# Transformational Leadership in the Classroom: Fostering Student Learning, Student Participation, and Teacher Credibility

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The purpose of this study was to examine the relationships between transformational leadership in college classrooms (i.e., charisma, individualized consideration, intellectual stimulation), student learning outcomes (i.e., cognitive learning, affective learning, state motivation, communication satisfaction), student participation, and student perceptions of instructor credibility (i.e., competence, trustworthiness, good-will). Participants were 165 students who reported on their instructors' leadership in addition to their own classroom behavior and learning. Results suggest that all three components of instructional transformational leadership are moderately to strongly associated with all outcome variables. Future research should determine which instructional behaviors communicate transformational leadership in the classroom, across different cultures.

Effective teaching requires skill and patience and involves much more than the simple ability to disseminate information (Kramer & Pier, 1999). Effective teachers must be experts in their discipline as well as experts in the social dynamics of classroom communication (Catt, Miller, & Schallenkamp, 2007). Teachers must be able to present their material, effectively manage their classrooms, facilitate maximum student involvement, and ultimately, enhance student learning. Although teaching well may be a difficult task, teachers have a number of resources at their disposal to help maximize their potential in the classroom. For instance, instructional communication research has revealed a plethora of teacher behaviors that enhance (Nussbaum, 1992) or diminish (Boice, 1996) student learning and affect.

Another resource that teachers have

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to help them become more effective in the classroom comes from the literature on leadership. A number of scholars have observed that organizational leadership theories are applicable in the classroom (Baba & Ace, 1989; Cheng, 1994; Harvey, Royal, & Stout, 2003; Pounder, 2003; 2008; Walumbwa, Wu, & Ojode, 2004) and these studies typically find that, by using transformational leadership, teachers can positively influence student behaviors and perceptions. For example, Pounder (2008) found that instructors who are perceived as transformational influenced a variety of outcomes including: extra effort from students, an increase in students' perceptions of leader effectiveness, and an increase in students' satisfaction with their teachers.

Most investigations of leadership in the classroom survey the effect of transformational leadership on student perceptions of the learning experience (e.g., Harvey et al., 2003; Pounder, 2008; Walumbwa et al., 2004). However, these studies typically examine the effect of transformational leadership on outcome variables borrowed from the organizational literature. That is, researchers have examined the effects of teachers' transformational leadership on variables such as students' extra effort in the classroom,

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students' perceptions of instructor effectiveness, and satisfaction. What is missing in the literature is an examination of transformational leadership and its relationship with more traditional student learning outcomes and classroom communication. This paper attempts to remedy this oversight by examining the link between transformational leadership and student learning outcomes (i.e., cognitive learning, affective learning, state motivation, communication satisfaction), student participation, and perceptions of teacher credibility.

# Transformational Leadership

Two conceptualizations of leadership that are often cited in the management literature are transactional and transformational leadership. Transactional leadership is defined as an instrumental approach to organizational leadership and is generally associated with a task orientation towards management (Conger, 1999). Managers using transactional leadership motivate subordinates by providing or withholding extrinsic rewards (Conger, 1999). Transformational leadership on the other hand, has typically been equated with "transforming the existing order of things as well as directly addressing... followers' needs for meaning and development" (Conger, 1999, p. 149). Conger suggests, unlike transactional leaders, transformational leaders are more concerned with empowerment than they are control strategies. For the purposes of this study we are concerned with transformational leadership in the classroom.

Bass (1985) defines transformational leadership as the synthesis of three components including charisma, individualized consideration, and intellectual stimulation. *Charisma* is defined as a function of subordinates' belief in a leader and his/her mission and their admiration for, trust, and devotion in a leader. Charismatic leaders are considered by their subordinates to be dynamic, hard

working, confident, attractive, competent, and successful. A sub-component of charisma is inspiration. Bass defines inspirational leaders as emotionally arousing, animating, and enlivening. The second component of transformational leadership is individualized consideration. This component is associated with leaders who treat subordinates different according to their individual needs and capabilities. Individualized consideration is related to thoughtfulness for others and the mentorship of subordinates. The third and final component of transformational leadership is intellectual stimulation. This component of leadership is associated with leaders that stimulate extra effort among their followers by forcing subordinates to rethink ideas that they may have never questioned before (Bass, 1985).

In the organizational literature, studies suggest that transformational leadership is associated with different outcomes when compared to non-transformational leadership. For example, subordinates of transformational leaders have less role conflict, higher task performance, and higher satisfaction with a task than subordinates with non-transformational leaders (Howell & Frost, 1989) and show more helping as well as compliance (Den Hartog, De Hoogh, & Keegan, 2007). Furthermore, transformational leaders are perceived as being more effective than nontransformational leaders, transformational leaders have been rated as better performing than non-transformational leaders, and subordinates have more reverence for transformational leaders, a stronger sense of collective identity, and higher perceptions of task performance compared to non-transformational leaders (Conger, Kanungo, & Menon, 2000; Hater & Bass, 1988). Transformational Leadership in the Classroom

Results from studies in management make clear the advantages of transforma-

tional leadership in organizations. Recently, scholars have begun to investigate the effect of transformational leadership in the classroom as well. However, to date, there is a dearth of literature on transformational leadership in schools in general and university classrooms in particular (Leithwood & Jantzi, 2006; Pounder, 2003; 2008). Still, a small selection of the literature has dealt with transformational leadership in college settings using teachers as the unit of analysis.

Pounder (2008) examined classroom leadership in a university setting in Hong Kong to discover if, by using transformational leadership, teachers could generate extra effort from students, increase students' perceptions of leader effectiveness, and increase students' satisfaction with them as teachers. The authors found positive correlations between student ratings of their instructors' classroom leadership behaviors with student ratings of the classroom outcomes articulated above.

Similarly, Harvey et al. (2003) examined the effect of instructors' transformational leadership on university students. The researchers used the constructs of charisma, individualized consideration, and intellectual stimulation as independent variables and examined their effects on students' favorable course related attitudes. Results indicated that charisma and intellectual stimulation were the two biggest predictors of students' perceptions of an instructor's performance (i.e., respect for an instructor, satisfaction with an instructor, and trust in an instructor) and that individualized consideration and intellectual stimulation were the two biggest predictors of student involvement. The researchers used this data to suggest that transformational leadership has a positive relationship with important outcome variables in a university classroom context.

Finally, Walumbwa et al. (2004) studied the full range leadership framework (the effect of transformational and transactional leadership on followers' outcomes) and its effect on three instructional outcomes in a university setting. The researchers discovered that increases in ratings of instructors' transformational leadership were associated with increases in student ratings of their willingness to exert extra effort, their perceptions of instructor effectiveness, and their satisfaction with the instructor.

#### Empirical Rationale

As opposed to simply looking at organizational outcomes (satisfaction, extra effort, and effectiveness) in a classroom setting, we opine that it is important to examine more traditional learning outcomes. The outcomes we chose to assess in our study include: cognitive learning, affective learning, state motivation, and student communication satisfaction. Cognitive learning ranges from the simple retention of information to the complex synthesis of material (Bloom, Hastings, & Madaus, 1971). Affective learning involves student feelings, emotions, and degrees of acceptance toward the subject matter (Krathwohl, Bloom, & Masia, 1964). State motivation to learn refers to student attempts to obtain academic knowledge or skills from classroom activities by finding these activities meaningful (Brophy, 1987). Student communication satisfaction refers to an affective response to the accomplishment of communication goals and expectations (Hecht, 1978). These variables were chosen because they represent several ways to examine student success in the classroom and have been associated with effective teaching behavior (Goodboy & Myers, 2008). Given that instructors who employ transformational leadership in their classrooms are perceived as effective teachers (Walumbwa et al., 2004) and students are willing to exert extra effort for such teachers and are satisfied (Pounder, 2008), students should report increases in traditional learning outcomes when they perceive their instructors as transformational. Therefore, the following hypothesis is posited:

H1: Student perceptions of their instructors' transformational leadership will be positively associated with student learning outcomes including cognitive learning, affective learning, state motivation, and communication satisfaction.

In addition to the student learning outcomes presented above, we measured student participation and student perceptions of teacher credibility. Student participation refers to any comments or questions that students offer or raise in class (Fassinger, 1995a). Participation was included in this study because it is an indirect indicator of student achievement (Voelkl, 1995). That is, students who participate in class tend perform better on exams (Reinsch & Wambsganss, 1994), are more motivated (Junn, 1994), and possess more confidence in the classroom (Fassinger, 1995a). Considering that students are more involved in the classroom when an instructor employs transformational leadership (Harvey et al., 2003), the following hypothesis is presented:

> H2: Student perceptions of their instructors' transformational leadership will be positively associated with student participation in the classroom.

Credibility was examined in this study as it refers to three components. These components include: competence (e.g., intelligent, informed), goodwill (e.g., cares about students, understanding), and trustworthiness (e.g., honest, moral, ethical) (McCroskey & Teven, 1999). Perceived teacher credibility is a desirable perception achieved through effective instruction with students (Martin, Chesebro, & Mottet, 1997; McPherson & Liang, 2007; Mottet, Parker-Raley, Beebe, & Cunningham, 2007; Schrodt, Turman, & Soliz, 2006; Schrodt & Witt, 2006) and jeopardized through ineffective instruction (Edwards & Myers, 2007; Schrodt 2003; Teven, 2007). Consequently, student perceptions of teacher credibility are shaped through positive classroom experiences. For instance, Edwards, Edwards, Qing, and Wahl (2007) revealed that positive word of mouth concerning an instructor increases student perceptions of instructor credibility. Chory (2007) found that perceptions of classroom fairness are positively predicted by instructor credibility. Moreover, Beatty and Zhan (1990) discovered that students rate teaching favorably and intend on taking future courses from credible instructors. Therefore, it is no surprise that students report more cognitive learning, affective learning, and motivation from credible instructors (Frymier & Thompson, 1992; McCroskey, Valencic, & Richmond, 2004; Pogue & AhYun, 2006).

Brann, Edwards, and Myers (2005), revealed that instructors who employ a progressive teaching philosophy (i.e., allow students to rely on their own experiences and promote active learning through motivation and discussion) versus a transmissive philosophy (i.e., traditional transfer of knowledge through lecture) are rated as more credible. Since transformational leadership in the classroom is based on admiration, motivation, empowerment, and intellectual stimulation (Bass, 1985; Conger, 1999), transformational instructors would almost certainly possess a progressive teaching philosophy rather than a transmissive one. Therefore, the following hypothesis is posted:

> H3: Student perceptions of their instructors' transformational leadership will be positively associated with student perceptions of their instructors' credibility including their: competence, goodwill, and trustworthiness.

# Method

#### Participants

Participants were 165 undergraduate students enrolled in one of eight introductory or upper level communication courses at a mid-sized Eastern university. Participants were 64 men and 101 women whose ages ranged from 18 to 30 years (M = 19.95, SD = 1.72). Thirty five participants were freshmen, 79 participants were sophomores, 17 participants were juniors, and 34 participants were seniors.

#### Procedures and Measurement

Participants completed a series of instruments and provided demographic data. Participants completed the instruments in reference to the instructor of the course they attended immediately prior to the data collection (Plax, Kearney, McCroskey, & Richmond, 1986). Participants also provided the initials of the instructor to ensure this procedure was followed correctly and to provide a cognitive reference for reporting. Data were collected during the last week of class before finals to guarantee that participants were familiar with their instructors' classroom behaviors.

Participants completed the Multifactor Leadership Questionnaire (Bass, 1985), the Class Participation Scale (Fassinger, 1995b), the Revised Cognitive Learning Indicators Scale (Frymier & Houser, 1999), the Affective Learning Scale (McCroskey, Richmond, Plax, & Kearney, 1985), the Student Motivation Scale (Richmond, 1990), The Source Credibility Scale (McCroskey & Teven, 1999), and the Student Communication Satisfaction Scale (Goodboy & Martin, 2006), in reference to their class.

Confirmatory factor analyses were performed on all scales for validity purposes (Levine, 2005; Levine, Hullett, Turner, & Lapinski, 2006). As suggested by Kline (2005), we assessed model fit using the model chi square, the Steiger-Lind root mean square error of approximation (RMSEA), the Bentler comparative fit index (CFI), and the standard root mean square residual (SRMR). Values larger than .10 for the RMSEA indicate a poor approximation of the model (Browne & Cudeck, 1993), values of the CFI greater than .95 indicate reasonably good model fit (Hu & Bentler, 1999), and values of the SRMR smaller than .08 indicate a reasonably good model fit (Hu & Bentler, 1999).

Multifactor Leadership Questionnaire. Although most studies of transformational leadership use a version of the Multifactor Leadership Questionnaire originally created by Bass (1985) to measure leadership qualities, researchers have yet to decide upon a common standard of measurement. For example, while some researchers use the Multifactor Leadership Questionnaire (MLQ) in its short form (e.g., Pounder, 2008; Walumbwa, Wu, & Ojode, 2004), other scholars use other versions of the scale (e.g., a modified version of the MLQ (not short form) Harvey et al., 2003) and some researchers use yet other measures of leadership (e.g., Baba & Ace, 1989 – student end of semester evaluations; Cheng, 1994-the Leader Behavior Description Questionnaire). In the current study we adapted the full version of the Multifactor Leadership Questionnaire (MLQ) (Bass, 1985) to measure transformational leadership in the classroom. The 28-item measure contains 18-items measuring charisma and inspiration, 7-items measuring individualized consideration, and 3-items measuring intellectual stimulation. Items ranged from not at all (0) to very often (4). Cronbach's alpha was .98 for charisma, .91 for individualized consideration, .87 for intellectual stimulation, and .98 for the overall scale. The 3-factor model was fitted to the data with the ML method of LISREL 8.8. The model indicated a good fit. Values of selected fit indices are as follows: X<sup>2</sup> (344) = 710.86, p < .01; CFI = .99; SRMR = .04; RMSEA = .08.

The Revised Cognitive Learning Indicators Scale is seven items and asks participants to report on behaviors or activities associated with learning course content. Responses were solicited using a 5-point Likert-type scale ranging from (0) never to (4) very often. In this study, the obtained Cronbach alpha was .91 for the summed scale. The 1-factor model was fitted to the data and indicated a good fit. Values of selected fit indices are as follows: *X*<sup>2</sup> (11) = 18.74, *p* = .07; *CFI* = .99; *SRMR* = .03; *RMSEA* = .06.

The Affective Learning Scale is 12 items and asks participants to report on their levels of affect for the course content, course instructor, and behaviors recommended in the course. Responses were solicited using three 7-point bipolar adjective subscales. In this study, the confirmatory factor analysis suggested that a single factor solution did not fit the data,  $X^2$ (54) = 792.35, p < .01; CFI = .87; SRMR =.08; *RMSEA* = .29. Therefore, we treated the subscales separately. Cronbach's alpha was .92 for course content, .95 for course instructor, and .94 for behaviors recommended in class. The 3-factor model was fitted to the data and indicated an acceptable fit. Values of selected fit indices are as follows:  $X^{2}(45)$ = 107.10, p < .01; CFI = .99; SRMR = .04;RMSEA = .09.

The *Student Motivation Scale* is five items and asks participants to report on their levels of state motivation toward a specific course and instructor. Responses were solicited using a 7-point bipolar adjective scale. In this study, the obtained Cronbach alpha was .95 for the summed scale. The 1-factor model was fitted to the data and indicated a good fit. Values of selected fit indices are as follows:  $X^2$  (5) = 5.40, p = .37; *CFI* = 1.00; *SRMR* = .01; *RMSEA* = .02.

The Student Communication Satisfaction Scale is 10 items and is a global assessment of student satisfaction resulting from communication encounters with an instructor. It uses a 7-point Likert-type response format ranging from strongly disagree (1) to strongly agree (7). In this study, the obtained Cronbach alpha was .97. The model was fitted to the data and indicated a good fit. Values of selected fit indices are as follows:  $X^2$  (32) = 58.07, p < .01; CFI = .99; SRMR = .02; RMSEA = .07.

The *Class Participation Scale* is six items and asks participants to report on how often they participate during class. Five items were used in this study. One item was

omitted because it was a frequency count of participation in a given class. Responses were solicited using a 5-point Likert-type scale ranging from (0) *never* to (4) *very often*. Cronbach's alpha was .90 for the summed scale. The 1-factor model indicated a good fit. Values of selected fit indices are as follows:  $X^2$  (3) = 5.95, p = .11; *CFI* = 1.00; *SRMR* = .02; *RMSEA* = .08.

The Source Credibility Scale includes 18 items and measures three dimensions of credibility (six items each): competence, goodwill, and trustworthiness. It uses a 7point semantic differential response format. In this study, obtained reliability coefficients were .93 for competence, .93 for goodwill, .93 for trustworthiness, and .96 as a single measure. The 3-factor model was fitted to the data and indicated a good fit. Values of selected fit indices are as follows:  $X^2$  (127) = 239.55, p < .01; *CFI* = .98; *SRMR* = .04; *RMSEA* = .07.

### Results

# Hypotheses

To test Hypothesis 1-3, Pearson Product-Moment Correlations were observed between the three components of transformational leadership and their associations with cognitive learning, affective learning, state motivation, communication satisfaction, student participation and instructor credibility. Findings are reported in Table 1. Results from the correlation analyses revealed moderate to strong positive relationships between the components of transformational leadership and the various instructional outcomes examined in this study (accounting for between 12% and 71% of the variance).

#### Discussion

Overall, the results from this study support the idea that transformational leadership is positively related to student learning outcomes, student participation, and perceptions of teacher credibility. These findings help corroborate past research in university

			Intercor	Ta relations	Table 1 Intercorrelations between variables	variable.	S					
Variables	1	5	3	4	S	9	2	∞	6	10	11	12
. Bass (C) 2. Bass (IC)	88.											
S. Bass (IS)	.80	.82										
<ul> <li>Cognitive Learning</li> </ul>	.67	.64	.62									
6. Affective Learning (C)	.78	.72	.72	.63								
6. Affective Learning (T)	.84	.76	.66	.57	.73							
7. Affective Learning (B)	.75	69.	.64	.63	.78	.73						
8. Motivation	.80	.75	.65	.60	.72	.73	.68					
9. Satisfaction	.87	.78	69.	.64	69.	.85	.74	.74				
10. Participation	.35	.37	.36	.52	.28	.32	.32	.37	.40			
11. Credibility (C)	.70	.59	.59	.47	.56	.68	.57	.57	.72	.22		
12. Credibility (G)	.80	.75	69.	.56	.70	.82	.75	.70	.80	.23	.64	
13. Credibility (T)	.72	.66	.65	.49	.62	.71	69.	.63	.73	.23	.72	.80
<i>Note</i> : N = 165. $p < .01$ for all correlations (one-tailed). Bass (C) = charisma, (IC) = individualized consideration, (IS) = intellectual stimulation; Affective Learning (C) = course, (T) = teacher, (B) = behaviors; Credibility (C) = competence, (G) = goodwill, (T) = trustworthiness.	correlations (one-tailed). Bass (C) = charisma, (IC) = individualized consideration, (IS) = intellectual stimuls course, (T) = teacher, (B) = behaviors; Credibility (C) = competence, (G) = goodwill, (T) = trustworthiness.	(one-tai = teache	led). Bas r, (B) = b	s (C) = c ehaviors	harisma, ; Credibil	(IC) = inc ity (C) =	dividualiz compete	zed consi ince, (G)	ideration = goodw	, (IS) = in /ill, (T) =	tellectual trustwort	stimula- hiness.

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classroom environments and suggest that the association of transformational leadership in the classroom may be more far reaching than previously thought. That is, each of the components of transformational leadership produced strong positive associations with all learning outcomes and teacher credibility and moderate associations with student participation as hypothesized. Therefore, in addition to enhancing satisfaction, extra effort, and effectiveness in a classroom setting, the results of this study suggest that transformational leadership is also positively related to traditional instructional outcomes and student behavior.

These findings may be explained, in part, by research on personalized education (Waldeck, 2006). Waldeck (2007) discovered that when students believe their education is personalized, they report greater learning outcomes and satisfaction. This perception of personalized education is based on (a) instructor accessibility (e.g., socializing with students, advice, availability), (b) courserelated practices (e.g., interactive activities, collaborative encouragement, individual requirements), and (c) instructor interpersonal competence (e.g., friendliness, approachability, dynamism). Instructors who employ transformational leadership in the classroom focus on individualized consideration where students are treated according to their individual needs and capabilities. Waldeck suggests that student perceptions of personalized education experiences are dependent on such considerations, which she labeled "courserelated practices." For instance, course related practices include designing course activities based on student interests and understanding that students have individual requirements that are unique from the rest of the class (Waldeck, 2007). Transformational leadership, then, may foster learning outcomes, participation, and teacher credibility because students perceive these educational practices as "personalized" through the individual consideration of each student.

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Furthermore, in college environments, a personalized educational experience may make a substantial difference because learning in this context is relationally driven (Frymier & Houser, 2000). Two of the components of transformational leadership are particularly important to this point. That is, teachers that are charismatic (e.g., dynamic, trusting, attractive, competent, and enlivening) and that show individualized consideration (e.g., are thoughtful and mentor students) should help students become excited about the information being presented. In addition, teachers that take the time to discover students' personal needs and attend to them both inside and outside of the classroom are likely to engender positive learning results in their classrooms (Brann et al., 2005; Myers & Bryant, 2004).

The items in the Bass (1985) scale may help illustrate why transformational leadership is so important in the classroom. Several items measure a leader's ability to foster admiration. For example, subordinates rate their leaders on a measure of being a model to follow, inspiring loyalty, and inspiring respect. In addition, several items measure a leader's ability to foster learning in the classroom. For example, items ask students to rate their teacher's ability to make people enthusiastic about assignments, transmit a sense of mission, encourage students to express ideas, and see what is important for students to consider. It is not surprising that the combination of cultivating admiration and promoting learning in the classroom is important in a university setting. Doing so represents a progressive approach to teaching which emphasizes the relationship between teachers and students.

A limitation of the current study is the sample size collected. Although we made efforts to gather student perceptions of a large sample of instructors, the sample size may limit the generalizability of the results. Moreover, data was collected at a single mid-size university on the East Coast. It may be the case that students from different geographic or cultural regions will respond to transformational teachers in a variety of ways. For example, while a charismatic teacher may be the biggest predictor influencing cognitive learning in a university on the East Coast of the United States, intellectual stimulation may be more important in another context.

To the point made above, Pounder (2008) notes that insufficient work has been done to examine how the results of transformational leadership (and the structural integrity of the scales used to measure it) can be replicated across cultural settings. That is, while it may be true that transformational leadership is valued in one culture, the same may not be true in other cultures. Interesting findings may be in store for scholars who choose to observe the effects of transformational leadership on university classroom learning outcomes in different cultural contexts.

Another possible fruitful direction for communication research is the investigation of the various ways in which instructors can communicate transformational leadership in the classroom. While we know that transformational leadership is linked to many positive outcomes in the classroom, it would be beneficial to also determine which instructor behaviors in class lead to student perceptions of teachers as transformational leaders. For example, Myers and Bryant (2004) conducted a study to determine what behaviors students perceived as related to credibility. In doing so the researchers were able to articulate specific behaviors that are linked to students' perceptions of trustworthiness, goodwill, and competence. The same could be done for transformational leadership. Instructional scholars should ascertain which instructional behaviors (e.g., teacher confirmation, teacher self-disclosure, relevance) promote transformational leadership in the classroom. Considering this research suggests that students do indeed perceive instructors as transformational leaders and report greater learning and participation along with perceptions of teacher credibility, instructional researchers would be welladvised to determine how to promote such leadership in the classroom and to examine this leadership across cultures.

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