Instructor Verbal and Nonverbal Immediacy and the Relationship with Student Self–efficacy and Task Value Motivation

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This descriptive correlation study sought to examine the relationships between verbal immediacy, nonverbal immediacy, self–efficacy and task value. Respondents assessed the verbal and nonverbal immediacy of their course instructor, and then assessed their personal self–efficacy and task value motivation. Results showed a significant positive relationship between verbal immediacy and self–efficacy (r = .334), nonverbal immediacy and self–efficacy (r = .209), verbal immediacy and task value (r = .234), and nonverbal immediacy and task value (r = .152). Based on the list of effect size descriptors for the magnitude of a correlation, developed by Hopkins (1997), the effect sizes between self–efficacy and verbal immediacy were considered moderate. The effect sizes between nonverbal immediacy and self–efficacy, and between verbal immediacy, nonverbal immediacy, and task value were considered small. Results indicated 11% of the variance in self–efficacy was explained by the verbal immediacy of teachers, and four percent of the variance in self–efficacy was explained by nonverbal immediacy. Specific to task value, six percent of the variance was explained by verbal immediacy and two percent by nonverbal immediacy. Results are discussed in light of the theoretical underpinnings and recommendations made for continued research.

Keywords: verbal immediacy, non–verbal immediacy, self–efficacy, task value, agricultural education, college students

Introduction

Stefanou, Perencevich, DiCinto, and Turner (2004) stated that, "There is a recognized need for studies that provide rich details from the classroom to help expand our understanding of the relationships between student motivation, how such motivation is expressed, and instructional practices" (p. 98). The theory of immediacy, operationally defined as behaviors that enhance closeness to and nonverbal interaction with others, considers and identifies verbal and nonverbal communication messages, yet is rarely connected with specific measurements of student motivation (Mehrabian, 1969). The need exists to identify whether teacher immediacy is associated with corresponding self–efficacy and task value student motivation. Wentzel and Wigfield (1998) stated that, "Researchers need to explore further how different classroom and interpersonal contexts influence students' academic and social motivation" (p. 170). Based on the expressed need of previous researchers (Stefanou, et al., 2004; Wentzel & Wigfield, 1998), and research which supports the academic and personal benefits of both self–efficacy and task value (Bandura, 1997; Christophel, 1990; Gorham, 1988; Schunk, 1991; Zimmerman, 2000), the purpose of this study was to examine the relationship between immediacy behaviors and student self–efficacy and task value motivation.

A review of the motivation and immediacy research in agricultural education revealed the need for further inquiry. Agricultural educators have examined self–efficacy of preservice teachers (Knobloch & Whittington, 2003a;

Roberts, Harlin, & Ricketts, 2006; Roberts, Mowen, Edgar, Harlin, & Briers, 2007; Wolf, Foster, & Birkenholz, 2008) and the self–efficacy of current high school agriculture instructors (Blackburn & Robinson, 2008; Knobloch & Whittington, 2003b; Wolf, 2008), yet the researchers found only one agricultural education study which examined the relationship between instructor immediacy and student motivation (Velez & Cano, 2008).

An examination of the relationship between instructor immediacy (verbal and nonverbal) and student motivation directly supports learning priority four of the National Research Agenda (Doerfert, 2011). Priority four of the National Research Agenda seeks to focus on, "meaningful, engaged learning in all environments" (Doerfert, 2011, p. 21). Specifically, the research agenda calls for research which examines the, "role of motivation, self-regulation, metacognition, and/or reflection in developing meaningful, engaged learning experiences across all agricultural education contexts" (Doerfert, 2011, p. 9). This present study sought to examine the role of instructor communication in student motivation. Hofer (2006) stated that, "Knowing more about how students are motivated and what you can do to structure a class that positively affects student motivation can make a significant difference in student engagement and learning" (pp. 140–141). An examination of the relationship between instructor behaviors (immediacy) and student motivation may yield results which can be used to create a more meaningful and engaged learning environment for students within agricultural education.

Theoretical Foundation

The theoretical foundation for this research was grounded in the Implicit Communication Theory espoused by Albert Mehrabian, and the Social Cognitive Theory developed by Albert Bandura. According to the Implicit Communication Theory, messages are constantly transmitted via a measure of verbal and non–verbal communication known as immediacy. Mehrabian (1969) defined nonverbal immediacy as those communication behaviors that "enhance closeness to and nonverbal interaction with another" (p. 203) and verbal immediacy as the stylistic differences in

expression from which we infer like or dislike. The Implicit Communication Theory and the underlying theory of Immediacy, provide a basis to identify and attempt to measure levels of verbal and nonverbal communication.

Mehrabian postulated that ". . . people rarely transmit implicitly the kinds of complex information that they can convey with words; rather, implicit communication deals primarily with the transmission of information about feelings and like–dislike or attitudes" (Mehrabian, 1981, p. 3). Thus, Implicit Communication Theory deals with a wide variety of the symbols and the *decoding* process utilized by the observer to form emotional states, attitudes, likes–dislikes, and preferences. Whether recognized or not, implicit communication is present in all cultures and encompasses a wide variety of different aspects of speech which seem, whether intended or not, to convey expressions of feelings or attitudes. Anyone who has been a traveler in a foreign country has experienced the sometimes frustrating impact of implicit communication. For example, it is possible to learn a second language, and communicate in an understandable manner, yet still, by way of subtle nuances, convey inappropriate thoughts, feelings, or intentions.

Implicit communication, defined by Mehrabian as nonverbal immediacy, refers to the ability of the instructors to convey affective feelings of warmth, closeness, and belonging (Richmond, Gorham, & McCroskey, 1987). Examples would include the use of eye contact, body position, physical proximity and body movement (Richmond, Gorham, & McCroskey, 1987).

Verbal immediacy, in contrast to nonverbal immediacy, refers to the verbal expressions used by teachers to develop within students a degree of like or dislike toward the teacher (Mehrabian, 1981). Examples of verbal immediacy would include ownership statements (my/our class), inclusive references (we vs. I) and probability (will v. may) statements (Rubin, Palmgreen, & Sypher, 1994).

Albert Bandura (1986) developed the Social Cognitive Theory of human development, grounded on the concept of triadic reciprocal determinism. According to Pajares (2002), reciprocal determinism is the view that, ". . . (a) personal factors in the form of cognition, affect,

and biological events, (b) behavior, and (c) environmental influences create interactions that result in a *triadic reciprocality* " (p. 1). In other words, Bandura believed that each of these factors interact with each other and form the basis for the social cognitive structure of an individual.

Bandura used the term reciprocality to describe the unique interdependent nature of the three determinants. All determinants can, and to some extent do, exert a multiplicity of influences on each other. In addition, Bandura (1986) stated that "the relative influence exerted by the three sets of interacting factors will vary for different activities, different individuals, and different circumstances" (p. 24). The practical benefit of Bandura's reciprocal determinism allows counselors and therapists to direct efforts at either personal, behavioral, or environmental factors (Pajares, 2002). Now, as opposed to the past psychodynamic, trait, and behaviorist theories, counselors were able to view the individuals, and their resulting behavior, as a blend of personal, behavioral, or environmental factors.

Once Bandura identified individuals as having and exercising control over their thoughts, feelings, and actions, he began developing a theory to address people's beliefs in their own ability to succeed in a task. Bandura conceptualized his ideas as the Theory of Self–Efficacy (Bandura, 1986).

The concept of self–efficacy was defined by Bandura (1986) as, ". . . people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances. It [self–efficacy] is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses" (p. 391). Self–efficacy forms the practical and useful basis for the social cognitive theory by emphasizing the interactive nature of human agency, thus allowing counselors, teachers, therapists and others to develop interventions and modifications to improve the psychological wellbeing of the individual. Bandura (1997) stated:

> Self–efficacy theory provides explicit guidelines on how to enable people to exercise influence over how they live their lives. A theory that can be readily used to enhance human efficacy has much greater

social utility than theories that provide correlates of perceived control but have little to say about how to foster desired changes. (p. 10)

The third theoretical foundation, for this research was grounded on the Theory of Expectancy–Value. While the Theory of Expectancy–Value has had numerous authors, the researchers chose to focus on the Eccles et al. (1983) model of expectancy–value. The Eccles et al. model focuses more on the academic implications of expectancy–value and emphasizes two important predictors of academic behavior: expectancies for success and the subjective task value associated with the task (Schunk, Pintrich, & Meece, 2008). The purpose of the current research was to focus on the aspect of task value. Eccles (2005) defined task value as, ". . . a quality of the task that contributes to the increasing or decreasing probability that an individual will select it" (p. 109). In other words, an individual will pursue a given task only if the value they place in that task is high. For example, a teacher might have an extremely bright student in a course, who, for lack of valuing the task or subject, refuses to participate and performs poorly. The student may have great potential, but without the corresponding task value, the potential will not be realized. According to Eccles (2005), and Wigfield and Eccles (2002), task value can be further subdivided into four components: attainment value, intrinsic or interest value, utility value, and cost value.

Conceptual Framework

Review of existing research related to verbal immediacy, nonverbal immediacy, self–efficacy, and task value points to both the importance and need for further research. Verbal immediacy has demonstrated an association with effective teaching, student motivation, affective learning, and perceived cognition (Christophel, 1990; Gorham, 1988). A myriad of other research studies have documented that the verbal immediacy of instructors increased student cognitive, affective, and behavioral learning (Christophel, 1990; Gorham, 1988; Gorham & Christophel, 1990; Plax, Kearney, McCroskey, & Richmond, 1986).

Nonverbal immediacy has been linked to student motivation; however, the preponderance of studies analyzing the relationships between nonverbal immediacy and student motivation utilized a general measure of trait and state motivation. Christophel (1990) stated that nonverbal immediacy appeared to directly influence student perceptions of the instructor and tendency to enroll again, as well as student state and trait motivation. Frymier and Houser (2000) discovered correlations of .38 between teacher nonverbal immediacy and state motivation, and correlations of .45 between verbal immediacy and state motivation. Richmond (1990) documented a .38 correlation between the combined constructs of verbal and nonverbal immediacy and student motivation.

It is important to recognize that, in the previously mentioned studies (Christophel, 1990; Frymier & Houser, 2000; Richmond, 1990) trait and state motivation are very broad, non–specific measures which may lack the ability to discriminate between the various types of motivation. One study, specific to agricultural education, did examine verbal and nonverbal immediacy in relation to approach–avoidance and expectancy–value motivation (Velez & Cano, 2008). Results indicated a moderate relationship between expectancy–value and nonverbal immediacy and a low association between verbal immediacy and expectancy–value.

In regards to motivational constructs, self–efficacy and task value represent two important aspects of motivation. Self–efficacy has been linked to many educational benefits for students including gains in student persistence and skill acquisition (Schunk, 1991), increases in academic performance and persistence (Multon, Brown, & Lent, 1991) and gains in student achievement and effort (Bandura, 1997; Zimmerman, 2000). Multon, Brown and Lent (1991) examined 39 different self–efficacy studies and concluded that, " . . . across various types of student samples, designs, and criterion measures, self–efficacy beliefs account for approximately 14% of the variance in students' academic performance and approximately 12% of the variance in their academic persistence" (p. 34).

Task value is related to, yet distinct, from self–efficacy in that students may feel able to complete a specific task (efficacy) yet may not complete the task because they have no reason or incentive to do so (task value) (Wentzel & Wigfield, 1998). Task value provides the impetus, and is the catalyst for attempting a task. Eccles et al. (1983) discovered that the task value beliefs of students predicted both intention and actual decisions to continue in a particular course of study, and Pintrich (1994) identified task value as a motivational construct highly sensitive to particular tasks and context.

The paucity of research examining specific motivational constructs, and the research support for the benefits of immediacy, self–efficacy, and task value, establishes a need for further research. Allen, Witt, and Wheeless (2006) conducted a meta–analysis examining teacher immediacy as a motivational factor in student learning and concluded that, "The research outcome in this report continues to justify attention to teacher immediacy as an aspect of classroom behavior that can improve learning outcomes by increasing student motivation" (p. 28).

Purpose

The purpose of this descriptive correlation study was to describe the relationship among verbal immediacy, nonverbal immediacy, self–efficacy, and task value. This study was guided by the following research questions.

RQ 1:   What is the relationship between instructor verbal and nonverbal immediacy and student self–efficacy?
RQ 2:   What is the relationship between instructor verbal and nonverbal immediacy and student task value?

Methods

Population and Sample
The target population for this descriptive–correlational study consisted of college students enrolled in two selected courses within the College of Food, Agricultural, and Environmental Sciences at The Ohio State University. A purposive sample was selected and assessed from two of the largest non–major specific courses offered by the college. According to Ary, Jacobs, Razavieh, and Sorensen (2006), a purposive sample is one in which, ". . . sample elements judged to be

typical, or representative, are chosen from the population" (p. 174). The two courses in which the assessment was administered were identified and selected based on class size, accessibility, and enrollment of a diverse variety of majors.

The selected courses comprising the purposive sample were perceived to contain a relative mix of freshman, sophomores, juniors, and seniors. Specifically, one course was a 100 level course predominantly taken by freshman and sophomores, while the other course was a required college course predominately taken by juniors and seniors. Both were deemed to be courses which were most closely representative of the entire college. However, based on the nonprobability method of collection, no attempt was made to generalize the results beyond the respondents (Ary et al., 2006). Data were collected from the two selected courses in which students were asked to assess instructor immediacy, classroom demographic information, and their personal motivation in the class they had attended *immediately previous* to the class in which data collection occurred.

It is important to recognize that the measurements of interest were on the cumulative verbal and nonverbal immediacy of the instructors. While the collection method and instruments did not record the time lapse between the prior class and the class in which collection occurred, the research was conducted during the mid–point of the course, allowing students time to be exposed to the verbal and nonverbal immediacy of their instructors.

Instrumentation

Each student was given the opportunity to complete four assessment instruments, the Immediacy Behaviors Instrument, both Verbal and Nonverbal, (Gorham, 1988; Richmond, Gorham, & McCroskey, 1987), and the Self–Efficacy and Task Value for Learning and Performance portion of the Motivated Strategies for Learning Questionnaire (MSLQ) created by Pintrich, Smith, Garcia, and McKeachie (1991, 1993).

The Verbal Immediacy Behaviors (VIB) instrument consisted of 20 Likert type questions, each ranging from 1 (*Never*) to 5 (*Very Often*). The Verbal Immediacy Behaviors instrument had previously attained alpha and split–half reliabilities ranging from .83 to .94 (Christophel, 1990). Based on previous recommendations

(Gorham, 1988) and the results of the pilot test, four questions were deemed unreliable and were removed from the study. The 16 item instrument yielded a pilot study Cronbach's reliability coefficient of 0.86 ($n = 27$), and a post hoc Cronbach's reliability coefficient of   0.83 ($n = 208$).

The Nonverbal Immediacy Behaviors (NIB) instrument consisted of 14 Likert type questions, each ranging from 1 (*Never*) to 5 (*Very Often*). In previous studies, the Nonverbal Immediacy Behaviors instrument has demonstrated summated reliability estimates ranging from 0.73 to 0.89 (Christophel, 1990; Richmond, Gorham, & McCroskey, 1987). The pilot study revealed a Cronbach's reliability coefficient of 0.82 ($n = 27$). A post hoc Cronbach's reliability analysis was 0.85 ($n = 208$).

The Self–Efficacy for Learning and Performance instrument consisted of eight Likert–type questions similarly scaled from 1 (*Not at all true of me*) to 7 (*Very true of me*). Previous Cronbach reliability for the self–efficacy portion of the MSLQ was 0.93 (Duncan & McKeachie, 2005). For the purposes of this research, the scale descriptors (*Not at all true of me*) and (*Very true of me*) were modified to read (*Strongly disagree*) and (*Strongly agree*). For instance, when answering the question, "I expect to do well in this class," participants were asked to rate their responses on a Likert–type questionnaire scaled from 1 (*Strongly disagree*) to 7 (*Strongly agree*). A panel of experts consisting of graduate students and professors were asked to assess the validity of such a change, and all questions with the new scale descriptors were deemed valid. The MSLQ with the modified scale descriptors was administered to college students. The pilot study revealed a Cronbach's reliability coefficient of 0.96 ($n = 27$). A post hoc Cronbach's reliability analysis was 0.96 ($n = 208$).

The task value measurement chosen for the research was the Task Value component of the Motivated Strategies for Learning Questionnaire (MSLQ) created by Pintrich, Smith, Garcia, and McKeachie (1991, 1993). The Task Value measure contained six Likert–type questions scaled from 1 (*Not at all true of me*) to 7 (*Very true of me*). Previously administrations of the Task Value segment of the MSLQ yielded a reliability coefficient of 0.90 (Duncan & McKeachie, 2005). For the purposes of this

research, the scale descriptors (*Not at all true of me*) and (*Very true of me*) were modified to read (*Strongly disagree*) and (*Strongly agree*). For instance, when answering the question, "I am very interested in the content area of this course," participants were asked to rate their responses on a Likert–type questionnaire scaled from 1 (*Strongly disagree*) to 7 (*Strongly agree*). A panel of experts consisting of graduate students and professors were asked to assess the validity of such a change, and all questions with the new scale descriptors were deemed valid. The MSLQ with the modified scale descriptors was administered to college students. The pilot study ($n = 27$) revealed a Cronbach's reliability coefficient of 0.83. The post hoc Cronbach's reliability was 0.93 ($n = 208$).

Data Collection

The target population consisted of students enrolled in two College of Food, Agricultural, and Environmental Sciences courses. The purposive sample consisted of two selected courses. Both courses had a combined enrollment of 250 students. Of the 250 possible respondents enrolled in the courses, 212 respondents returned questionnaires, with four questionnaires incomplete or missing more than five percent of responses. The four incomplete questionnaires were removed from the study resulting in a useable sample of 208 respondents.

While the students surveyed attended one of two selected courses, the selected measurement was on the course *immediately preceding the course in which collection occurred.* The method of collection, commonly used in past research (Gorham, 1988; McCroskey, Richmond, & Bennett, 2006; Gorham & Christophel, 1992; Plax, Kearney, McCrosky, & Richmond, 1986), was intended to maximize variability and minimize threats to validity. While the data utilized in this study were part of a larger study, the current research focused strictly on the relationships between immediacy, self–efficacy and task value.

Data Analysis

Data were analyzed using the SPSS 16.0 statistical software package. An alpha level of .05 was set *a priori*. Hopkins (1997) correlation coefficients descriptors were utilized to address the relationships between verbal immediacy,

nonverbal immediacy, self–efficacy, and task value. Hopkins labeled his indicators as: .00-.10 = trivial, .10-.30 =small, .30-.50 =moderate, .50-.70 = large, .70-.90 = very large, and .90-1.00 = nearly perfect. The strengths of the relationships were defined in terms of the coefficient of determination and effect size.

Results

A brief demographic overview indicated that of the 208 respondents, 64% were male and 36% were female. The respondents indicated assessing instructors who were 71.2% male and 28.4% female, ranging in age from 20–29 ($n = 45$), 30–39 ($n = 42$), 40–49 ($n = 45$), 50–59 ($n = 59$), 60–69 ($n = 14$), and greater than 70 ($n = 1$). The student participants reported assessing 50 course prefixes based on the course they attended *immediately preceding the course in which collection occurred.* Of the 50 course prefixes the two largest categories were chemistry ($n = 23$, 11.1 %) and math ($n = 20$, 9.6%). The students identified 20.7 % of the classes as elective and 78.4 % as required. The demographic data pertaining to the verbal and nonverbal immediacy assessments is descriptive of the instructor, while the data pertaining to self–efficacy and task value is descriptive of the student.

Research questions one and two combined sought to determine the relationship between instructor verbal and nonverbal immediacy, and student self–efficacy and task value. The student responses for verbal and nonverbal immediacy, based on a scale from 1 (never) to 5 (very often), indicated a verbal immediacy mean of 2.88 ($SD = .75$) and a nonverbal immediacy mean of 3.57 ($SD = .63$). The responses for self–efficacy and task value, based on a scale of 1 (strongly disagree) to 7 (strongly agree), indicated a self–efficacy mean of 5.08 ($SD = 1.31$) and a task value mean of 4.83 ($SD = 1.47$).

Pearson product–moment correlations were calculated and Table 1.0 describes the relationship between the summated constructs. Hopkin's (1997) adjectives describing the magnitude of the correlation and the correlational effect size were utilized. Hopkins identified $r = .10-.30$ ($r^2 = .01$) as a small effect size correlation, $r = .30-.50$ ($r^2 = .09$) as a moderate effect size correlation, $r = .50-.70$ ($r^2 =$

.25) as a large effect size correlation, and .70-.90 (r^2 = .49) as a very large effect size correlation.

Table 1
Relationship Between Verbal Immediacy, Nonverbal Immediacy, Self–efficacy and Task Value

		Nonverbal Immediacy	Self–efficacy	Task value
Verbal Immediacy	Pearson Correlation	.601[*]	.334[*]	.234[*]
	Adjective [a]	Large	Moderate	Small
Nonverbal Immediacy	Pearson Correlation	—	.209[*]	.152[*]
	Adjective [a]		Small	Small
Self–efficacy	Pearson Correlation		—	.545[*]
	Adjective [a]			Large

Note. n = 208
[a] Adjectives according to Hopkins, 1997.
* Correlation is significant at the 0.05 level (2–tailed).

All measures of association between the variables yielded a statistically significant result. However, King and Minium (2008) encouraged the use of effect size and coefficient of determination measures to further elucidate the practical significance of the findings.

Examination of the relationship between the constructs revealed small to large levels of association. Verbal immediacy had a moderate correlation with self–efficacy and small correlation with task value. Nonverbal immediacy evidenced a small association with both self–efficacy and task value. All measures of association between the variables yielded a statistically significant result.

The coefficient of determination (r^2) was the measure used to further describe the results. The coefficient of determination, as well as the effect size descriptor, are two important indicators of the practical significance of the findings (King & Minium, 2008). The research indicated that 11 percent of the variance in self–efficacy was associated with verbal immediacy, representing a small coefficient of determination. Four percent of the variance in self–efficacy was associated with nonverbal immediacy, representing a small coefficient of determination. Specific to task value, six percent of the variance was associated with verbal immediacy (small r^2) and two percent with nonverbal immediacy (small r^2). Both effect size and coefficient of determination provide insight as to the practical significance of the association results.

Conclusions/Recommendations

Only 11 percent of the variance in self–efficacy was associated with teachers' verbal immediacy. While this leaves 89 percent of the variance unexplained, it is important to recognize this research does not address the amount of student self–efficacy that is dependent on, or influenced solely, by the environment. Bandura established that the amount of influence of the triadic determinants [(a) personal factors in the form of cognition, affect, and biological events, (b) behavior, and (c) environmental influences] would vary from individual to individual. Bandura (1986) stated that, "The relative influence exerted by the three sets of interacting factors will vary for different activities, different individuals, and different circumstances" (p. 24). It is possible that the environmental influences to self–efficacy may only account for a portion of student variance in self–efficacy. An 11 percent variance may be a sizeable portion when considering the potential overall influence of environmental factors which form only one edge of the triadic reciprocality triangle. Instructors, who wish to enhance verbal immediacy can do so by praising student efforts, providing humor and self–disclosure, engaging students in conversations and displaying a willingness to meet and interact with students (Edwards & Edwards, 2001).

Further research should examine all three of the triadic determinants and attempt to determine their relative inputs to student self–

efficacy. Bandura (1997) indicated that the relative influence would vary from individual to individual. However, focused research might identify some commonalities. Determinants evidencing the highest potential to maximize student self–efficacy should be identified and researched. Once individual factors are determined, instructors will have the opportunity to reflect on their instruction and modify teaching to optimize the development of student self–efficacy.

Bandura (1997) asserted that one of the primary benefits of self–efficacy is that it is able to be influenced by others. Self–efficacy can be developed through mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states (Bandura, 1997). According to Schunk (1991) instructors should be purposeful and careful in interactions with students as, ". . . students derive cues signaling how well they are learning, which they use to assess efficacy for further learning" (p. 209). According to Pajares (2002), instructors wishing to promote self–efficacy development in students should provide students the opportunity to engage in authentic mastery experiences, group and social interaction, and classroom activities designed to encourage participation and foster a welcoming and non–threatening classroom climate. Mastery experiences, theorized to be the largest contributor to self–efficacy, can be enhanced by class instructors who break down complex skills into easily mastered subskills (Bandura, 1997). Instructors who allow students to experience small frequent successes will have the greatest likelihood of increasing student self–efficacy (Bandura, 1997).

Nonverbal immediacy accounts for four percent of the variance in self–efficacy. Based on the results of this research, very little variance in self–efficacy can be explained by nonverbal immediacy. This may relate to the four distinct sources commonly used to establish personal self–efficacy. Bandura defined the four sources, in order of the greatest contributor to self–efficacy to the least contributor to self–efficacy, as: mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Physiological and affective states, which according to Bandura (1997) are likely to promote the least increase in self–efficacy, would seem, out of the four

sources, to be the most logical area of instructor nonverbal influence. Nonverbal immediacy focuses on behaviors such as eye contact, body position, body movement, physical proximity and personal touch (Richmond, Gorham, & McCroskey, 1987). Perhaps instructors are unable to substantially alter the physiological and affect states of students as a result of their nonverbal communication. The lack of instructor nonverbal immediacy may not translate into a physiological or affective stimulus. Rather, the absence of such behaviors may simply allow the student to remain physiologically and affectively unchanged.

Based on this research, and given the low amount of variance explained by nonverbal immediacy, the authors would encourage only limited future research. Further research should consider the use of an extended self–efficacy measure that may be more sensitive to the construct of self–efficacy. The use of the short instrument (8 statements) may have decreased the ability of the research to adequately detect a relationship. In addition, since the measurement of self–efficacy is task and situationally dependent, observational measures of the nonverbal communication of the instructor, followed by immediate assessment of the students, may yield greater clarity as to potential relationships.

The relationship between verbal and nonverbal immediacy and task value was minimal. Task value appears to be a motivation trait which bears little relationship with teacher communication. Similar to self–efficacy, it is important to recognize that there may be only a small portion of task value that is able to be influenced by the instructor. Examination of the theory underlying task value provides clues as to possible reasons for the low correlation.

Expectancy–Value theory, the theory which supports task value, considers four primary types of value: attainment (importance), intrinsic (interest), utility, and cost (Wigfield & Eccles, 2002). The MSLQ purports to measure the first three, yet doesn't distinguish between them. The six item MSLQ measure would probably be considered too short to distinguish between all three constructs. Therefore, the six questions are grouped under the task value heading and the only evidence for the measurement of importance (attainment), interest, and utility value is in the actual wording of the individual

questions. The lack of distinction in assessing the sub–constructs to task value created difficulty in analysis of the findings.

Task value, as a measure of motivation, appears to be a more "personal" measure which is greatly dependent on contextual and personological variables (Pintrich, 1994). The nature of attainment value and the failure of the measurement to assess the contextual and personological variables may moderate the current findings. Some students, based on classroom context and personological variables, may indicate increased task value in a course, while, some students may indicate very low levels of task value for a course. The differences in task value scores may in no way reflect the communication behaviors of the instructor. Rather, the intrinsic nature of task

value, augmented by a whole host of confounding variables, may bear responsibility for the small levels of association. Future research should examine the components of task value independently. A different, longer measure should be employed which is able to discriminate between importance (attainment), interest, and utility components of task value. A review of the individual components would allow researchers to better analyze the potential association with teacher behaviors. Specifically, utility value would intuitively appear to be less related to instructor behaviors than the interest and attainment components of task value. To enhance clarity and further illuminate the variables of interest, a more thorough review, with the use of a longer measure, is warranted.

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