

Agricultural Education Student Teachers' Self-Efficacy in Classroom Management

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Abstract

Classroom management has been a primary topic of concern for teachers and administrators throughout educational history. Beginning agriculture teachers have often cited classroom management issues as the most important problem they faced in their professional roles. The purpose of this study was to examine the sense of efficacy perceived by agricultural education student teachers at the conclusion of their student teaching internship experience. The three dimensions of teacher efficacy addressed in this study included: Classroom Management & Discipline, External Influences, and Personal Teaching efficacy. A question of this study was to identify leadership development experiences of student teachers that were predictive of higher levels of teacher efficacy in classroom management. This information was believed to be of potential value to enhance teacher efficacy in classroom management in the pre-service agricultural teacher education program. However, the results of this study indicated that the leadership development experiences selected were not of practical value in predicting their perceived level of self-efficacy. Further research was also recommended to identify factors related to higher levels of self-efficacy among future teachers.

Introduction

A positive sense of self-efficacy in classroom management is essential for a teacher. Bandura (1994) states that individuals with low senses of self efficacy tend to dwell on their personal deficiencies when faced with difficult tasks, they slacken efforts and give up in the face of adversity, and they are slow to recover from failure. Therefore, investigating student teachers sense of efficacy in classroom management is appropriate and necessary.

Classroom management and discipline issues are frequently cited as concerns of student teachers. This observation was described in the *Handbook of Research on Teacher Education* (1996) which reported that many studies concluded that pre-service teachers often felt poorly-prepared in the area of classroom management. Mundt and Connors (1999, p. 38) summarized their views in the context of agricultural education when they wrote: "Consistently, classroom management and student discipline come to the forefront as problems for beginning teachers."

Unquestionably, effective classroom management is an important factor that contributes to student success in agricultural education. In fact, Newcomb, McCracken, Warmbrod, & Whittington (2004) note that high levels of student achievement are not likely in an environment that is not conducive to learning. Managing the student learning environment is an important role for classroom teachers and should be emphasized in preservice teacher education programs.

Research suggests that classroom management may be related to the health and well-being of teachers. Brouwers and Tomic (2000) reported that perceived low levels of self-efficacy in classroom management had a detrimental affect on emotional exhaustion and contributed to teacher burnout. The study of student teachers' sense of efficacy related to classroom management may provide important insights to aid teacher educators in promoting a stronger sense of teacher efficacy among student teachers in agricultural education. In so doing, the potential exists to avoid some of the negative consequences associated with teacher dissatisfaction and burnout as a result of ineffective classroom management experiences.

Self-Efficacy and Teacher Efficacy

Bandura's theory of self-efficacy has been widely discussed and researched at various levels of education. Bandura (1994, p.1) described self-efficacy as, "People's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that effect their lives." A strong sense of self-efficacy enhances human accomplishment and personal well-being in part because of the individual's belief in their own potential to influence the outcome. Individuals with a high sense of self-efficacy often exhibit an intrinsic interest and tend to be deeply engrossed in their activities. They set challenging goals and maintain a strong commitment to achieve those goals. Individuals with a high sense of self-efficacy approach threatening situations with greater confidence, feeling they have at least some ability to exert an influence and/or a degree of control over the situation. Contrasted to individuals with low self-efficacy, who tend to doubt their ability or potential to influence an outcome, and generally avoid difficult or threatening situations (Bandura, 1994).

Researchers have expanded and refined Bandura's original description of efficacy in the context of teachers and teaching. Tschannen-Moran and Hoy (2001) suggested that teacher efficacy was simple idea with significant implications. The authors described teacher efficacy as "... a judgment about his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated." (p. 1). Woolfolk (2007) noted that a teacher's sense of efficacy is one of the few personal characteristics of teachers positively correlated with student achievement.

Self-efficacy and self-esteem are often used in the same context. However, the terms should not be used interchangeably based on the literature addressing the two constructs. Woolfolk (2007) noted that self-efficacy is concerned with judgments of personal capabilities and capacity, whereas self-esteem is concerned with judgments of self worth. Self-efficacy focuses on an individual's potential influence on a given situation and more specifically the ultimate outcome, whereas self-esteem focuses on a value judgment of an individual's worth.

Individual self-efficacy is derived from four main sources: mastery experiences, physiological and emotional arousal, vicarious experiences, and social persuasion (Bandura, 1994). Each of these sources may be incorporated into the student teaching experience. Mastery experience occurs when a student teacher personally engages in the practices of teaching. Student teacher success, even on a small scale, may contribute toward the development of a stronger sense of teacher efficacy.

The physiological and emotional dimensions within a teacher are influenced through interaction with students, whether positive or negative. The physiological dimension is often characterized through stress reactions, again either positive or negative. Vicarious experiences are derived from participant observation and reflection on the behavior and actions of role models. When a student teacher observes a positive role model (typically, but not limited to their cooperating teacher), their sense of efficacy as a teacher may be enhanced. Social persuasion is the feedback messages that are received. For a student teacher, such messages may come either from students or from the cooperating teacher. In general, a positive student teaching experience is expected to increase the student teacher's sense of self-efficacy. Therefore, prospective teachers tend to strengthen their personal sense of teacher efficacy as a consequence of a successful student teaching experience (Woolfolk, 2007).

Knobloch and Whittington (2003) studied agricultural education teachers' sense of efficacy after the first ten weeks of a student teaching internship experience. The researchers found that the student teaching experience and the teacher preparation were associated with a stronger sense of teacher efficacy. However, their findings revealed that beginning agriculture teachers experienced a decline in their sense of teacher efficacy during their first year of teaching. This latter finding suggested a need for induction-year assistance and support to overcome feelings of inadequacy during the critical first year of teaching.

Leadership involvement is a factor that influences an individuals' sense of efficacy. Chen & Bliese found that individuals involved in upper-level leadership roles had a higher level of self-efficacy (2002). Birkeholz & Schumacher (1994) found that leadership traits positively correlated with involvement in leadership organizations. The traits of Administration, Achievement, Community, Empathy and Problem Solving all positively correlated to different leadership experiences of college of agriculture graduates.

Classroom Management

Classroom management is a general and imprecise term that encompasses a range of teacher behaviors, attitudes, and actions that influence the learning environment and ultimately, student achievement. The term was defined by LePage et al. (2005, p. 327) as:

Many practices integral to teaching, such as developing relationships; structuring respectful classroom communities where students can work productively; organizing productive work around a meaningful curriculum; teaching moral development and citizenship; making decisions about timing and other aspects of instructional planning; successfully motivating children to learn; and encouraging parent involvement.

Beginning teachers ranked classroom discipline as the most serious teaching problem in a 1986 study by Evans and Tribble. Research addressing in-service needs in Agricultural Education by Duncan, Ricketts, Peake, and Uessler (2005) found that 'managing student behavior problems' was one of the top three needs identified by beginning teachers who participated in their study. Miller and Fritz (2003) stated that while concerns and frustrations exist throughout a teacher's career; classroom management issues may be more intense during student teaching and induction year experiences.

Mundt & Connors' (1999) Delphi study of beginning agriculture teachers asked about problems and challenges experienced during the first years of teaching. Classroom management and student discipline were among the top three areas that surfaced from the first round, and one of the top five areas surfacing after the final round. The authors noted that their findings were consistent with the literature which acknowledged that classroom management and discipline were serious concerns of beginning agriculture teachers.

Teacher education resources, including learning modules and teaching methods textbooks (Newcomb, McCracken, Warmbrod & Whittington, 2004), have acknowledged that classroom management is essential and directly influences student achievement. Classroom management is important to consider in any attempt to assess teacher performance. Both formative and summative assessments of teaching performance generally incorporate one or more measures of classroom management. Likewise, peer reviews of teachers will typically address various dimensions of teaching related to classroom management behaviors and dispositions.

School administrators seeking high levels of student achievement have viewed classroom management as an absolute necessity that also has an impact on teacher satisfaction and career success. Van Tassell (2006) reported that classroom control was viewed by administrators as a measure of teacher quality. Although classroom discipline differs from classroom management, building administrators often view teachers who avoid sending student to 'the office for disciplinary reasons' as evidence that the teacher is in control and performing well in the classroom.

Brophy (1988) suggested that to manage classrooms effectively, teachers need to have knowledge of research-based principles of classroom management, information on how to implement those principles, and an understanding of when and why such methods should be used. Brophy also noted that teacher knowledge must be adapted to the context in which the teacher will be working so that issues of content and instruction can be interwoven with classroom management knowledge. Silvestri (2001) recommended that individuals considering teaching as a profession should observe successful teachers who demonstrate effective classroom management behavior, attitudes, and strategies. Silvestri also noted that instruction in other pre-service teacher education courses should reinforce effective classroom management techniques, both in principle and practice.

Self-Efficacy in Classroom Management

Emmer and Hickman (1991) suggested that the development of a separate measure for self-efficacy in classroom management was appropriate because the domain was distinct from the ability to influence learning or achievement outcomes. Their original study was based on the personal teaching efficacy scale developed by Gibson and Dembo (1984). The original Gibson and Dembo instrument was modified by isolating classroom management factors and pilot testing the revised instrument. The authors rationalized that teachers may focus their classroom management techniques on behavioral outcomes that were not directly linked to student learning.

Therefore, it was assumed that in order to achieve a classroom environment that was conducive to student learning, the teacher should have a basic knowledge of the principles of

classroom management and discipline (Emmer & Hickman, 1991). Conversely, a lack of classroom management and discipline was expected to limit the potential for high levels of student achievement.

The theory of self-efficacy suggests that teachers with a strong sense of efficacy will typically work harder and persist longer, (even when dealing with difficult students) in part because of the teachers' belief in themselves (Woolfolk, 2007). This assertion extends to classroom management as well, teachers are expected to work harder and maintain positive control of their classroom environment because they feel that by doing so they can influence student achievement outcomes. Following a successful student teaching internship (which may be viewed as an intense mastery experience) student teachers should feel empowered by their ability to effectively manage the classroom learning environment. The experiences involved with observing and modeling the cooperating teacher should strengthen their sense of efficacy as a teacher in the area of classroom management and discipline.

Purpose/Objectives

The purpose of this study was to assess the self-perceived sense of efficacy among agricultural education student teachers at The Ohio State University related to classroom management. The following research questions were developed to guide the study.

1. What are the leadership development experiences that agricultural education student teachers at The Ohio State University participated in?
2. How do agricultural education student teachers perceive their sense of efficacy related to classroom management at the end of their student teaching internship?
3. What leadership development experiences can be used to explain the variance associated with agricultural education students teachers' sense of efficacy related to classroom management?

Methods

The population of this descriptive study was Agricultural Education student teachers at The Ohio State University who completed their student teaching experience during the Autumn Quarter, 2006. The population frame was identified by the faculty coordinator of the student teaching internship. Twenty eight individuals who met the criteria of having completed their ten-week student teaching internship in Agricultural Education during Autumn Quarter, 2006. A non-response follow-up was not completed as 27 of the 28 individuals completed the questionnaire.

The data collection instrument used was developed by Emmer and Hickman (1991). The instrument contained 35 items and a six-point Likert-type response scale coded as follows: 1=Strongly Disagree, 2=Moderately Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Moderately Agree, 6=Strongly Agree. The reliability of the three efficacy subscales on the original instrument were: Classroom Management & Discipline = .79, External Influences = .78; and Personal Teaching Efficacy = .68 (Emmer & Hickman, 1991). Face and content validity of the instrument were assessed in the Emmer & Hickman study. In addition, construct validity

was established through factor analysis procedures. Demographic items were added to the instrument to answer the research questions. The demographic questions concerning leadership development experiences were adapted from Birkenholz & Schumachers 1994 study of leadership skills of college of agriculture graduates.

The instrument was converted to an electronic format and administered electronically via Survey Monkey®. Responses were collected at the conclusion of the student teaching internship near the end of Autumn Quarter, 2006. Participants were emailed an introductory letter explaining the purpose of the study and provided the URL link to the instrument. Respondents were requested to complete by November 17, 2006.

Responses were collected electronically analyzed using SPSS 13.0. Summary statistics were computed to review the data to ensure that responses were within the expected scale range for the Likert-type items. A multiple regression analysis was conducted to identify leadership development experiences that explain a portion of the variance associated with each of the three efficacy constructs.

Findings

Twenty six of the participants were between 21 and 23 years old, one participant was 27 years of age. Approximately, two-thirds of the participants were female (66.7%), and one-third were male (33.3%). The leadership experiences of the respondents are presented in Table 1.

The majority of respondents indicated that they had been enrolled in their high school agriculture classes (96.3%) and had served as officers in their local FFA Chapter and 4-H club. Approximately one-half of the respondents had served in leadership roles in Honor Society and church youth groups while in high school.

Over 70 percent of the respondents had participated in high school athletics during their freshman year. High school athletic participation declined to 48 percent by their senior year. In addition, only one-third of the respondents reported participating in FFA Prepared Public Speaking above the district level, with even lower levels of participation in Parliamentary Procedure, Extemporaneous Speaking, Creed Speaking, Job Interview, and Agricultural Sales activities in the FFA.

Table 1
Leadership Development Experiences

Characteristic	Yes %	No %
Did you enroll in High School Agriculture classes?	96.3	3.7
Were you an FFA Member?	96.3	3.7
Were you an officer at your local FFA chapter?	81.5	18.5
Were you a State FFA Officer?	25.9	74.1
Were you involved in 4-H?	85.2	14.8
Were you an officer in your local 4-H club?	85.2	14.8
Were you a State 4-H Officer?	7.4	92.6
Have you served in a leadership role at the local level in Honor Society?	59.3	40.7
Have you served in a leadership role at the local level in Boy/Girl Scouts?	14.8	85.2
Have you served in a leadership role at the local level in Church Youth?	51.9	48.1
Have you served in a leadership role at the local level in Grange?	0.0	100.0
Did you participate in high school athletics during your Freshman year?	70.4	29.6
Did you participate in high school athletics during your Sophomore year?	55.6	44.4
Did you participate in high school athletics during your Junior year?	51.9	48.1
Did you participate in high school athletics during your Senior year?	48.1	51.9
Did you participate in Creed Speaking above the district level during high school?	37.0	63.0
Did you participate in Parliamentary Procedure above the district level during high school?	48.1	51.9
Did you participate in Extemporaneous Speaking above the district level during high school?	18.5	81.5
Did you participate in Prepared Public Speaking above the district level during high school?	33.3	66.7
Did you participate in Job Interview above the district level during high school?	18.5	81.5
Did you participate in Agricultural Sales above the district level during high school?	18.5	81.5
Did you participate in Agricultural Issues Forum above the district level during high school?	0.0	100.0

Responses to the 16 items that comprised the Classroom Management and Discipline Efficacy factor (see Emmer & Hickman, 1991) are presented in Table 2. More than one-half of the participants (51.9%) strongly agreed with the item, ‘I can communicate to students that I am serious about getting appropriate behavior.’ The items with the lowest levels of agreement were the reverse coded items, ‘I don’t always know how to keep track of several activities at once’, and ‘Sometimes I am not sure what rules are appropriate for my students.’

Overall the summated mean for the Classroom Management and Discipline Efficacy factor was 4.70 on the 6.0 Likert-type scale. This overall average indicates that, collectively, the student teacher cohort was in moderate agreement with their ability to effectively manage the classroom environment and student discipline.

Table 2
Responses to Items Comprising the Classroom Management and Discipline Efficacy Factor

Item	%1 ^b	%2 ^b	%3 ^b	%4 ^b	%5 ^b	%6 ^b
I can communicate to students that I am serious about getting appropriate behavior.	0.0	0.0	0.0	7.4	40.7	51.9
I find it easy to make my expectations clear to students.	0.0	0.0	0.0	14.8	44.4	40.7
When I really try, I can get through to most difficult students.	0.0	0.0	0.0	11.1	55.6	33.3
I know what routines are needed to keep activities running efficiently.	0.0	0.0	0.0	11.1	66.7	22.2
I am confident of my ability to begin the year so that students will learn to behave well.	0.0	3.7 ^a	3.7 ^a	11.1	40.7	40.7
I know what kinds of rewards to use to keep students involved.	0.0	0.0	7.4	14.8	40.7	37.0
I can keep a few problem students from ruining an entire class.	0.0	0.0	0.0	22.2	55.6	22.2
If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	3.7	0.0	7.4	11.1	44.4	33.3
If students stop working in class, I can usually find a way to get them back on track.	0.0	0.0	0.0	25.9	55.6	18.5
When a student is having difficulty with an assignment, I am usually able to adjust it to his/her level.	0.0	0.0	3.7	29.6	40.7	25.9
There are very few students that I don't know how to handle.	0.0	0.0	3.7	37.0	40.7	18.5
I have very effective classroom management skills.	0.0	0.0	7.4	25.9	51.9	14.8
If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	0.0	0.0	18.5	22.2	48.1	11.1
If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	0.0	7.4	7.4	37.0	40.7	7.4
I don't always know how to keep track of several activities at once. ^c	7.4	3.7	22.2	22.2	25.9	18.5
Sometimes I am not sure what rules are appropriate for my students. ^c	0.0	7.4	22.2	29.6	37.0	3.7
			μ^b			σ
Summated mean for Classroom Management and Discipline factor			4.70			0.38

^aMultiple modes exist.

^bResponses were coded: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Moderately Agree, and 6 = Strongly Agree.

^cResponses were reverse coded

Responses to the 14 items that comprised the External Influences Efficacy factor are presented in Table 3. The item with the highest level of agreement was 'If students are not

disciplined at home, then they are less likely to accept it at school,' 48.1 percent of the respondents strongly agreed with this statement. Respondents disagreed with the statement 'Compared to other influences on student behavior, teacher's effects are very small', 29.6 percent of the respondents strongly disagreed with the statement, and only 3 respondents slightly or moderately agreed.

Overall the summated average score for the External Influences Efficacy factor was 3.55, between the Slightly Disagree and Slightly Agree scale descriptors. This overall factor average indicated that, collectively, the student teacher cohort neither agreed nor disagreed that external influences affected student behavior in the classroom environment beyond the control of the teacher.

Table 3

Responses to Items Comprising the External Influences Efficacy Factor

Item	%1 ^b	%2 ^b	%3 ^b	%4 ^b	%5 ^b	%6 ^b
If students are not disciplined at home, then they are less likely to accept it at school.	0.0	7.4	7.4	7.4	29.6	48.1
Home and peer influences are mainly responsible for student behavior.	0.0	0.0	11.1	51.9	29.6	7.4
Student behavior in classrooms is influenced more by peers than the teacher.	0.0	11.1	18.5	33.3 ^a	33.3 ^a	3.7
Teachers have little effect on stopping misbehavior when parents don't cooperate.	0.0	14.8	29.6	33.3	7.4	14.8
There are some students who won't behave no matter what I do.	3.7	18.5	29.6	18.5	18.5	11.1
Even a teacher with good teaching abilities may not reach many students.	0.0	14.8	29.6	33.3	22.2	0.0
I find some students to be impossible to discipline effectively.	0.0	22.2	33.3 ^a	33.3 ^a	11.1	0.0
I am unsure how to respond to defiant students.	7.4	29.6 ^a	18.5	29.6 ^a	7.4	7.4
A teacher is very limited in what can be achieved because a students' home environment is a large influence on achievement.	7.4	33.3	22.2	14.8	11.1	11.1
The hours in my class have little influence on students compared to the influence of their home environment.	7.4	29.6	29.6	11.1	14.8	7.4
The amount that a student can learn is primarily related to family background.	18.5	22.2 ^a	22.2 ^a	22.2 ^a	14.8	0.0
If a student does not feel like behaving, there is little that a teacher can do.	18.5	40.7	18.5	14.8	3.7	3.7
The influence of a student's home experiences can be overcome by good teaching.	0.0	7.4	7.4	25.9	33.3	25.9
Compared to other influences on student behavior, teacher's effects are very small.	29.6	37.0	22.2	3.7	7.4	0.0
			μ^b			σ
Summated mean for External Influences factor			3.55			0.57

^aMultiple modes exist.

^bResponses were coded: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Moderately Agree, and 6 = Strongly Agree.

Responses to the five items comprising the Personal Teaching Efficacy factor are presented in Table 4. The item with the highest level of agreement was, 'If parents would do more with their children at home, I could do more with them in the classroom.' Seventy-five of the respondents indicated agreement with this statement. The statement with the highest level of disagreement was, 'When a student does better than usual, many times it is because I exerted a little extra effort', 18.5 percents of the respondents either strongly or moderately disagreed with this statement.

Overall, the summated average score for the Personal Teaching Efficacy factor was 4.44, between the Slightly Agree and Moderately Agree scale descriptors. This overall factor average indicates that, collectively, the student teacher cohort was between Slight to Moderate Agreement in the belief that they possessed the knowledge, behaviors, and disposition that could influence the level of achievement realized by students in their classrooms.

Table 4
Responses to Items Comprising the Personal Teaching Efficacy Factor

Item	%1 ^b	%2 ^b	%3 ^b	%4 ^b	%5 ^b	%6 ^b
If parents would do more with their children at home, I could do more with them in the classroom.	0.0	3.7	14.8	25.9	22.2	33.3
When a student gets a better grade than he/she usually gets, it is usually because I found better ways of teaching that student.	0.0	0.0	7.4	37.0	48.1	7.4
When the grades of my students improve it is usually because I found more effective teaching approaches.	0.0	7.4	3.7	37.0	40.7	11.1
If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching that concept.	0.0	0.0	11.1	37.0	48.1	3.7
When a student does better than usual, many times it is because I exerted a little extra effort.	7.4	11.1	0.0	44.4	22.2	14.8
		μ^b			σ	
Summated mean for Personal Teaching Efficacy		4.44			0.65	

^aResponses were coded: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Moderately Agree, and 6 = Strongly Agree.

The third research question sought to identify demographic characteristics that could explain a portion of the variance associated with each of the teacher efficacy subscales. None of the demographic characteristics examined in this study were found to account for any variance associated with Classroom Management & Discipline subscale or the Personal Teaching Efficacy subscale.

The only demographic characteristic that was found to explain a portion of the variance was the respondents' service in a leadership role in the Boy/Girl Scouts. This characteristic accounted for 16.7% of the explained variance on the External Influences subscale. Respondents who had served as a Boy/Girl Scout leader reported a greater sense of efficacy regarding the effect of External Influences on student achievement. Although this finding explained some of the variance, the researchers were unable to explain the logic, rationale, or practical significance of the result; especially in the context of only 15 percent of the student teacher respondents having indicated prior experience serving as a leader of Boy/Girl Scouts at the local level.

Conclusion/Recommendations/Implications

This study sought to assess the sense of efficacy experienced by Agricultural Education student teachers following their student teaching internship and identify any leadership

development experiences that influence their sense of efficacy. From a demographic perspective, the 27 student teacher respondents were fairly typical seniors in Agricultural Education at a midwestern land-grant university, approximately 22 years of age and having been leaders in their local FFA and 4-H programs. Many of the respondents had participated in activities during their high school years including Honor Society, Church Youth groups, and athletics. Fewer of the respondents indicated participation in FFA leadership activities above the district level, although nearly half had participated on a Parliamentary Procedure team.

The concept of teacher efficacy was described as the individual's teacher's belief that their performance as a teacher has the potential to influence the ultimate level of achievement or performance realized by their students. Woolfolk (2007) noted that self-efficacy was the only personal characteristic of teachers positively correlated with student achievement. Therefore, this study was conducted to examine the level of teacher efficacy of agricultural education student teachers and to identify prior leadership development experiences that might contribute to enhancing the sense of self-efficacy in teacher preparation programs.

Based on the results of this study, Agricultural Education student teachers agreed that their Classroom Management & Discipline and Personal Teaching Behaviors were able to influence student achievement in their classrooms. However, the student teachers neither agreed nor disagreed that External Influences were beyond their control regarding student achievement.

In addition, this study was unable to discern leadership development experiences that were predictive of the student teachers' sense of self-efficacy. The mentoring relationships within Boy/Girl Scouts may be a possible cause for the 16.7% of the explained variance on the External Influences subscale. However as the number of participants who had been members in Boy/Girl Scouts was so small, it appears that student teacher self-efficacy, as measured by the instrument used in this study, cannot be predicted based upon the selected leadership development experiences. A measure of leadership involvement rather than just a membership index would shed more light on the influence of past leadership experiences on self-efficacy.

Further research is warranted to provide additional insight into the process of enhancing future teachers' sense of efficacy related to classroom management. Knowing that teacher self-efficacy is the only personal characteristic of teachers positively correlated with higher levels of student achievement suggests that educational researchers should strive for a broader and deeper understanding of this complex construct.

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