Exploring the Relationship between Professor/Student Rapport and Students' Expectancy for Success and Values/Goals in College of Agriculture Classrooms

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Recent reports have indicated that many undergraduate students have become unmotivated and unengaged in the learning process. As a result, calls have been made for instructors in higher education to implement classroom interventions to help better engage students in the learning process. Research has shown that creating a hospitable learning environment can help increase students' motivational levels, which should help increase student engagement. One possible way of creating a hospitable classroom environment is by increasing professor/student rapport. Therefore, the purpose of this study was to determine the relationships between professor/student rapport and students' motivation, operationalized as expectancy for success and values/goals. This study was conducted with students enrolled in large classes (50 or more students) in the College of Agricultural and Life Sciences at the University of Florida. Participants in this descriptive correlational study mostly agreed that they possess good rapport with their instructors. Additionally, results showed that students have higher than intermediate levels of expectancy for success and values/goals for the class. Lastly, a moderate positive relationship was found between rapport and students' expectancy for success and a substantial positive relationship was found between rapport and values/goals.

Keywords: expectancy for success; colleges of agriculture; values and goals; professor/student rapport

The National Research Council (NRC, 2009) posited that if agricultural graduates are to be competitive in the 21st century workplace, then colleges of agriculture must adapt the undergraduate experience in ways that help students improve their skills in critical thinking, problem solving, teamwork, communication, and students' knowledge of diversity. In addition to increasing the aforementioned skills, the Association of Public and Land-Grant Universities (APLU, 2009) indicated that graduates should be self-motivated, lifelong learners who possess an appreciation for and understanding of agricultural and life sciences. The charges put forward by these organizations called for new instructional interventions that would require high levels of commitment and engagement on the part of faculty members and students.

Many have suggested however, that students in higher education have become increasingly unmotivated and unengaged in the learning process (Arum & Roksa, 2011; Bok, 2006; Edgerton, 2001; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; NRC, 2009; Smith, Sheppard, Johnson, & Johnson, 2005; Taylor, 2006). Pintrich and Zusho (2007) insisted that "College student motivation is a persistent and pervasive problem for faculty and staff at all levels of postsecondary education" (p. 731). An investigation by Hassel and Lourey (2005) found that many college undergraduates completed only the bare minimum on assignments, did not finish or in many cases never attempted to read assigned readings, spent little time out of class studying, and were chronically absent from class. Likewise, Taylor (2006) tagged these undergraduates as a "cohort of postmodern students" (p. 50) and indicated that they are intellectually and academically disengaged. What is more, Kuh et al. (2006) suggested that many of these students

never make it to graduation and posited that as the attrition levels in colleges and universities continue to grow, so do the reasons for the attrition. Kuh et al. stated that less than 25% of the 45% of students who failed to complete their degree did so because of academic reasons. These issues in higher education indicate that changes must be made to help improve student engagement if the challenges set forth by the NRC (2009) and APLU (2009) are to be met.

One possible way to increase student engagement might be by increasing student motivation (McCombs, 1991; McLaughlin et al., 2005; Pintrich, 2004; Pintrich & Zusho, 2007; Schunk, 1989). Pintrich (2004) as well as Pintrich & Zusho (2007) hypothesized that motivation plays a huge role in students' use of self-regulated learning and equated self-regulated learning with classroom academic engagement. Likewise, McCombs (1991) reasoned that students "will assume personal responsibility for learning, monitoring, checking for understanding, and becoming active, self-regulated learners in the right motivational atmosphere" (p. 118). According to Pintrich (2004), student motivation is comprised of students' self-efficacy, goals, values, affect, and emotions. Because motivation relies heavily on these affective factors, students might be more likely to engage in academic situations in which they feel comfortable (Pekrun, Goetz, Titz, & Perry, 2002; Pintrich & Linnenbrink, 2004). Thus, the possibility of increasing students' motivation through the building of interpersonal relationships between students and instructors might exist (Rodriguez, Plax, & Kearney, 1996).

In his dissertation, Velez (2008) stated, "When a teacher steps into a classroom they enter into relationships with the learners" (p. 3). Campbell (1998) further suggested, "Student learning requires a voluntary commitment, as well as a strong interaction among students and teachers" (p. 34). Chickering and Gamson (1987) submitted that one of the principal factors contributing to student motivation and engagement is faculty-student interactions. Additionally, Astin (1993) reported that faculty-student interactions were a top predictor of student success. Moreover, the National Research Council (2009) stated that, "Effective teaching in higher education incorporates pedagogical strategies that create hospitable learning environments" (p. 35). If positive contact between students and teachers occurs, correspondingly students should feel more at ease in the classroom, enjoy the learning environment, and have higher levels of motivation (Rodriguez et al., 1996).

Theoretical Framework

Social cognitive theory served as the theoretical framework for this study (Bandura, 1986). The main tenet of social cognitive theory conjectures that humans learn as a result of internal processes in conjunction with external influences (Bandura, 1986; Schunk, 2004). Accordingly, one assumption of this theory, as posited by Bandura (1986), is the idea of triadic reciprocality (See Figure 1). The concept of triadic reciprocality supposes that human learning is a product of the bidirectional interactions between three variables: environmental factors, personal factors, and behaviors (Bandura, 1986). Bandura (1989) argued that many scholars have typically viewed learning as a unidirectional process where behaviors have been influenced by either cognitive processes or environmental variables. However, Bandura (1989) refuted this unidirectional view of learning, stating that many elements influence learning and that the interactions in the triadic reciprocality model are the causative factors in human development. Nonetheless, Bandura (1986, 1989) stated that reciprocal interaction between the three variables does not mean equal interaction. The interactions between variables may be of varying strength and may not happen concurrently.

Theoretically, interactions should occur between students and instructors that influence rapport and students' motivation, which ultimately will influence students' classroom behaviors. This study is part of a larger study that examined environmental, personal, and behavioral factors, however, for the context of this paper, the variables of interest were professor/student rapport (environmental factor) and motivation (personal factor) and the relationship of students' perceptions of rapport with their motivation.
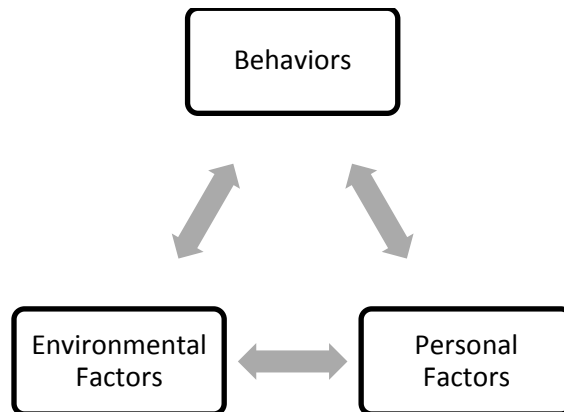
Figure 1. Triadic Reciprocality Model (Bandura, 1986)

Rapport

The building of positive relationships between professors and students has been termed professor/student rapport (Wilson, Ryan, & Pugh, 2010). Lowman (1994, 1995) called this interpersonal rapport and stressed the importance of this concept to being an effective teacher. Lowman (1995) indicated that teachers who build rapport have been characterized as caring, welcoming, encouraging, positive, democratic, and have expressed a genuine interest in their students. Meyers (2009) posited that in college classrooms, interpersonal relationships are essential to the teaching and learning process.

One important aspect associated with professor/student rapport is the interaction that occurs between students and instructors (Wilson et al., 2010). Students typically respond well to individual student-faculty interactions and many positive student outcomes have been realized from these exchanges (Alderman, 2008; Smith et al., 2005). Cox, McIntosh, Terenzini, Reason, and Lutovsky Quaye (2010) suggested that frequent personal contact between instructors and students has an effect on students' attitudes, cognition, classroom behaviors, and relationships. Murray (1997) synthesized the literature on effective teaching and reported that student-faculty interaction has shown the

"strongest and most consistent relationships with instructional outcome measures" (p. 195). Alderman (2008) further suggested that high-quality out of class contact involves four characteristics: instructors must be personable and approachable; instructors must show enthusiasm and passion for their work; instructors must care for students; and instructors must be mentors to students. Researchers have hypothesized that frequent, substantive interaction between faculty and students (Cox et al., 2010), caring for students by faculty members (Meyers, 2009), and relationship building between faculty and students (Lowman, 1994, 1995; Wilson et al., 2010) can have the effect of increasing student affect (Benson, Cohen, & Buskist, 2006; Wilson & Locker Jr., 2008), motivation (Henning, 2007; Wilson, 2006; Wilson & Locker Jr., 2008; Wilson & Taylor, 2001), and achievement (Volkwein, King, & Terenzini, 1986).

Motivation

Pintrich (2003) posited that motivational theories have consistently asked two basic questions, "what gets students moving (energization) and toward what activities or tasks" (p. 669). Consequently, instructors in college classrooms need to understand what motivates their students in order to promote optimal learning (Svinicki, 2004). In the context of this study, motivation was considered a personal factor in the triadic

reciprocality model, and was operationalized by two constructs put forward by Pintrich and Zusho (2007): students' expectancy for success in a course (*expectancy*) and students' values and goals associated with a course (*values/goals*).

According to Pintrich and Zusho (2007), expectancy consists of student self-efficacy and control of learning beliefs. Examining each piece of the expectancy construct more closely, self-efficacy has been referred to as a student's beliefs about their capability to perform a task (Linnenbrink & Pintrich, 2003), while control of learning beliefs has been described as how much control a student perceives they have over their learning (Ormrod, 2008). Self-efficacy deals with students' perceptions of their competence in task-specific situations (Pajares, 1996). Studies examining self-efficacy have revealed that much about student performance can be predicted by self-efficacy (Pintrich & Zusho, 2007; Schunk & Pajares, 2002). Additionally, Bandura (1986, 1997) hypothesized that self-efficacy has an effect on students' effort, persistence, achievement, and choice of learning tasks. Ormrod (2008) posited that the development of self-efficacy has typically been thought to be influenced by several factors, including past accomplishments and failures, communication of messages by others, and the achievements and failures of others. Because of the influence these factors have on self-efficacy, especially the communication of messages by others, perhaps rapport can aid in the development of students' self-efficacy.

The second aspect of expectancy is control of learning beliefs (Duncan & McKeachie, 2005; Pintrich, 2004; Pintrich & Zusho, 2007). Control of learning beliefs has historically been conceptualized as attribution theory and described in various ways, including locus of control, temporal stability, and controllability (Ormrod, 2008; Pintrich & Zusho, 2007; Weiner, 2000). Control of learning beliefs can be either internally-centered or externally-centered and account for students' feelings about how much control they have over their learning (Pintrich & Zusho, 2007). Pintrich and Zusho (2007) posited that control of learning beliefs indicating an internal, student-driven control result in higher levels of student engagement and achievement, more so

than those beliefs characterized by external control. They further suggested that students who believe a link exists between behaviors and performance tend to study more and engage in behaviors consistent with self-regulated learning.

The second construct of motivation in this study was values/goals. Pintrich and Zusho (2007) surmised that the values/goals construct deals specifically with why students choose to engage in certain academic tasks and behaviors, and the two main components that comprise values/goals are students' goal orientation and students' task value (Pintrich, Smith, Garcia, & McKeachie, 1991).

Pintrich and Zusho (2007) indicated that all theories of motivation rely on some form of goal orientation aspect. Goal orientation describes the purposes or reasons for peoples' conduct, or what Pintrich and Zusho (2007) referred to as the "intentionality to human behavior" (p. 773). In addition, Pintrich and Zusho (2007) suggested that goals are "cognitive representations of the different purposes students may adopt in different achievement situations" (p. 773). Consequently, the research investigating the goal orientations of students has focused on students' motives for engaging in academic tasks. Students' goal orientation can be either intrinsic or extrinsic. In the former, students' motivation is driven by internal goals such as mastering a concept, while the latter motivation relies on external motivators such as rewards, grades, or praise (Pintrich & Zusho, 2007).

The second piece of students' values/goals is task value, which refers to how much value an individual places on a particular task. More specifically, task value refers to students' interest in an academic task, the importance of the task to students, and the utility value of an academic task to students' future plans (Wigfield & Eccles, 2000). Students' interest in an academic task is described as the level of enjoyment that a student attains from engaging in a certain task (Eccles & Wigfield, 2002). Pintrich and Zusho (2007) suggested that in a classroom context student interest encompasses factors such as genuine interest in the course content and toward the instructor. However, they cautioned that while student interest is a product of personal and task characteristics, care should be taken to avoid confusing student interest with situational

interest, which is temporary interest in an academic task brought about by environmental features such as an interesting guest lecturer, a fascinating topic, or other novel situations.

Eccles et al. (1983) used the term attainment value to describe the importance of performing well on a task to an individual. Pintrich and Zusho (2007) posited that attainment value is related to an individual's goal orientation and thus will vary from individual to individual and from task to task. In accordance with this belief, Pintrich and Zusho stated that a student's goal orientation affects the behaviors that student chooses to employ, while the attainment value would affect that student's level of involvement. As a result, students may view success in a specific task differently according to their goal orientations, and the importance placed on attaining their goals will drive how involved they become in the process (Pintrich & Zusho, 2007).

The last task value according to Eccles et al. (1983) was utility value. Utility value refers to the value of an academic task to a student's future goals (Eccles et al., 1983). Pintrich and Zusho (2007) suggested that students determine utility value by examining the perceived usefulness of an academic task in helping them reach their goals. In addition, Pintrich and Zusho posited that a high utility value of a task might outweigh other task value measures such as personal interest.

Purpose

The National Research Agenda of the American Association for Agricultural Education (Doerfert, 2011) recommended improving the success of students in colleges of agriculture as a Research Priority Area, more specifically indicating that researchers should examine the influence of faculty variables and student psychological variables' contributions to students' success. Doerfert (2011) additionally posited that agricultural educators are the teaching and learning experts in colleges of agriculture and should take the lead on conducting research to improve instructional practices. Therefore, this research sought to examine these psychological variables in an attempt to inform faculty members in colleges of agriculture of possible classroom practices that might augment their teaching. Accord-

ingly, increasing professor/student rapport might serve as one way to increase the motivation and engagement of students, and ultimately academic achievement. Thus, an examination into the relationships between professor/student rapport and motivational variables is warranted. The purpose of this study was to determine the relationships between professor/student rapport and students' motivation, operationalized as expectancy for success and values/goals. The following objectives guided the study:

1) Assess selected undergraduate students' self-reported perceptions of professor-student rapport,
2) Assess selected undergraduate students' self-reported measures of expectancy for success and values/goals,
3) Examine the relationships between students' perceptions of rapport and students' expectancy for success and values/goals, and
4) Determine the variance in students' expectancy for success and values/goals explained by rapport.

Methods

The population of interest for this descriptive correlational study was under-graduate students enrolled in large College of Agricultural and Life Sciences (CALS) lecture courses with enrollments of 50 to 100 students at the University of Florida during the fall 2011 semester. The responding sample was comprised of students enrolled in these courses who completed the two survey instruments ($n = 306$). Following approval by the Institutional Review Board, an invitation was sent to instructors who taught the courses that met the size requirements within CALS asking them to allow their students to participate.

A total of 56 CALS courses taught by 29 instructors met the criteria of the study. The initial invitation was sent via email to the 29 instructors. Three follow-up email invitations were sent according to timelines set by Dillman, Smyth, and Christian (2009). One instructor declined to participate and one instructor's course was dropped from consideration because it was taught solely online. Additionally, 18

instructors did not respond to the invitation, while eight instructors agreed to allow their students to participate in the study. Two of the instructors that agreed allowed two of their class sections to participate, bringing the total to 10 class sections. Courses with between 50 and 100 students were chosen because the assumption was made that instructors of large classes have a harder time interacting with students one-on-one, thus making it more difficult for instructors to build rapport (Heppner, 2007). Friedel (2006) reported that no standardized definitions of class size exist, but other studies have considered classes of 50 or more students to be large (e.g. Cuseo, 2007).

Two instruments were used to collect the data for this study. The professor/student rapport scale (Wilson et al., 2010) was used to collect the rapport data and the Motivated Strategies for Learning Questionnaire (MSLQ, Pintrich et al., 1991; 1993) was used to collect the students' expectancy for success and students' values/goals data.

The professor/student rapport scale (Wilson et al., 2010) consisted of 34 Likert-type items that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*) and measured students' perceptions of instructor qualities that help build rapport. Sample rapport items included, "My professor and I get along;" "My professor is thoughtful;" and "My professor is approachable." Wilson et al. (2010) reported a reliability of $\alpha = .96$ for the scale. Additionally, Ryan, Wilason and Pugh (2011) tested the rapport scale for internal consistency and test-retest reliability, and they reported a Cronbach's alpha of .89 and a test-retest reliability of $r = .72$. For this study, post-hoc reliabilities were established using Cronbach's Alpha ($\alpha = .96$).

The MSLQ (Pintrich et al., 1991; 1993) consisted of two main constructs, student motivation and self-regulated learning. The motivation construct was the portion that contained students' expectancy for success and values/goals. The full MSLQ instrument included 81 Likert-type items that ranged from 1 (*not at all true of me*) to 7 (*very true of me*). However, the student expectancy for success construct contained 12 items, while the values/goals component contained 14 items. Sample items from the expectancy for success construct included, "If I try

hard enough, then I will understand the course material;" and "I am confident I can do an excellent job on the assignments and tests in this course," while the values/goals construct included sample items, such as "In a class like this, I prefer course material that really challenges me so I can learn new things;" and "I think I will be able to use what I learn in this course in other courses." Pintrich et al. (1993) did not report reliability coefficients for student expectancy for success and values/goals, their only reports were for the subscales. However, post-hoc reliabilities for each of these constructs were calculated for this study and results showed a Cronbach's alpha of .91 for student expectancy and a Cronbach's alpha of .86 for the values/goals component.

The data were collected during the middle of the fall 2011 semester using the professor/student rapport scale and the MSLQ. The timing of the survey administration was chosen to allow students time to develop rapport with their instructors and to have a better awareness of their expectancy for success and values/goals for the class. The survey instruments were administered separately at the beginning of two different class periods. Instructions on the instrument asked students to self-report their perceived rapport with the instructor in the class in which the survey was administered, as well as self-report their expectancy for success and values/goals for the same class.

Data were analyzed using the Statistical Package for Social Sciences (SPSS v. 19.0). According to Boone Jr. and Boone (2012), it is appropriate to treat Likert scale data as interval data if four or more items on the instrument comprise a construct. The professor/student rapport scale consisted of 34 Likert-type items that measured the construct of rapport, while the student expectancy construct consisted of 12 Likert-type items and the values/goals construct was measured by 14 items. Therefore, summated means were calculated for each individual construct. An alpha level of .05 was set *a priori* for all statistical analyses. Objectives 1 and 2 were assessed using measures of central tendency, while objective 3 was analyzed using Pearson's Product Moment Correlation coefficients to determine the direction and strength of the relationships between the variables, and objec-

tive 4 was assessed by calculating the adjusted R-squared values.

Statistical comparisons were made between the sample and population demographics to determine if the responding sample was representative of the population. Respondents were compared with the population on gender, CALS students/non-CALS students, age, and race/ethnicity. According to McMillan and Schumacher (2010), results of a study are generalizable to the population if they possess similar characteristics as the sample. Chi-square tests were used to compare categorical data, while independent samples t-tests were used to compare the means of interval data. An alpha level of .05 was established *a priori*.

Chi-square tests indicated that no significant difference existed between the respondents and population on gender (x^2 = 3.58, *p* = .062). Therefore, the gender of the respondents was deemed representative of the gender of the population. Likewise, no significant difference was found between respondents and the population on the proportion of CALS versus non-CALS students. The chi-square statistic for CALS versus non-CALS was 2.06 with a p-value of .163. Consequently, the breakdown of CALS and non-CALS students in the sample was representative of the proportion of CALS/non-CALS students in the population.

Additionally, an independent samples t-test was run to compare the mean age of the respondents against the mean age of the population. Results showed the mean age of the respondents was 21.17 (2.87) and the mean age of the population was 21.79 (2.57). These means were found to be statistically significant (*p* < .001), which would indicate that the sample was not representative of the population. However, given the large number of respondents in the sample (*n* = 306) and population (*N* = 2033), the likelihood of finding significant results is high (McMillan & Schumacher, 2010). Therefore, Cohen's *d* effect sizes were calculated according to conventions put forward by Kotrlik, Williams, and Jabor (2011) to determine practical significance of the results. The Cohen's *d* value was .23, which according to Kotrlik et al., represents a small effect size. As a result, the sample is most likely representative of the population on the variable of age.

Lastly, a chi-square test was conducted to determine if differences existed between the race/ethnicity of the respondents and population and a significant difference was found with regard to race (x^2 = 28.39, *p* < .001). Again, significant results are perhaps likely due to the large number of students compared (McMillan & Schumacher, 2010). However, inference of the findings to the population must be taken with caution because of the significant results of the comparison of race/ethnicity.

Because rapport is a construct that relies on both students and instructors, an attempt to examine the variability of the rapport of the participating instructors was made. The researchers grouped the instructors into low, intermediate, and high levels of rapport. Moore, Masterson, Christophel, and Shea (1996) reported that a strong positive relationship exists between teachers' student evaluation scores and teacher immediacy, while other researchers have indicated that immediacy has been the variable most closely associated with rapport (Meyers, 2009; Stewart & Barraclough, 1992; Wilson et al., 2010). Therefore, the student evaluation scores of instructors were utilized to place the instructors into groups. The determination of groups was made from an examination of the literature. One instructor was in the low rapport group, two instructors were in the intermediate group, and the remaining five were in the high group.

Results

Results of the data analysis revealed that the majority of the participants were White-Caucasian (63.2%). The second largest group was African-American (15.0%), followed by Hispanic/Latino (12.4%), Other (4.9%), and Asian (4.2%). The majority of the sample was female (63.7%) and the mean age of the participants was 21.17 (*SD* = 2.87).

Objectives 1 and 2 sought to assess undergraduate students' self-reported perceptions of rapport with their instructor as well as students' self-reported perceptions of their expectancy for success and values/goals. Table 1 displays the summated means and standard deviations for these variables. Results revealed that the summated mean score for the 34 rapport items was 4.36 (*SD* = .53). The summated mean score for

student expectancy for success was 5.92 (*SD* = .86), and the summated mean for values/goals

was 5.26 (*SD* = .93).

Table 1

Descriptive Statistics for Rapport, Expectancy, and Values/Goals

Construct	Minimum	Maximum	*M*	*SD*
Rapport[a]	1.65	5.00	4.36	.53
Expectancy[b]	1.42	7.00	5.92	.86
Values/Goals[b]	1.00	7.00	5.26	.93

[a]Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). [b]Likert-type scale (1 = *not at all true of me* to 7 = *very true of me*).

The purpose of objective 3 was to examine the direction and magnitude of the relationships between students' perceived rapport with their instructor and students' perceived expectancy and values/goals. To accomplish this objective Pearson Product Moment Correlations were calculated among the variables. Table 2 displays the correlation matrix. The magnitude of relationships was determined using Davis' (1971) conventions. A moderate positive relationship was found between rapport and students' expectancy (*r* = .43), while a substantial positive relationship was found between rapport and values/goals (*r* = .54).

Table 2

Correlations among Rapport, Student Expectancy, and Values/Goals

Variable	1	2	3
1. Rapport	---	.43	.54
2. Expectancy		---	.53
3. Values/Goals			---

Objective 4 sought to determine the variance in students' expectancy for success and values/goals explained by rapport. Results showed that rapport explained 17.8% of the variance in students' expectancy for success and 29.2% of the variance in values/goals.

Conclusions, Discussion and Implications

Based on the research questions that guided this study, several conclusions can be drawn. The first objective of this study was to examine students' self-reported perceptions of the rapport they have with their instructors. The participants in this study mostly agreed that they possess rapport with their instructors. According to Wilson et al. (2010), this would suggest that the instructors of these students have effectively built relationships through positive classroom interactions. Additionally, these results show that the instructors involved in this study should possess traits such as caring for and respecting their students, mentoring students, being approachable, communicating well, being enthusiastic, exhibiting fairness, and displaying an eagerness to help students (Wilson et al., 2010). The NRC (2009) and Lowman (1994, 1995) hypothesized that the instructor traits associated with rapport lend to the effectiveness of the instructor. Therefore, students' perceptions of their rapport with the instructors in this study could lead to the conclusion that these instruc-

tors should be exhibiting characteristics that enhance their teaching effectiveness.

Objective two sought to determine students' self-reported perceptions of their expectancy for success and their values/goals. Results showed that the participants in this study reported higher than intermediate levels of both expectancy for success and values/goals. According to Ormrod (2008), three factors contribute to expectancy for success, past successes and failures, communication of messages by others, and observation of accomplishments and failures of others. The classes utilized in this study were upper-level, major-specific classes or lower-level introductory courses in CALS, and the students participating in the study were mostly juniors and seniors. Therefore, in accordance with motivation theory, it is plausible that these students might have experienced prior success in classes within their major, which could lead to greater expectancy for success. Additionally, it is possible that the older students enrolled in the lower level courses have greater expectancy for success due to the level of the course and potential past successes. The students in this study also reported high levels of rapport with their instructor, which would lead one to believe that the instructors in this study are communicating positive messages to students. In line with Ormrod, positive messages should help improve students' expectancy for success. Lastly, anecdotal evidence shows that CALS students typically build relationships with their peers, especially within majors, thus creating opportunities for dialoging about which classes are most challenging. In addition, much information is available about classes and instructors. The University of Florida website provides student evaluation scores for every instructor, and many students also utilize websites such as Ratemyprofessor.com. Armed with this information, it is possible that students may feel more expectancy for success in certain courses.

In the case of values/goals, the goal setting levels reported by participants may be a function of the analysis of the MSLQ goal orientation data. The MSLQ measures both intrinsic and extrinsic goal orientation (Pintrich et al., 1991). According to Pintrich and Zusho (2007), students will either be intrinsically motivated (e.g. challenged to master a concept) or extrinsically motivated (e.g. grades, rewards, competition).

The analysis of the data in this study did not differentiate between intrinsic and extrinsic goal orientation, therefore, students reporting high levels of either type of goal orientation would appear to be more motivated.

Wigfield and Eccles (2000) suggested that three components of value contribute to how much a student will value a class including, interest, importance, and future value of the information. In this study, several of the courses were upper-level classes that specifically pertained to students' majors. The assumption could be made that students have an inherent interest in courses directly relating to their major. Additionally, these students should place importance on learning the material in classes in their major and find value for future use of the information. Furthermore, Pintrich and Zusho (2007) posited that reactions toward an instructor can affect students' interest in and value of a course. In light of the reported perceptions of rapport, it is plausible that students' relationships with their instructor may have contributed to the value students placed on their courses.

Objective three sought to examine the relationships between students' self-perceived levels of rapport with their instructor and students' self-reported levels of expectancy for success and values/goals. Results showed that a moderate positive relationship was found between rapport and students' expectancy for success and a substantial positive relationship was found between rapport and values/goals. These findings align with previous research, which found that higher levels of rapport have been positively associated with student enjoyment, satisfaction with the class (Benson, Cohen, & Buskist, 2005), and varying aspects of motivation (Wilson, 2006, Wilson et al., 2010; Wilson & Locker Jr., 2008; Wilson & Taylor, 2001). Schunk (2004) would suggest that higher levels of expectancy for success and values/goals for a course are influenced by the relationships formed between instructors and students.

Similarly, the aim of the fourth objective was to determine the amount of variance that rapport explained in students' expectancy for success and values and goals. Results revealed that 17.8% of the variance in student expectancy for success and 29.2% of the variance in values/goals was accounted for by the relationship

with rapport. These findings are congruent with previous studies that showed rapport to have positive relationships with students' attitudes toward instructors and motivation (Benson, Cohen, & Buskist, 2006; Wilson, 2006; Wilson & Locker Jr., 2008). Additionally, Henning (2007) reported that teacher relational variables were found to be significant predictors of student motivation. In the context of the triadic reciprocality model (Bandura, 1986), the environmental factor of professor/student rapport should influence students' personal factors. Results of this study showed that the personal factors of expectancy for success and values/goals vary with rapport. Accordingly, the conclusion could be made that when students perceive they have a good relationship with their instructor they might have greater expectancy for success and value the course more, which could lead to greater engagement. However, while measures were taken to ensure that this sample was representative of the population, inference to the population should be taken with caution because a limitation of the study was the difference found with race/ethnicity.

Recommendations

In the National Research Agenda for the American Association for Agricultural Education, Doerfert (2011) indicated that agricultural teacher educators are the experts on teaching and learning in colleges of agriculture. As a result, he recommended that agricultural teacher educators should provide leadership in creating meaningful learning environments across agricultural disciplines. Therefore, based upon the findings of this study, several recommendations for practitioners and researchers can be made.

First, instructors should consider implementing practices into their classroom that will lead to more positive student/instructor interaction, and thus better relationships between instructor and students. Practices that encourage better student/instructor interaction might include, inviting students to visit during office hours; using

personal examples in teaching; calling students by name; getting to know students and showing genuine concern for students; showing enthusiasm for the subject; connecting with all students, especially those who may not normally seek out relationships with instructors; and showing respect for all students. Additionally, instructors should develop an understanding of student motivation and educate themselves on factors that influence student motivation. Lastly, developers of faculty professional development should consider including material that emphasizes rapport and relationship building into faculty professional development programs.

This study was conducted in the College of Agricultural and Life Sciences at the University of Florida, which is a large land-grant university in the southeastern United States. Velez (2008) indicated that culture may play a role in how students perceive actions by the instructor. Consequently, the culture in CALS may be different than cultures in other colleges at the University of Florida and is most likely different than the cultures at other universities in various parts of the country. Therefore, further research should be conducted at other institutions in different geographic areas to determine the role that culture plays in the relationship building process between instructors and students. What is more, because the differentiation between intrinsic and extrinsic goal orientation was not made, further studies might investigate the relationships that each type of goal orientation have with rapport. Qualitative inquiries should be conducted with students to gain a deeper understanding of how rapport influences student motivation. Lastly, because this study was conducted over the course of only one semester in several classes, perhaps students were not able to adequately assess their perceived rapport with instructors. Longitudinal studies could be conducted with students who take multiple courses with an instructor to gain a better understanding of the rapport building process.

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