

# **Barriers to Participation in the National FFA Organization According to Urban Agriculture Students**

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*Urban youth engaged in after-school organizations have more positive attributes compared to their unengaged contemporaries. The FFA is one particular intra-curricular organization with after-school components; yet, urban students do not participate in FFA at the same levels as rural students. The purpose of this descriptive study was to explore barriers to participation in FFA among urban high school agriculture students in an urban school district. We surveyed students' level of participation in FFA to determine their perceived barriers to FFA participation. Findings revealed students do not agree with any of the listed or expected barriers; however, significant differences surfaced between non-members and active members concerning barriers related to friends, family, school, and the community. The study exposed a need to address the perceptions of friends, family, and community when recruiting urban FFA members.*

Keywords: FFA, urban students, agricultural education, barriers to participation

Urban students are underrepresented in the FFA compared to rural students. For instance, a study comparing 32 urban and rural FFA chapters found 71% of the rural agriculture students were FFA members compared to 52% of urban agriculture students (Lawrence, Rayfield, Moore, & Outley, 2013). The discrepancy in FFA involvement should not be overlooked as a condition of urban agriculture programs. FFA provides urban students with numerous positive outcomes which have been cited as important for urban youth according to urban youth development research (Larson, Hansen, & Walker, 2005; Wood, Larson, & Brown, 2009). Furthermore, school-based agriculture programs are designed to include classroom instruction, supervised agricultural experiences, and membership in the FFA (Phipps, Osborne, Dyer, & Ball, 2008); thus, urban agriculture students who choose not to become involved in FFA activities may not be receiving the full benefits of the school-based agriculture experience. Statistical data (e.g., Gliem & Gliem, 2000; LaVergne, Jones, Larke, & Elbert, 2012; Lawrence, Rayfield, Moore, & Outley, 2013; Team Ag Ed 2006), as well as other qualitative studies (e.g., Phelps, Henry, & Bird, 2012; Roberts, Hall, Gill, Shinn, Larke, & Jaure, 2009) indicate a barrier that inhibits urban agriculture students from joining the FFA. Identifying any barriers facing urban agriculture students can help teachers, stakeholders, and teacher educators redesign and /or develop urban FFA programs which will break down urban students' barriers to FFA participation.

## **Review of Literature**

Agricultural education research on urban settings has focused on a variety of issues, including the agriculture knowledge of students (Pense & Leising, 2004; Trexler, 2000), career choice of students (Esters & Bowen, 2005), curricular program (Soloninka, 2003), reasons for

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enrolling in agriculture programs (Esters & Bowen, 2004; Talbert & Larke, 1995), issues facing teachers (Warner & Washburn, 2009), and students' preferences in leadership development (Anderson & Kim, 2009). However, none of these studies measured specifically the barriers to FFA participation or involvement in agriculture program for urban students. Two studies, which studied the perceptions of students towards the FFA, highlighted the role of negative perceptions of the organization as a possible barrier. For instance, a survey of 540 FFA members from across the nation revealed the image of FFA was a barrier to student participation (Hoover & Scanlon, 1991). These perceptions remained constant once formed. More recent studies complemented these findings (Gliem & Gliem, 2000). For example, a case of study of 10 schools with more than 300 FFA and non-FFA participants in total, revealed non-FFA members often referred to FFA members as *hicks*, *hillbillies*, and *farmers*. Non-FFA members also displayed apathy toward participating in FFA activities (Phelps, Henry, & Bird, 2012). These perceptions of FFA and FFA members from outsiders and/or non-FFA members can create challenges for recruiting urban agriculture students to join the FFA.

Other studies indicated the lack of diverse role models could form a barrier to urban students' joining the FFA. A survey of 232 Texas agriculture teachers found teachers lacked diverse role models in agricultural education to recruit diverse students (LaVergne et al., 2012). Diverse role models could help bridge the gap between the agriculture program and diverse students. This idea was actually put into action in a study published two years prior. Three FFA programs in Texas were identified as having high Hispanic school populations and low Hispanic FFA membership. A series of six interventions were introduced at each school to increase Hispanic FFA membership (Roberts et al., 2009). One of those interventions included a Hispanic role model, who was also a former agriculture teacher, to work with the teacher and members. The three schools each increased the number of Hispanic FFA members after the interventions. All of the above-mentioned agricultural education studies highlight the same larger issue – negative perceptions of students towards the FFA and lack of diverse role models in the organization could form barriers to urban students' participation.

Urban agriculture students could reap many potential benefits from FFA involvement. Urban youth engaged in after-school organizations have more positive attributes compared to their unengaged contemporaries (Quane & Rankin, 2006). For instance, at-risk children demonstrate an increased level of positive behaviors and decreased level of negative behaviors when engaged (Scott-Little, Hamann, & Jurs, 2002). Youth engagement in out-of-school activities has grown to be a significant thread of research (Harvard Family Research Project [HFRP], 2004, 2006, 2008), though data tend to be generic for all after-school programs (Fashola, 1998). Researchers link involvement in youth organizations to a multitude of positive academic, social, and emotional developmental outcomes for youth. For instance, a meta-analysis of 35 quasi-experimental and experimental studies found at-risk students who attend after school programs experienced an increase in reading and math achievement (Lauer, Akiba, Wilkerson, Apthorp, Snow, & Martin-Glenn, 2006). Another meta-analysis of more than 70 after-school programs found students generally experienced an increase in their level of self-confidence and self-esteem (Durlak & Weissberg, 2007). FFA is one particular intra-curricular organization with after-school components having multiple benefits for students (Phipps et al., 2008). Yet, urban students do not participate in FFA at the same levels as rural students (Lawrence et al., 2013). Considering the potential benefits for urban students, why the disparity?

### Conceptual Framework

This study was informed by previous research on barriers to student participation in after-school activities and thus served as the conceptual framework for the study. Researchers have conceptualized barriers as involving a variety of influences. Previous research on broad student populations (primarily suburban and urban) identified numerous general barriers to students'

participation. These barriers include lack of transportation (HFRP, 2004; US Department of Education, 2003), family responsibility (Borden et al., 2005; HFRP, 2004; Sanderson & Richards, 2010), lack of parental encouragement (Sanderson & Richards, 2010; Simpkins, Davis-Kean, & Eccles, 2005), and concern for students' safety (HFRP, 2004; Sanderson & Richards, 2010). A few studies specifically analyzed barriers urban youth encountered. Students reported they want to relax with friends after school and lost interest in programs (Halpern, 2000; Weisman & Gottfredson, 2001). Some students needed or wanted to work after school (Lauver, Little, & Weiss, 2004). Others had familial responsibilities after school, such as caring for siblings (Grossman, Price, Fellerath, Jucovy, Kotloff, Raley, & Walker, 2002; Lauver, 2002). In certain areas, students felt unsafe when traveling to and from after-school activities (Grossman et al, 2002; Lauver, 2002). These barriers indicate an intricate framework with various influences related to family, friends, and community.

Weiss, Little, and Bouffard (2005) developed a framework for participation in after-school schools which collapsed many of the aforementioned barriers into a single model. They found five predictors of participation of student participation: student characteristics, perceptions of family and friends, school characteristics, and neighborhood characteristics (see Figure 1). These predictors of participation formed part of the conceptual framework for this study and guided the development of a survey of barriers to urban students participation in FFA.

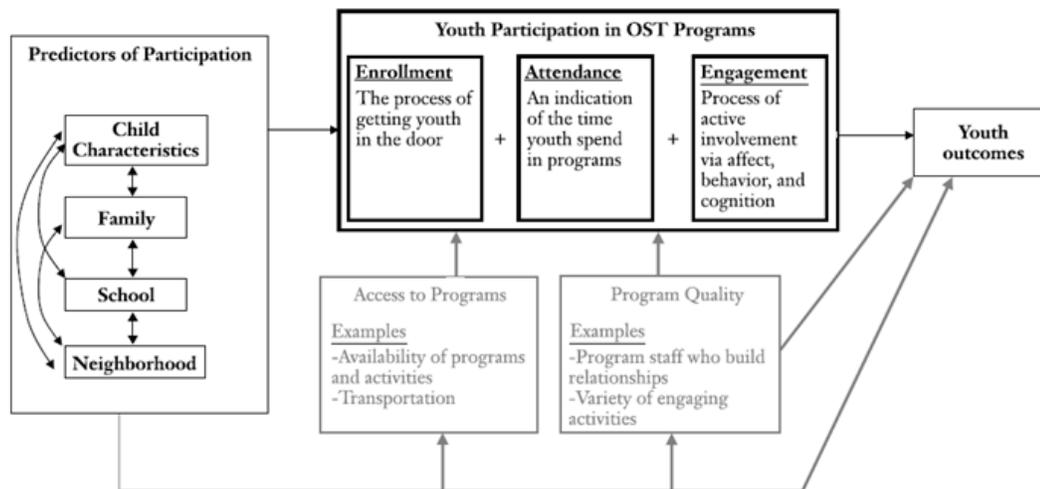


Figure 1. Conceptual model of participation in out-of-school time. From “More than just being there: Balancing the participating equation,” by H.B. Weiss, P.M.D. Little, & S.M. Bouffard, 2005, *New Directions for Youth Development*, 105, p.21. Copyright 2005 by Wiley Periodicals.

The literature on barriers and influences of agriculture students' participation in the FFA also guided this study. For instance, researchers recognized that a lack of role models in the FFA (LaVergne, Larke, Elbert, & Jones, 2011), needs of FFA chapters with diverse membership (Vincent & Torres, 2011), and negative stereotypes of the FFA and FFA members (Gliem & Gliem, 2000; Hoover & Scanlon, 1991; Phelps, Henry, & Bird, 2012) could form barriers to urban students' FFA participation. A lack of diversity among agriculture teachers and characteristics of the agriculture program have also been identified as barriers to urban students' participation in the FFA. These two additional barriers were added to the conceptual framework of the study (Figure 2).

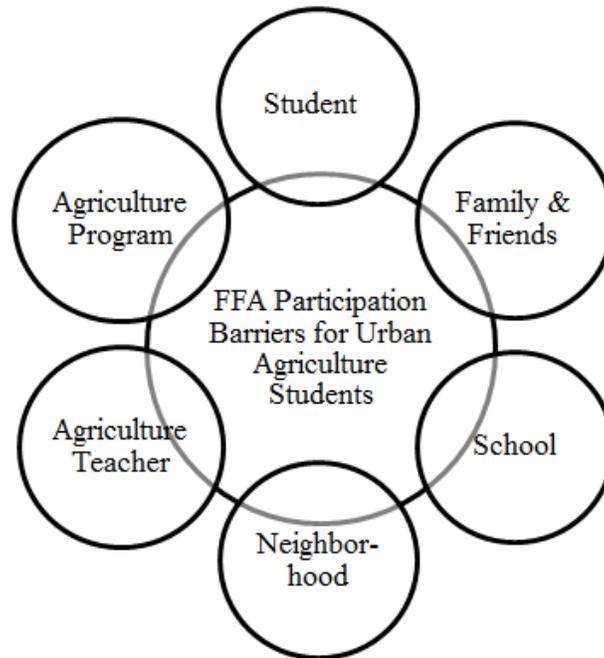


Figure 2. Conceptualization of barriers to FFA participation for urban agriculture students.

### Purpose and Objectives

The purpose of this descriptive study was to explore barriers to FFA participation among urban high school agriculture students in one Midwestern, urban school district. The objectives were:

1. Describe FFA involvement of students.
2. Describe barriers students encounter to FFA participation.
3. Describe the barriers students encounter to FFA participation by their level of FFA involvement.

This research aligned to priority area five, “efficient and effective agricultural education programs,” of the of the American Association of Agricultural Education’s National Research Agenda (Doerfert, 2011). Identifying and rectifying any barriers to FFA participation faced by agriculture students will help improve agriculture programs in urban programs. The inclusion of more urban agriculture students in FFA will help the organization broaden its reach (National FFA Organization, 2013) and ensure urban agriculture students reap the full benefits of their school-based agriculture experience (Phipps et al., 2008).

### Methods

The target population was all of the students enrolled in an agriculture class in a Midwestern metropolitan school district. The school district served an urban populace of over 300,000 people. The sample was a time-location sample of all of the urban agriculture students in the school district. Three distinct agriculture programs were identified within the school district. The total agricultural student population of the three programs was 99 students. Seventy students participated in the study for a response rate of 70.7%. Twenty-nine students either opted not to be part of the study or were not present during the administration of the questionnaire. A breakdown of the race of the students participating in the study revealed that 61.4% of the students were Black, 18.6% White, and 19.4% represented different races. Eighty percent of the

students were female and 20% male. Sixteen percent of the students in the study were sophomores, 54% were juniors, and 30% were seniors. The survey was administered during a single setting at every class of each program.

Each program differed in their curricula focus; however, all programs shared a similar focus on advanced agriculture curriculum and FFA chapter characteristics. The three programs each focused on a separate thread of agricultural education curriculum: agricultural science, veterinary science, and horticulture. The programs were designed as advanced career and technical education programs within each school as the majority of students were upperclassmen. The three FFA chapters attached to these programs were more limited in scope. They conducted only a handful of activities at the local chapter level and even fewer activities beyond the chapter level. Two of the three programs mandated students to be FFA members once they entered the agriculture programs, which bring about a design issue in terms of measuring time involvement. We argue for this study, it is more important to measure whether or not the student perceives they are members as opposed to a mere payment of dues. Regardless, this is important to note and brings about a potential limitation to the study.

The questionnaire had two parts: time involvement in FFA and barriers to participation in FFA. Time involvement originally had five levels; however, it was collapsed to three levels to obtain a more even distribution across groups. Those collapsed levels were: a) I am not a FFA member (non-member), b) I am a member but I have not participated in any activities, meetings, or competitions (non-active member), and c) I am a member and I participated in at least one activity, meeting, or competition (active member).

The items about barriers were adopted from a study by Rayfield, Compton, Doerfert, Frazee, and Akers (2008). Adaptions to the instrument included the development of constructs based on the conceptual framework and the wording of questions to reflect barriers rather than opportunities. Students identified their level of agreement to statements with the following prompt, "I have NOT gotten more involved in with the FFA because...." An example of an answer to this question included, "I have to care for family members after school." Students were asked to rate their level of agreement on statements according to a five-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The survey instrument was subjected to review by a panel of experts to ensure face and content validity. A pilot test ( $n = 23$ ) of the instrument was conducted at a similar program in a similar large school district. We intended to utilize constructs for the analysis of barriers to participation; however, the reliability coefficients of the pilot were too low. A test-retest reliability analysis was conducted during the pilot and all items were above 80% agreement with the range between 82% and 100%. Thus, we determined the items to be reliable individually. The metropolitan school district was purposively selected for this study because the three programs shared similar characteristics; thus, generalizations to other urban programs should be made with caution.

Calculations used descriptive statistics and ANOVA with post hoc procedures with each variable (i.e., item by item analysis). Descriptive statistics were calculated for students' level of involvement in the FFA and barriers to FFA participation. The data were tested for homogeneity of variance, and the variances were deemed unequal within the group for seven items. We utilized a Welch test for equality of group means to accommodate for this factor. ANOVA calculations determined if differences existed in barriers to FFA participation based on students' level of involvement. A post hoc analysis was conducted on the items that were identified as significant in the ANOVA procedure to illicit how the levels of FFA involvement differed according to the specific barriers to FFA participation. The post hoc procedures conducted included LSD (Field, 2005). An alpha of .05 was established *a priori*.

## Findings

The findings for Objective 1 (describing student involvement in FFA) reported that 27% ( $n = 19$ ) of students surveyed were not FFA members, 21% ( $n = 15$ ) were non-active members, and 51% ( $n = 36$ ) were active members.

The findings for Objective 2 (describing student barriers to FFA participation) included two items receiving the highest means: “Our FFA chapter is not well known by other students in the school” ( $M = 2.75$ ;  $SD = 1.25$ ); and “my neighborhood does not value our FFA chapter” ( $M = 2.53$ ;  $SD = 1.29$ ). The following items received the lowest means: “If I joined the FFA, I would be teased by my friends” ( $M = 1.25$ ;  $SD = 0.53$ ); and “my agriculture teacher(s) does not support participation in the FFA chapter” ( $M = 1.23$ ;  $SD = 0.57$ ). The findings for Objective 1 and 2 are summarized in Table 1.

Objective 3 was to describe barriers students encounter to FFA participation based on their level of FFA involvement. Post hoc analysis of the nine items identified as significant revealed how the means differed between each of two of the three levels of the time involvement and the barriers. Table 2 reports the ANOVA ad hoc analysis. Eight items noted differences in FFA perception between at least two of the groups surveyed. The items are expressed by the following statements: the FFA chapter does not fit into the activities and beliefs of the school; the FFA activities takes up too much time; I have no transportation to get to the FFA activities; if I joined the FFA chapter, I would be teased by my friends; none of my friends are FFA members; the FFA chapter does not fit into the activities and beliefs of the community; and I have to care for family members after school.

Table 1

Barriers to Participation Item Analysis According to Student's Time Involvement in the FFA

Items	n	M (SD)	Self-Identified Membership Status M (SD)			F
			Non-member n = 19 (27%)	Non-active n = 15 (22%)	Active n = 36 (51%)	
Our FFA chapter is not well known by other students in the school	69	2.75 (1.25)	2.68 (1.16)	2.47 (1.30)	2.91 (1.29)	0.95
My neighborhood does not value our FFA chapter	69	2.53 (1.29)	2.21 (1.13)	2.40 (1.45)	2.40 (1.33)	0.73
I have to care for family members after school	70	2.46 (1.34)	2.74 (1.48)	2.78 (1.21)	1.63 (1.07)	0.05*
I am too busy with other school activities	69	2.46 (1.24)	2.89 (1.49)	2.67 (1.05)	2.14 (1.12)	0.23
I have no transportation to get to the FFA activities	69	2.38 (1.21)	2.84 (1.17)	2.73 (1.16)	1.97 (1.15)	0.04*
People within the school do not support the FFA	68	2.32 (1.29)	2.26 (1.24)	1.86 (1.03)	2.54 (1.38)	0.24
I am getting ready to go to college after high school and the FFA doesn't help with that	69	2.25 (1.08)	2.63 (1.12)	2.07 (1.03)	2.11 (1.05)	0.18
I am too busy working at my after-school job	68	2.24 (1.32)	2.58 (1.43)	2.36 (1.45)	2.00 (1.19)	0.29
My neighborhood does not value involvement in community activities	69	2.23 (1.21)	2.11 (1.24)	2.47 (1.30)	2.20 (1.18)	0.73
The FFA does not relate to my life	69	1.97 (1.12)	2.21 (1.23)	1.60 (0.91)	2.00 (1.14)	0.30
The FFA activities takes up too much time	66	1.94 (0.91)	2.50 (0.99)	2.29 (0.73)	1.50 (0.71)	0.02*
The FFA chapter does not fit into the activities and beliefs of the school	66	1.88 (1.09)	2.44 (1.38)	1.87 (0.92)	1.58 (0.87)	0.03*
I cannot see the benefits of our FFA chapter	69	1.87 (1.10)	2.00 (1.25)	1.67 (1.23)	1.89 (0.96)	0.78
I do not believe FFA activities are fun	69	1.87 (0.98)	2.21 (1.080)	1.60 (0.83)	1.80 (0.96)	0.10
None of my friends are FFA members	69	1.75 (1.05)	2.42 (1.43)	1.67 (0.90)	1.43 (0.65)	0.01*
The FFA chapter does not fit into the activities and beliefs of the community	69	1.75 (0.96)	2.32 (1.16)	1.73 (0.88)	1.46 (0.74)	0.02*
I am concerned about safety after-school	69	1.72 (1.00)	1.95 (1.18)	2.13 (1.06)	1.43 (0.78)	0.06
My sibling(s) do not encourage participation in the FFA chapter	69	1.65 (1.00)	1.74 (1.05)	1.67 (1.11)	1.60 (0.95)	0.91
My principal(s) does not support participation in the FFA chapter	69	1.64 (1.03)	1.84 (0.96)	1.40 (0.91)	1.63 (1.11)	0.59

Table 1 Continues

*Table 1 Continued*

My parent(s) or guardian(s) do not encourage participation in the FFA chapter	69	1.55 (0.99)	1.95 (1.27)	1.80 (1.21)	1.23 (0.49)	0.04*
Popular students do not join the FFA	69	1.51 (0.85)	1.68 (0.89)	1.40 (0.74)	1.46 (0.89)	0.56
My neighborhood offers better after school activities than FFA	69	1.49 (0.74)	1.58 (0.69)	1.47 (0.74)	1.46 (0.78)	0.57
My school counselor(s) discourages participation in the FFA chapter	69	1.29 (0.55)	1.47 (0.61)	1.47 (0.74)	1.11 (0.32)	0.23
If I joined the FFA, I would be teased by my friends	68	1.25 (0.53)	1.53 (0.77)	1.13 (0.35)	1.15 (0.36)	0.02*
My agriculture teacher(s) does not support participation in the FFA chapter	69	1.23 (0.57)	1.26 (0.45)	1.33 (0.90)	1.17 (0.45)	0.53

*Note.* \* $p < .05$ ; Responses are based on a five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

Table 2

*Post Hoc Analysis of Item According to Student's Involvement in the FFA*

Items	Significant Difference Between Membership Groups		
	Non-Member & Non-active	Non-Member & Active Member	Non-active & Active Member
The FFA chapter does not fit into the activities and beliefs of the school	X	X	
The FFA activities takes up too much time	X	X	
I have no transportation to get to the FFA activities		X	
If I joined the FFA chapter, I would be teased by my friends	X	X	
None of my friends are FFA members	X	X	X
My parent(s) or guardian(s) do not encourage participation in the FFA chapter		X	
The FFA chapter does not fit into the activities and beliefs of the community	X	X	
I have to care for family members after school		X	X

*Note.* Significance for LSD

## **Conclusions and Recommendations**

We suggest caution when generalizing the findings of this study to other urban agriculture programs. Nonetheless, this study offers some interesting perspectives into the barriers urban students encounter to participating in FFA. The findings from Objective 1 revealed the majority (73%) of students were FFA members. These findings were not surprising considering two of the programs required students to pay FFA dues when enrolling in the program. The finding showing where a majority of the surveyed students reported participating in at least one FFA activity was not surprising because most of the programs' FFA activities were intra-curricular.

The findings from Objective 2, established to identify barriers, revealed students not agreeing with any of the listed barriers to FFA participation. This finding was surprising. The literature on urban after-school programs identified numerous possible barriers from previous research. For instance, family responsibilities were identified as a barrier for some urban students (Borden et al., 2005; Grossman et al., 2002; HFRP, 2004; Lauver, 2002; Sanderson & Richards, 2010); however, the item "I have to care for family members after school" received no general agreement among the students. Furthermore, students did not agree with any of the barriers related to negative stereotypes of the FFA, which was identified in the literature (Gliem & Gliem, 2000; Hoover & Scanlon, 1991; Phelps, Henry, & Bird, 2012). The results derived from Objective 2 are quite positive. There are no clear barriers inhibiting their FFA participation. However, a new question emerged from this implication; why did the 36 (49%) students enrolled in agricultural-related classes not join or participate in the FFA? Qualitative research may provide researchers with a more detailed explanation of this elusive question.

This research proposes numerous reasons for students' unexpected response to barriers based on findings of Objective 2. The three agriculture teachers participating in the study may have developed a very supportive classroom environment for their urban students. This supportive nature may have led to the agriculture students not agreeing with any of the barriers listed in the questionnaire related to agriculture teacher and program. Furthermore, the relative inactive nature of the agriculture programs (only a few FFA activities at the local level and even fewer activities beyond the chapter level) may have had an influence on the students. They did not have an opportunity to develop any negative perceptions of the FFA. The other explanation for these findings would be that urban students do not encounter any barriers to their participation in the FFA chapter; however, this explanation would counter previous research in agricultural education (Gliem & Gliem, 2000; Hoover & Scanlon, 1991; LaVergne et al., 2012; Phelps, Henry, & Bird, 2012; Roberts et al., 2009). This research demonstrated how the local programs participating in this study fostered positive environments for their diverse students. Such positive reinforcement has some grounding in literature (Vincent & Torres, 2011), and this positive local chapter trumped some of the barriers to FFA participation. More case study research on successful urban agriculture programs could provide more examples for practitioners to follow when designing new programs.

Even though overall means revealed no agreement to the barriers, findings from Objective #3 (barriers based on level of involvement) revealed significant differences between non-members and members (active and non-active groups) within the barriers related to friends, family, school, and community. Significant differences also existed between non-members and active members or non-active members in the social barriers regarding perceptions of friends, school, and community. These differences between groups followed the findings of other studies related to students' barriers and perceptions of the FFA (Gliem & Gliem, 2000; Hoover & Scanlon, 1991; Phelps, Henry, & Bird, 2012).

Differences between non-members and members (both non-active and active) warranted further discussion. Findings concerning the influence of friends and family complemented the other studies which found diverse students need role models in agricultural education (LaVergne

et al., 2011). Differences between the participants on the barriers relating to FFA activities not fitting into beliefs of the school and community coincided with previous studies which highlighted the negative perceptions some non-members had towards FFA (Gliem & Gliem, 2000; Hoover & Scanlon, 1991; Phelps, Henry, & Bird, 2012). Barriers regarding a lack of transportation and need to care for family members echoed the findings from other educational studies (HFRP, 2004; Sanderson & Richards, 2010; Simpkins, Davis-Kean, & Eccles, 2005; US Department of Education, 2003).

Implications results from the findings of Objective 3 are important for stakeholders of urban FFA programs. Perceptions of friends, family, and community need to be addressed when recruiting members. Urban FFA chapters might need role models that can reach out to the student population and families (LaVergne et al., 2011). FFA advisors should consider how their FFA chapter fits into the culture of the school. Adopting this recommendation means rethinking the activities of the chapter (Roberts et al., 2009). More research is needed to explore how agriculture teachers can overcome barriers to urban student's participation in the FFA. Future research can take two directions: (a) study the interventions and activities of successful urban FFA chapters, and (b) pursue research that envisions FFA chapters focusing exclusively on urban students. These explanations could help stakeholders design FFA chapters that appeal to more urban students.

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