# Involvement of Urban Agricultural Education Students in FFA Activities and Opportunities

**Abstract**

*Students in large cities across the United States can better understand agriculture through their involvement in School-Based Agricultural Education (SBAE). Since the passage of the Smith-Hughes Act in 1917, Agricultural Education has been a pathway that encourages students to continue schooling and connect with future careers. We conducted a descriptive study to explore the involvement of 2021-2022 high school Agricultural Education students in the National FFA Organization. Involvement was calculated through self-reported participation in chapter activities, officer positions, FFA degrees, and contests or events. Additionally, the study evaluated students' curiosity toward stretching or embracing as well as their overall adaptability in different situations. The study occurred in the fall of 2021 with 543 respondents from 18 urban SBAE programs in 12 states completing the online survey. Respondents reported self-perceived moderate curiosity, very strong adaptability, and light involvement in FFA. For urban SBAE students, involvement in FFA was not affected by demographics other than those in the 12th grade were more involved. This could imply study respondents who see the value in the organization's leadership training or college and career readiness are the most curious and adaptable toward being involved in the organization.*

***Keywords:*** curiosity; stretching; embracing; adaptability; National FFA Organization; FFA involvement; Astin's Theory of Involvement

## Introduction/Review of Literature

By the turn of the 20th century, it was common for students in rural communities to take off several days of school at a time, as their presence was integral to their families getting the planting, harvesting, or other farm work completed on time (Snyder, 1993). With the Industrial Revolution impacting nearly every community across the country, new opportunities arose for the next generation of young people. After the first decade of the 20th century, a diverse coalition of organizations, government agencies, and universities put aside their differences and came together to support legislation that would implement agriculture, trades, industry, and homemaking curriculum in high schools across the nation (Hillison, 1995). Passage of the Smith-Hughes National Vocational Education Act (1917) would have a ripple effect of encouraging farm boys to continue their education beyond the eighth grade. The growing popularity of these courses led to the creation of vocational clubs across the nation, and in 1928 a national organization, the Future Farmers of America (FFA), was born (National FFA Organization, 2022b). Then, in 1950, President Harry S Truman signed Public Law 81-740, granting FFA a federal charter, making FFA an intracurricular component of Agricultural Education.

Agricultural Education in the United States continued to change and adapt alongside societal and cultural norms in the last century. Over the decades, FFA expanded its membership, and barriers to involvement in the organization have begun to slowly erode. When the organization was founded in 1928, 21.5% of the workforce in the United States was employed in agriculture (Dimitri et al., 2005), and 43.9% of the population resided in rural areas (U.S. Census Bureau, 2022). By the 1970s, 54% of all farm households in the United States were receiving non-farm income (Dimitri et al., 2005), and the number of American families living in urban communities had increased to 73.6% of the population (U.S. Census Bureau, 2022). The urbanization of the country contributed to the need for Agricultural Education to be expanded into both urban and rural communities alike.

In 1988 the National Research Council's Committee on Agricultural Education in Secondary Schools called for the creation of Agricultural Education programs in urban communities to promote agricultural literacy and encourage agricultural career exploration for these students. The ripple effect of this committee's decision led Future Farmers of America to rebrand itself with the National FFA Organization as its official name in 1988 (National FFA Organization, 2022b). Additionally, new contests and avenues for membership activity were created to expand membership to middle schoolers, recognize agriscience achievement, and promote agricultural literacy beyond the organization.

Participation in the National FFA Organization is a crucial part of the three-component model of school-based agricultural education (SBAE), and active involvement allows individual members to engage in leadership development, personal growth, and career success (Talbert et al., 2022). For an organization that had spent much of its first 60 years focused on production agriculture in rural America, the expanded focus toward educating students in urban communities about agriculture has been met with a multitude of challenges (Elliott & Lambert, 2018; Esters & Bowen, 2005; Henry et al., 2014; Martin & Kitchel, 2014a; Martin & Kitchel, 2014b; Martin & Kitchel 2015; Phelps et al., 2012; Talbert & Larke, 1995). A significant difference between urban communities compared with rural communities is the cultural, language, and ethnic diversity of people who live in urban areas (Segaert, 2008).

Cultural and demographic differences between rural and urban communities in the United States have created barriers for students in urban areas to have similar SBAE experiences as those in rural areas (Elliott & Lambert, 2018; Lawrence et al., 2013). Historically, the National FFA Organization has been deeply rooted in the culture of rural America (Martin & Kitchel, 2014b; Phelps et al., 2012). However, today's urban demographics in the United States are 57.3% White and 42.7% Minority, while rural communities are significantly less diverse with 78.2% White and only 21.8% Minority (Cromartie, 2018). While some students from urban areas have gained valuable perspectives on what life is like in rural America (Martin & Kitchel, 2014b), FFA must continue to adapt to a more accurate representation of the communities it serves (Lawrence et al., 2013; Roberts et al., 2009).

In the thirty years since FFA's rebranding, experiences for students in urban communities have been the focus of many studies and improvements in practice have been made (Henry et al., 2014; Martin & Kitchel, 2015; Talbert & Larke, 1995). However, challenges remain for advisors (Martin & Kitchel, 2015) and students (Elliott & Lambert, 2018; Martin & Kitchel, 2014a) in urban areas of the United States to be fully involved in the National FFA Organization. This study's purpose was to identify the levels of involvement students in metropolitan areas have in the National FFA Organization. Additionally, the study evaluated students' tendencies to stretch and embrace challenges they face and their overall adaptability in different scenarios to compare with their FFA involvement.

## Theoretical Framework

### Theory of Involvement

This study used Astin's (1999) Theory of Involvement as a framework to evaluate students' participation in the National FFA Organization. Astin's theory is rooted in five basic assumptions: (1) involvement requires the investment of mental and physical energy, (2) involvement is continuous and varies, (3) involvement may be quantitative and qualitative, (4) the level of involvement is directly related to the amount of development gained from being involved, and (5) involvement correlates with academic performance. Within these assumptions, there are three main elements of involvement: (a) a student's inputs such as their demographics, their background, and any previous experiences; (b) their environment, which accounts for all the experiences a student would have; and (c) the outcomes, which

cover a student's characteristics, knowledge, attitudes, beliefs, and values that exist after graduation (Astin, 1999).

One of the intentions of the Smith-Hughes Act of 1917 was to encourage farm boys to continue their education after the eighth grade. At the time of its passage, there were 1.9 million high school students in the United States, which made up only 25.5% of all 14- to 17-year-olds in the country (Snyder, 1993). There is a relationship between involvement in intra- and extracurricular activities for students and the completion of more years of education (Barber et al., 2001; Wyble, 2009). By including the intracurricular component of FFA, SBAE is one avenue to motivate high school-aged students to complete more education (Velez et al., 2018). By 1975, the number of high school students had increased to 15.6 million, accounting for 91.1% of all 14- to 17-year-olds in the country (Snyder, 1993).

Past studies with high schoolers and undergraduates have found benefits to involvement in student organizations, including leadership development (Dugan, 2006; Ewing et al., 2008; Foreman & Retallick, 2013; Rosch & Nelson, 2018; Simonsen et al., 2014), academic resiliency (Astin, 1996; Prophete, 2013), and career preparation (Cooper et al., 1994; Rubin et al., 2002; Wyble, 2009). The current study used Astin's Theory of Involvement as a basis for understanding the involvement tendencies of students enrolled in Agricultural Education courses at high schools in urban areas of the United States. The inputs of students' demographics and locations gave us a better understanding of their tendencies to be more or less involved in certain activities offered by the National FFA Organization.

## Purpose and Research Objectives

The purpose of this study was to examine involvement in FFA activities, officer positions, degrees, and Career/Leadership Development Events that existed for 2021-2022 high school students in urban communities throughout the United States. To meet this purpose, we conducted an online quantitative survey of Agricultural Education students from urban communities. The following research objectives guided the study:

1. Describe tendencies toward stretching or embracing unfamiliar scenarios of urban SBAE students using the Curiosity and Exploration Inventory-II (CEI-II).
2. Describe the adaptability of urban SBAE students using the Career Adapt-Abilities Scale (CAAS) Career Adapt-Abilities Inventory – International Version 2.0.
3. Describe the level of FFA Involvement of urban SBAE students through an FFA Involvement Instrument.
4. Describe relationships between urban SBAE students' demographics and measures of stretching/embracing, adaptability, and FFA involvement.

## Methods

An online Qualtrics® survey was developed using a descriptive research design with five sections: (1) Stretching and Embracing, (2) Adaptability, (3) FFA Involvement, (4) Academic Success, and (5) Demographics. The stretching and embracing section was the Curiosity and Exploration Inventory–II (CEI-II) (Kashdan et al., 2009). The adaptability section was the CAAS – International Version 2.0 (Savickas & Porfeli, 2012). We modified the FFA involvement section from the McBride and Talbert (2022) and Copeland et al. (2020) studies with input from National FFA Staff members to measure the type, duration, and level of involvement the participants had in the organization. The academic success section was developed with input from National FFA Staff members and measured self-reported GPA, post-high school plans, the distance their intended job or post-high school education

will be from their home community, and their intentions to pursue agriculturally related education after high school. We developed the demographic section with input from National FFA Staff members and included gender identity, race or ethnicity, the receipt of free and reduced lunch as a measure of social economic status, internet access, access to technological devices, and technological challenges at home. The Purdue University Institutional Review Board approved the study to be conducted.

**Stretching and Embracing**

Respondents completed the Curiosity and Exploration Inventory-II (CEI-II). This 10-item scale was developed by a team of psychology researchers from four universities to measure students' tendencies to either seek new experiences or embrace the unpredictable nature of everyday life (Kashdan et al., 2009). It has been cited by more than 311 publications (Scopus, n.d.-b). We chose this instrument to compare how students' tendencies toward stretching or embracing impact the input, environment, or outcomes of their involvement in SBAE as it relates to Astin's Theory. The 10 items from the CEI-II are split into two subscales to measure the respondents' stretching tendencies compared with their embracing tendencies. Participants responded by indicating their tendencies toward each item on the scale from 1 (Very Slightly or Not At All), 2 (A Little), 3 (Moderately), 4 (Quite a Bit), and 5 (Extremely). The participants' total score from the inventory is a representation of their overall tendencies to stretch or embrace.

**Adaptability**

Respondents completed the Career Adapt-Abilities Scale (CAAS) Career Adapt-Abilities Inventory – International Version 2.0, a 24-item scale developed to measure adaptability with a scale reliability of 0.92 (Savickas & Porfeli, 2012). It has been cited by more than 909 publications (Scopus, n.d.-a). Since publishing the CAAS, Porfeli and Savickas (2012) have tested its validity in several countries, and the United States' average adaptability of 3.81 out of 5 is similar to the international average of 3.84. We chose this instrument to compare students' adaptability as a factor in Astin's Theory's five assumptions of involvement. The 24 items from the scale are divided into four subscales for measuring the respondents' concern, control, curiosity, and confidence. Participants respond by indicating their ability for each item on the scale from 1 (Not Strong), 2 (Somewhat Strong), 3 (Strong), 4 (Very Strong), and 5 (Strongest). The participants' total score from the inventory is a representation of their adaptability.

**FFA Involvement**

This section asked respondents to indicate their involvement in four major categories: chapter activities, officer positions, FFA degrees, and participation in contests or events. This questionnaire was modeled from similar scales used in previous Agricultural Education studies (Copeland et al., 2020; Dormody & Seevers, 1994; McBride & Talbert, 2022). Several questions were included in the questionnaire to calculate the amount and extent of students' participation in the chapter, above the chapter, and national activities that were available to them. Students who have increasing levels of involvement are more likely to develop as leaders (Foreman & Retallick, 2013) and be better prepared for their future careers (Astin, 1999; Wyble, 2009).

Our research team wanted to ensure that a student who was highly active at the local chapter level was credited for their involvement. We did not think it would be fair to award higher involvement scores to students who were less involved in chapter activities but more involved in state or national events and contests. In the chapter activities section, respondents were asked about their participation in FFA-specific activities (e.g., chapter business meeting, chapter meeting with guest speaker or presentation, team building meeting, chapter awards banquet), fundraising events (e.g., selling items, providing a service for a fee, donor visits, collecting and donating items for non-profit organizations),

social events (e.g., chapter games or sports, fun nights, watching a movie as a group, picnics, chapter retreats), community service activities (e.g., food drive, toy drive, adopt a spot to beautify, conservation project), and community education events (e.g., elementary school partnerships, country agriculture days, county fair booths, petting zoos, safety training programs).

One point was given for each activity selected. Follow-up questions were asked for respondents to indicate their type of involvement in each activity, and a numerical point value was calculated based on their degree of participation. For instance, respondents were to describe their participation in FFA-specific activities as showing up to one or more events and not participating (1 point); going to one or more events, participating, and leaving (2 points); going to one or more events, participating, and also helping set up or tear down (3 points); or organizing one or more of the events and serving in a leadership capacity (4 points). If there was no participation in any of the chapter activities listed, follow-up questions were also asked to better understand their reasons for not participating.

In the officer positions section, a point was given for all positions held, including chapter office, region/district/area office, and state office positions. Similarly, a point was given for each FFA degree that had been achieved including Discovery, Greenhand, Chapter, and State degrees. The contests and events section assigned points for all levels of participation including the classroom or chapter level, above the chapter level, and the national level. The section included competitive events or contests, proficiency award submissions, Agriscience fair participation, FFA conventions attended, and leadership conferences or camps attended.

Two follow-up questions were asked for respondents who indicated they had participated in a competitive event or contest, and a numerical point value was calculated based on their degree of participation. The first question asked how many competitive events or contests they had participated in during their FFA careers: one (1 point), two (2 points), three (3 points), and four or more (4 points). The second question asked respondents to indicate the extent of their participation in the competitive event or contest they liked the most, including simply showing up the day of the competition (1 point), practicing a few times ahead of the event (2 points), practicing for several weeks before the contest (3 points), or the contest was so important that they practiced every chance they could get (4 points).

Total scores from the questionnaire could range from 0 to 55. A total score of 0 indicated a respondent who was Not Involved, as they would have selected "No Participation" in every category. A total score of 1-14 was defined as Lightly Involved indicating participation in something at the chapter level, but not much further than simply "showing up and leaving." A total score of 15-20 was defined as Moderately Involved, and respondents in this category must have had a greater level of participation than simply showing up to events. Scores of 21-30 were defined as Actively Involved, as respondents must have either helped with several chapter events or participated in events above the chapter level. Highly Involved respondents with a score of 31-41 would have usually led events or had a high level of participation above the chapter or at the national level with events. Finally, a total score of 42-55 was defined as Substantially Involved, and these respondents must have served in leadership roles for every chapter activity and have some level of involvement above the chapter or at the national level in various events.

**Participants**

The population for the study was high school Agricultural Education students from selected urban chapters for the 2021-2022 school year ($N = 31$). Urban chapters were selected using the National Center for Education Statistics' (NCES, n.d., "Exhibit A") definition of a Large City locale as a: "Territory inside an urbanized area and inside a principal city with a population of 250,000 or more."

The target population's age ranged from 14-19 years old, and no subject was excluded from the study based on their gender identity, ethnicity, or health status. A list of ($N$ = 74) advisors from 31 Agricultural Education programs in Large Cities was obtained from the National FFA Organization. The Qualtrics® link was sent to these advisors with directions for how to administer the survey to their students, and the Purdue University Institutional Review Board (IRB) approved an anonymized consent process within the survey since the data collected could not be tied back to individual participants. Given the National FFA Organization's membership at the time of data collection was 735,038 members, the average estimated chapter size was 83 members. For the 31 chapters involved, there were an estimated 2,573 members involved in this study.

A participation incentive drawing was used for both FFA advisors and participating students. At the end of data collection, 55 advisors from 18 participating programs were given a $20 Amazon gift card for distributing the survey to their students. Respondents entered a drawing at the survey's conclusion and 50 were randomly selected to receive a $20 Amazon gift card. The electronic gift cards were distributed by National FFA Staff to the recipients.

### Data Collection

A pilot study was conducted with the Indiana FFA Executive Committee members. These FFA members were selected as they tend to be active in chapter, district, state, and national FFA events and activities ensuring they could detect question-wording confusion or errors. A link to the pilot study questionnaire was emailed to all 26 Indiana FFA Executive Committee members. After the initial email and a reminder email, 17 responded for a 65.4% response rate. Isaac and Michael (1995) recommended 10-30 respondents for a pilot study. Some questions were ordered differently, and questionnaire aesthetics were modified based on responses. The 17 respondents completed the survey in a mean of 16 minutes.

An email was sent on August 24, 2021, to FFA advisors from chapters in selected NCES Large Cities. The email alerted the FFA advisors that they would be receiving a survey to distribute to their students. Following this alert to FFA advisors, the questionnaire was distributed via email on August 30, 2021, to all 74 FFA advisor email addresses according to their official 2020-2021 rosters with the National FFA Organization. The email contained a link to the Qualtrics® survey along with guidelines for how they were requested to distribute the survey to all of their high school Agricultural Education students. Reminders were emailed each week until September 27, 2021. A final reminder was sent on October 26, 2021, ahead of the National FFA Convention and Expo. Data collection ended on November 5, 2021.

### Data Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS). Means, frequencies, and percentages were calculated for all variables. For statistical analyses, the significance level was set a priori at 0.05. ANOVA analyses were conducted for FFA involvement and FFA membership, stretching/embracing (CEI-II), adaptability (CAAS), GPA, gender, ethnicity, SES (free/reduced lunch), and future plans. Correlation analyses were conducted between FFA involvement and overall stretching/embracing and adaptability.

## Findings

### Response Rate

Of the study's 31 chapters in Large Cities, participants from 18 chapters responded to the questionnaire, which is a 58.1% response rate of the included chapters in the study. Agricultural

Education students enrolled in these 18 chapters were given the link to the survey, and 733 respondents opened the questionnaire and made at least one response. Of the 733 respondents, 603 completed the survey; however, 60 did not provide accompanying informed consent, so the final usable responses for the study were 543.

**Demographic Profile**

A majority of respondents were female (54.7%) with 39.0% identifying as male and 6.3% identifying as either non-binary or non-disclosed. Respondents identified their race/ethnicity as White (44.3%), Black/African American (23.7%), Hispanic/Latino/Latinx (14.8%), Asian/Asian American (5.9%), Biracial/Multiracial (5.6%), American Indian/Alaska Native (0.4%), Native Hawaiian/Other Pacific Islander (0.2%), and some respondents preferred not to answer (5.2%). We wanted to be as noninvasive as possible in measuring (SES), so we asked respondents if they received free or reduced lunch at their schools. This resulted in 61.9% indicating they received free or reduced lunch, 25.8% who indicated they did not, and 12.3% preferred not to answer.

**Stretching/Embracing and Adaptability**

Respondents rated their tendencies to stretch or embrace from 1 = very slightly or not at all to 5 = extremely. The composite mean Curiosity and Exploration Inventory-II (CEI-II) was moderately curious about seeking new experiences or embracing the unpredictable nature of life (Kashdan et al., 2009). CEI-II scores were composed of stretching, $M = 3.41$, $SD = .83$; and embracing, $M = 3.24$, $SD = .82$. Combined, these constructs explain students' tendencies in different scenarios toward stepping outside of their comfort zones. This led to an overall mean of $M = 3.33$, $SD = .76$ (See Table 1). For this study, the CEI-II scale had a Cronbach's alpha of .87.

Table 1

*Respondents' Curiosity and Exploration Inventory-II Scores (n = 543)*

| | Minimum | Maximum | *M* | *SD* |
|---|---|---|---|---|
| Stretching Score | 1 | 5 | 3.41 | .83 |
| Embracing Score | 1 | 5 | 3.24 | .82 |
| Curiosity and Exploration Inventory-II Score | 1 | 5 | 3.33 | .76 |

*Note*. Possible scale values: 1 = very slightly or not at all. 2 = a little. 3 = moderately. 4 = quite a bit. 5 = extremely. Kashdan et al. (2009).

Respondents rated their adaptability from 1 = not strong to 5 = strongest. The composite mean Career Adapt-Abilities Scale was approaching very strong (Savickas & Porfeli, 2012). The adaptability score was composed of the four constructs: (a) concern, $M = 3.91$, $SD = .80$; (b) control, $M = 3.87$, $SD = .72$; (c) curiosity, $M = 3.73$, $SD = .78$; and (d) confidence, $M = 3.83$, $SD = .80$. Each of these constructs explains a specific factor of the respondents' adaptability. This led to an adaptability mean of $M = 3.83$, $SD = .68$ (See Table 2). For this study, the CAAS adaptability scale had a Cronbach's alpha of .94.

Table 2

*Respondents' Career Adapt-Abilities Scale – International Version 2.0 Scores (n = 543)*

| | Minimum | Maximum | *M* | *SD* |
|---|---|---|---|---|
| Concern Score | 1 | 5 | 3.91 | .80 |
| Control Score | 1 | 5 | 3.87 | .72 |

| | | | | |
|---|---|---|---|---|
| Curiosity Score | 1 | 5 | 3.73 | .78 |
| Confidence Score | 1 | 5 | 3.83 | .80 |
| Career Adapt-Abilities Scale (CAAS) Score | 1 | 5 | 3.83 | .68 |

*Note*. Possible scale values: 1 = not strong. 2 = somewhat strong. 3 = strong. 4 = very strong. 5 = strongest. Savickas and Porfeli (2012).

Table 3 shows the respondents' composite CEI-II and CAAS means by demographics. The ANOVA comparison of means was not significant for any of the demographics at the .05 level with the CEI-II; however, CAAS mean comparisons were significant for those who wished to not disclose their gender and those who identified as male and female. CAAS mean comparisons were also statistically significant when comparing Black respondents with White or Latino respondents.

Table 3

*Comparisons of CEI-II, CAAS, and Demographics (n = 543)*

| | | *f* | *CEI-II* | *f* | *CAAS* |
|---|---|---|---|---|---|
| Gender Identity | Female | 283 | 3.36 | 294 | 3.91[a] |
| | Male | 194 | 3.31 | 209 | 3.77[a] |
| | Non-Binary | 16 | 3.38 | 16 | 3.81 |
| | Non-disclosed | 17 | 2.89 | 18 | 3.29[b] |
| Race/Ethnicity | American Indian or Alaska Native | 2 | 3.75 | 2 | 4.01 |
| | Asian or Asian American | 32 | 3.16 | 32 | 3.66 |
| | Black or African American | 128 | 3.39 | 127 | 4.05[a] |
| | Hispanic, Latino, or Latinx | 80 | 3.28 | 79 | 3.75[b] |
| | Native Hawaiian/Other Pacific Islander | 1 | 2.40 | 1 | 3.58 |
| | Biracial or Multiracial | 30 | 3.39 | 30 | 3.82 |
| | White | 239 | 3.32 | 238 | 3.79[b] |
| | I prefer not to answer | 28 | 3.34 | 28 | 3.66 |
| Free/Reduced Lunch | Yes | 320 | 3.31 | 332 | 3.86 |
| | No | 136 | 3.33 | 139 | 3.82 |
| | Prefer not to answer | 54 | 3.39 | 66 | 3.72 |

*Note*. [ab]Statistically significant at the a priori .05 level. CEI-II overall mean score: 3.33 out of 5.00 (moderate level of stretching/embracing). CAAS overall mean score: 3.83 out of 5.00 (strong level of adaptability).

**FFA Involvement**

Respondents self-reported their FFA involvement to be $M$ = 8.2, which is lightly involved. Table 4 shows the respondents' FFA involvement, while Table 5 categorizes involvement by grade. Although the survey was distributed at the beginning of the school year, freshmen students (6.0) were still lightly involved and similar to sophomores (6.8). Only seniors' scores (11.9) were statistically significant compared with all other grades. Table 6 shows FFA involvement for gender identity, race/ethnicity, and SES. The ANOVA comparison of means was not significant for any of the demographics at the .05 level for FFA involvement.

Table 4

*Respondents' FFA Involvement (n = 543)*

| | *f* | % of Respondents |
|---|---|---|
| Not Involved | 122 | 22.5 |
| Lightly Involved | 321 | 59.1 |
| Moderately Involved | 46 | 8.5 |
| Actively Involved | 36 | 6.6 |
| Highly Involved | 14 | 2.6 |
| Substantially Involved | 4 | 0.7 |

*Note*. Not Involved (0/55), Lightly Involved (1-14.9/55), Moderately Involved (15-20.9/55), Actively Involved (21-30.9/55), Highly Involved (31-41.9/55), & Substantially Involved (42-55/55)

Table 5

*Respondents' FFA Involvement by Grade (n = 540)*

| | *9th Grade* (*M* = 6.0) *f* | *10th Grade* (*M* = 6.8) *f* | *11th Grade* (*M* = 8.5) *f* | *12th Grade* (*M* = 11.9*) *f* |
|---|---|---|---|---|
| Not Involved | 37 | 38 | 24 | 23 |
| Lightly Involved | 72 | 125 | 62 | 60 |
| Moderately Involved | 2 | 12 | 12 | 19 |
| Actively Involved | 5 | 10 | 9 | 12 |
| Highly Involved | 3 | 2 | 2 | 7 |
| Substantially Involved | 0 | 0 | 0 | 4 |

*Note*. *Statistically significant at the a priori .05 level.

Table 6

*Demographics and FFA Involvement Score (n = 543)*

| | | *Min* | *Max* | *FFA Involvement M* | *SD* |
|---|---|---|---|---|---|
| Gender Identity | Female | 1 | 48 | 10.9 | 8.68 |
| | Male | 1 | 44 | 10.1 | 8.36 |
| | Non-Binary | 1 | 38 | 8.5 | 9.85 |
| | Non-disclosed | 1 | 37 | 11.8 | 12.74 |
| ***Table Continued*** | | | | | |
| Race/ Ethnicity | American Indian or Alaska Native | 3 | 13 | 8.0 | 7.07 |
| | Asian or Asian American | 2 | 39 | 11.5 | 9.07 |
| | Black or African American | 1 | 44 | 11.1 | 8.13 |
| | Hispanic, Latino, or Latinx | 1 | 33 | 9.4 | 6.81 |
| | Native Hawaiian/Other Pacific Islander | 4 | 4 | 4.0 | - |
| | Biracial or Multiracial | 1 | 44 | 11.1 | 9.24 |

| | | | | | |
|---|---|---|---|---|---|
| | White | 1 | 32 | 11.1 | 8.44 |
| | I prefer not to answer | 1 | 48 | 10.4 | 11.56 |
| Free/Reduced Lunch | Yes | 1 | 48 | 11.3 | 9.40 |
| | No | 1 | 36 | 9.6 | 7.12 |
| | Prefer not to answer | 1 | 32 | 8.7 | 7.67 |

*Note*. ANOVA comparisons were not significant at the a priori .05 level.

Table 7 shows the types of chapter activities in which respondents participated and the extent of their participation overall. Respondents were most likely to be involved in social events (46.6%) such as chapter games or sports, fun nights, watching a movie as a group, picnics, or chapter retreats. FFA-specific activities (37.4%) such as chapter business meetings, chapter meetings with guest speakers or presentations, team building meetings, or chapter awards banquets was the next highest category of involvement. Community service activities (23.0%) and community education events (18.8%) were the next most popular, while fundraising events had the lowest level of involvement (17.7%). There were 189 respondents (34.8%) who indicated they were not involved in any of the chapter activities listed.

Table 7

*Respondents' Chapter Activity Involvement (n = 543)*

| | | *f* | % of Respondents |
|---|---|---|---|
| Type of Chapter Activity (Select all that apply) | Social Events | 253 | 46.6 |
| | FFA-Specific Activities | 203 | 37.4 |
| | Community Service | 125 | 23.0 |
| | Community Education | 102 | 18.8 |
| | Fundraising Events | 96 | 17.7 |
| | None | 189 | 34.8 |
| Extent of Chapter Activity Involvement | Showed up, did not participate | 70 | 12.9 |
| | Went, participated, left | 345 | 63.5 |
| | Went, participated, and helped | 256 | 47.1 |
| | Organized and led event(s) | 102 | 18.8 |

For the 189 respondents who selected None, an additional question was asked to determine why they were not involved in any of the chapter activities listed. They were provided a list of categories and they were to select the one that best described their reasons for no involvement, as shown in Table 8.

Table 8

*Respondents' Reasons for Having No Chapter Activity Involvement (n = 179)*

| | *f* |
|---|---|
| This is my first year, I have not had a chance to participate yet | 73 |
| Not interested in any of these FFA activities | 43 |

| | |
|---|---|
| Would have been interested, but not offered (outside reasons, COVID-19, etc.) | 34 |
| Conflicts with sports, other clubs | 23 |
| My chapter did not offer any of these | 6 |

Although there were 189 respondents who indicated they were not involved in the chapter activities listed, several of those respondents were involved in activities above the chapter level such as attending leadership conferences, camps, or conventions. There were 120 respondents who had an FFA Involvement score of zero, meaning they were not involved in any FFA event or activity listed. Table 9 shows the race or ethnicity of respondents who indicated they had No Involvement in any category.

Table 9

*Race or Ethnicity and No FFA Involvement (n = 120)*

| | *f* | % of Race/Ethnicity |
|---|---|---|
| White | 52 | 21.8 |
| Black or African American | 25 | 19.5 |
| Hispanic, Latino, or Latinx | 23 | 28.8 |
| Asian or Asian American | 7 | 21.9 |
| Biracial or Multiracial | 5 | 16.7 |
| I prefer not to answer | 8 | 28.6 |

Table 10 shows FFA involvement with respondents' plans after high school. A follow-up question was asked to determine if their educational major after high school would (44.2%) or would not (55.8%) be related to agriculture.

Table 10

*Future Plans and FFA Involvement Score (n = 543)*

| | *FFA Involvement M* |
|---|---|
| Join the military | 12.1 |
| Attend a four-year college | 11.3 |
| Obtain an agriculture-related job | 11.0 |
| Attend a two-year college | 10.1 |
| Obtain a non-agriculture-related job | 9.8 |
| Undecided | 8.9 |
| Attend a training or vocational school | 7.9 |

*Note*. ANOVA comparisons were not significant at the a priori .05 level.

## Limitations

Data collection methodologies did not allow for the determination of a precise response rate. Therefore, the reader is cautioned in applying these findings beyond the population represented by the respondents. An early/late response comparison showed no statistical differences (Lindner et al., 2001). This study can provide baseline data for comparison by future studies. Because we only contacted chapter advisors and not students directly, not having communication with students limited our ability

to send reminders directly to respondents. Also, relying on a database to identify and locate schools and teachers for the study may have caused us to miss teachers at certain schools.

The pilot test was made up of students who were not all from NCES-designated Large Cities, which was a limitation. A lack of access to technology may have also been a barrier to the study. We did not have data to show exactly how many high school Agricultural Education students were enrolled at each school; therefore, we made estimates based on national averages with the National FFA membership per chapter. Also, data were collected in the fall of 2021. With the disruptions in school and activities starting in the spring of 2020 due to COVID-19, respondents may not have been able to experience the full range of FFA activity opportunities. This study only surveyed urban students, therefore, not comparing urban students' involvement with rural students was a limitation.

## Conclusions and Discussion

For urban SBAE students, involvement in FFA was not affected by demographics other than those in the 12th grade were more involved. Viewing this through Astin's (1996, 1999) theory, Agricultural Education students whose involvement is continuous and varied and who see the value of that involvement are more likely to pursue higher levels of activity in the organization. Additionally, it appears urban SBAE students have similar inputs and environments as measured in this study meaning other factors are contributing to their levels of involvement.

Overall Mean FFA involvement was Lightly Involved. Slightly more than one in five respondents had No Involvement with no statistical differences for race/ethnicity identification. These findings are different from those of Velez et al. (2018) who found that Black males were more involved in non-SBAE Career and Technical Student Organizations and that White females were 20% more likely to hold officer positions in SBAE Career and Technical Student Organizations. Lightly involved implies these respondents are attending chapter FFA activities, but are not fully experiencing the leadership, personal, and career development these activities are designed to provide. Focused, targeted efforts on local, state, and national levels must occur to actively involve FFA members from groups with low involvement.

The composite CAAS (3.83) approached a very strong level of adaptability, indicating this group of respondents is adaptable. When looking at the four constructs – concern (3.91), control (3.87), curiosity (3.73), and confidence (3.83) – curiosity was the lowest. Curiosity is the construct that reflects an individual's interest in exploring and seeking information about a topic (Porfeli & Savickas, 2012). Curiosity is also a key component of the CEI-II scale, which also had a lower composite mean (3.33). These lower levels of curiosity related to other constructs could explain why respondents were only Lightly Involved in the organization.

## Recommendations

### Recommendations for Practice

Respondents indicated one reason for lower involvement was conflicts with other school activities. Local FFA advisors can work with advisors of other student organizations and athletic coaches to create an all-school activities calendar and hold regular meetings of advisors and student presidents to discuss scheduling to eliminate or reduce conflicts. It may also be beneficial for urban FFA chapters to team up with other student organizations in their schools to create more awareness about SBAE for students.

National FFA has two programs that could be used more effectively to encourage greater levels of urban SBAE students' involvement in FFA activities. First, the National FFA Teacher Ambassador program can be used to obtain FFA advisor buy-in for modifying existing or creating new activities for greater urban SBAE student involvement in FFA. Second, the National Chapter Award Models of Success program could be modified to promote the involvement of a higher percentage of FFA members in the chapter and above chapter-level activities. This could be done by creating a rubric item with an appropriate number of points for the percentage of members engaged in each activity.

We also recommend National FFA and Agricultural Education leaders expeditiously implement the Agricultural Education for All efforts (National FFA Organization, 2022a). These efforts could ensure FFA events and degree programs are inclusive and appropriate to urban students' demographics and environments to guide a greater number of their students to be more fully engaged in chapter activities. Additionally, state-level FFA leaders are encouraged to work with local urban FFA advisors to make above chapter-level and state-level FFA activities appropriate for and open to urban FFA members. The second most reason for having no chapter activity involvement was not interested in any of these activities. State FFA Associations can be incubators of innovation, so we recommend states with urban FFA chapters develop urban-focused activities that can become models of innovation to be shared and duplicated across the country. An evaluation of current chapter activities is needed to understand any hindrances to involvement. If the activities themselves are not appealing to students, new programs or events will be needed.

### Recommendations for Research

Future studies with urban SBAE students should look at additional demographic variables to determine if other factors are influencing levels of involvement. This study did not consider environmental factors such as the number of students per agriculture teacher, school facilities, and the FFA budget. An in-depth qualitative study may be more appropriate for discovering how the environment affects urban SBAE student ability to be involved in FFA activities.

The COVID-19 pandemic disrupted students' access to FFA involvement for two years. Further research on the high school graduating classes of 2024 and 2025, students who were in the 9th and 10th grades for this study, is needed to determine if their light involvement continues. Additionally, replicating this study after schools have moved on from the COVID-19 pandemic for at least four years could present a beneficial comparison of involvement.

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