn't stick without inclusion. *Harvard Business Review*. https://hbr.org/2017/02/diversity-doesnt-stick-without-inclusion
- Silver, J. K., Slocum, C. S., Bank, A. M., Bhatnagar, S., Blauwet, C. A., Poorman, J. A., Villablanca, A., & Parangi, S. (2017). Where are the women? The underrepresentation of women physicians among recognition award recipients from medical specialty societies. *PM & R: The Journal of Injury, Function, and Rehabilitation*, *9*(8), 804-815. https://doi.org/10.1016/j.pmrj.2017.06.001
- Society for Human Resource Management. (2008). SHRM's Definition of Diversity: SHRM's Diversity & Inclusion Initiative [PowerPoint slides]. https://community.shrm.org/HigherLogic/System/DownloadDocumentFile.ashx?Docume ntFileKey=260d230d-1c63-4ded-8405-eb25fbfde830

- Stevens, F. G., Plaut, V. C., & Sanchez-Burks, J. (2008). Unlocking the benefits of diversity: All-inclusive multiculturalism and positive organizational change. *The Journal of Applied Behavioral Science*, 44(1), 116-133. https://doi.org/10.1177/0021886308314460
- Tubbs, J.A. (2015). *The role of culture in agricultural education: A synthesis of research*. [Master's thesis, University of Kentucky]. UKnowledge database. https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1019&context=cld_etds