Leadership Style and Student Satisfaction: Mediation of Teacher Effectiveness

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ABSTRACT— *Teacher leadership style, his/her teaching effectiveness, and student satisfaction are considered to be the key to enhancing effective teaching-learning experiences in educational setting. The purpose of this study was to examine the relationship between teacher leadership styles and student satisfaction, and investigate if teacher effectiveness mediated the relationship. One hundred thirteen graduate management students and 11 management teachers participated in the survey conducted in a business school in Kathmandu, Nepal. Results suggest that teacher's effectiveness is significantly predicted by teacher's transformational leadership style and is also a significant predictor of student satisfaction. Also, teacher effectiveness was found to partially mediate the relationship between teacher's transformational leadership and student satisfaction, with teacher's transformational style predicting student satisfaction. Limitations of the study are identified, important implications and future research issues are discussed.*

Keywords— Leadership styles, Teacher effectiveness, Student satisfaction

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1. INTRODUCTION

Over the past fifty years, a substantial body of research has advanced leadership and ill date, numerous leadership theories have been proposed and tested in thousands of empirical studies (Borgmann and Rowold, 2008). A few of them are tested in school and university settings (e.g., Kurland, Peretz, & Hertz-Lazarowitz, 2010; Sammons, Gu, Day, & Ko, 2011; York-Barr & Duke, 2004). According to York-Barr and Duke (2004) much effective school studies, over the past few decades have concentrated on examining the relationship between the leadership behavior of school principals and the enhancement of organizational performance. Northouse (2013), a prominent scholar in leadership literature opines leadership as a process that is distributed and performed by several people including the formal leader. This infers that leadership in educational setting is not confined to principals, but could also be the responsibility of others, one of them being teachers. In this regard, Richardson's (2003) study titled helping teachers participate competently in school leadership, supports that teacher leadership is becoming increasingly present and can contribute to produce environment that allow students to learn as much as possible.

It would be unfair to ignore the issues relating students in a study conducted in educational setting. No matter what style the teacher uses, and how well he/she teaches, if that will not result in positive outcomes for students, little value is added in teaching-learning process. This notion advocates that if teacher's leadership style is appropriate, it is likely that teaching will be effective which in turn may produce positive outcomes for students. As shown in studies by Harvey, Royal, and Stout (2003) as well as by Pounder (2003), effectiveness in leadership style resulted in increase in students satisfaction with teachers in addition to other outcomes.

Within leadership literature, research on leadership effectiveness has been the interest for many years resulting in numerous studies in the area (e.g., Aydin, Sarier, & Uysal, 2013; Sammons, et al., 2011). These scholars attribute leadership effectiveness as an important determinant of producing positive outcomes in the followers. Aydin, et al. (2013) mention these outcomes as organizational commitment and job satisfaction. Likewise, Sammons, et al. (2011) mention them as performance and improvement. When teachers are considered as leaders in classrooms as argued by Williams and Williams (2011), then their effectiveness like leadership effectiveness in organizations, are equally, if not more important to produce positive outcomes in the students. However, unlike leadership effectiveness that has received adequate attention in organizational studies, teacher effectiveness is a seriously overlooked facet in academic literature.

Despite teacher effectiveness being central and vital construct for teaching-learning process in educational setting, prior research has not systematically examined how teacher effectiveness affects the relationship between the teacher's leadership style and student's satisfaction. Thus, the purpose of this study was to examine the relationship between teacher leadership styles (transformational and transactional) and outcome for students (satisfaction) using teacher effectiveness as a mediator in this relationship. The study sought to:

1. Identify the degree to which graduate management teachers use transformational and transactional leadership styles.

2. Examine which leadership style (and dimension of the leadership styles) is best able to predict the satisfaction of graduate management students.

3. Investigate mediating effect of teacher effectiveness in the relationship between teacher leadership style and student satisfaction in a business school.

This study highlights the important role of teacher effectiveness in translating student satisfaction with the use of appropriate leadership style of teachers. With the focus on the relationships between teacher leadership styles and student satisfaction, this study hopes to contribute by offering insights on the framework that may encourage educational institutes to enhance better teaching-learning experiences. Additionally, this study is being conducted in a business School in Nepal, a relatively unexplored cultural setting in academic literature. Thereby, the finding of the study is expected to contribute to guide leadership practices more suitable to the cultural context of study.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1 Teachers as leaders

Traditionally, schools and colleges have been large, impersonal systems with decision making centralized at the highest levels. However, in today's era of dwindling resources, compelling student needs, and escalating performance expectations for students and institution alike, classroom teachers are confronted with new demands that challenge their traditional roles as educators (Bowman, 2004). This challenge according to the author, demands identity shift for teachers from productive contributors, working essentially behind closed classroom doors, to creators and sustainers of developmental culture for students and themselves. This new identity is as one of the most engaging transitions in teachers' professional lives according to Bowman (2004).

Studies on educational settings have noted teaching as the performance of a leadership role in a group. Norr and Crittenden (1975) evaluated college teaching as leadership in their study and claim that the number and content of dimensions found in descriptions and evaluations of both leadership and teaching are similar. The authors further mentioned that teaching, as an instance of leadership, is an interactive process involving teacher attributes and behavior, student characteristics, the physical and social setting, and the particular educational task. In support of previous studies, Delvin and Samarawickrema (2010) identified criteria of effective teaching in a changing higher educational context that are similar to dimensions of effective leadership. Furthermore, historical figures such as Socrates, Plato, Jesus, Moses, and Gandhi, to name but a few, have been most widely celebrated as teachers, have also been leaders.

In their study to summarize the findings of two decades on teacher leadership literature, York-Barr and Duke (2004) revealed that the teachers rightly and importantly hold a major position in the ways schools operate and in the core functions of teaching and learning. The authors conclude that educational improvement at the level of instruction, necessarily involves leadership by teachers in classrooms and because the teachers demonstrate high levels of instructional expertise, collaboration, reflection, and a sense of empowerment, they became leaders or, more accurately, are allowed by their peers to lead. In the same line, Richardson's (2003) study confirm that ability of a teacher to make a positive difference is closely associated students' motivation to put extra efforts and their satisfaction with the teacher. Interestingly, a teacher's behavioral attributes identified by these studies are similar to the attributes of a leader.

2.2 Transformational and transactional leadership

Transformational leadership theory was based on the recognition that people are motivated by instrumental motivation (Bass, 1990). According to the scholar, the theory describes two leadership patterns: transformational and transactional leadership. The former focuses on instilling belief in one's ability and on generating positive emotions. The latter grants followers rewards that satisfy immediate personal interest.

Northouse (2013), a renowned author of leadership theory and practices, highlight that the full range of model of leadership developed by Bass in later years comprises four interrelated dimensions: idealized influence (leader's ability to arouse devotion and involvement through personal dynamics such as self-confidence, ideological stance, and dramatic and emotional appeal); inspirational motivation (leader's ability to strengthen followers by raising their needs

perspectives and by providing opportunities for them to develop their capabilities); intellectual stimulation (leader's ability to support followers for creativity and self direction so that the followers are encouraged to challenge the status quo and take risks); and finally, individualized consideration (leader's ability to treat followers on a one-to one basis in order to elevate goals and develop skills of their followers).

The transactional leadership style is an exchange process based on the fulfillment of contractual obligations (Bass, 1990). Northouse (2013) highlighted that transactional leadership comprises two dimensions: contingent reward which is the exchange of appropriate rewards for meeting agreed-upon objectives; and management by exception which is systematically monitoring mistakes and deviations for standards and taking corrective action when mistakes occur.

There is a wealth of research in educational setting that has used transformational and transactional leadership styles. Such empirical research has consistently supported the argument that transformational style has significant add-on effects to transactional leadership in explaining motivation, satisfaction, and performance. Ross and Gary (2006) studied leadership and student achievement and reported substantial evidence of transformational as compared to transaction leadership being a stronger predictor of effective practices in Canadian schools. Similarly, Aydin, et al. (2013) examined the effect of leadership styles of school administrators and found that particularly, transformational leadership style affected job satisfaction and organizational commitment in a positive way. In the same line, study by Kurland, et al., (2010) demonstrated that principal's transformational leadership style as significant predictor of school learning in Israel.

2.3 Student satisfaction

Research on teaching effectiveness invariably run into the problem of evaluating the outcomes of teaching. Most obvious way is to look at student learning including measures of student achievement and performance (Sammons, et al., 2011). Some others have investigated the teacher personality, behavior, and effectiveness (Komarraju, Karau, Schmeck, & Avdic, 2011). However, if the motive is to identify student satisfaction, it may be difficult to come up with better measures than the students' own perceptions of their satisfaction. As McKeachie (1990) opines that not only can students provide data about the effects that teacher has had on them, but they also have an excellent opportunity to observe what the teacher does and what the course requires. Thus, student reports of teaching have commonly been used as a source of data, not only for research, but also to improve teaching and to evaluate teaching for personnel decisions.

Student satisfaction is an essential element that is a result of quality education that ensures learning optimization. To optimize students' learning, both teacher and student are expected to engage in effective teaching-learning process. Thomas and Galambos (2004) researched to identify what satisfies students. Their findings showed that student satisfaction is strongly related to student's reaction to faculty in classroom. Williams and Williams (2011) argue that very little, if any learning occurs if students are not motivated consistently. They suggested five ingredients for improving student motivation as: student, teacher, content, process, and environment. With respect to teacher, they opine that a teacher must be inspirational and be able to create a personalized and empowering environment to the students. Such exposure will optimize students' motivation for overall learning satisfaction. The attributes for teacher identified by Williams and Williams (2011) closely relate to transformational leadership dimension such as inspirational appeal and individualized consideration. Thus, it is assumed that a teacher's transformational leadership style would be instrumental in producing in better learning outcomes and greater satisfaction for students. Such assumption lead to the following hypothesis:

> **H1:** *Transformational leadership style of management teacher will be more positively related to graduate management student satisfaction than transactional leadership.*

2.4 Teacher effectiveness

For teaching-learning process to be effective, role of both teacher and student is equally significant. A teacher may exhibit the best style and provide all resources, however, that alone will not lead student satisfaction, if it is not effective to add value in learning experience. Effective teaching requires much more than the simple ability to disseminate information. According to Bolkan and Goodboy (2009), to be effective, teachers must be able to present their materials, effectively manage their classrooms, facilitate maximum student involvement, and ultimately enhance student learning.

A number of researchers (e.g., Harvey, et al., 2003; Pounder, 2003) have observed that organizational leadership is applicable in classrooms too where teachers' transformational style can positively influence students perceptions. In this regard, Pounder's (2003) study, conducted in a university setting in Hong Kong found that transformational teachers influence various outcomes for students; and hence, established a positive correlations between teacher leadership behaviors with students outcomes. Similarly, Harvey, et al., (2003) conducted study in a university setting among undergraduate students and discovered that increase in ratings of teachers' transformational leadership was associated with increase in student rating of their willingness to put extra efforts, their perceptions of teacher effectiveness, and their satisfaction with the teachers.

Prior research findings as highlighted above could infer that, given the matched leadership style of teachers and teaching approaches (teacher effectiveness), student might attain statistically higher satisfaction. This could also infer that students are more likely to perceive teaching effectiveness as a cornerstone of their learning satisfaction. However, previous research evidences directly linking the teacher leadership style, teaching effectiveness, and student satisfaction are not available to the knowledge of the researcher. This study assumed that teacher effectiveness acts as a mediator in the relationship. Such assumption lead to the following hypotheses:

H2: *Transformational leadership style of management teacher will be more positively related to teacher effectiveness than transactional leadership.*

H3: *Teacher effectiveness will mediate the relationship between management teachers' leadership styles and graduate management students' satisfaction.*
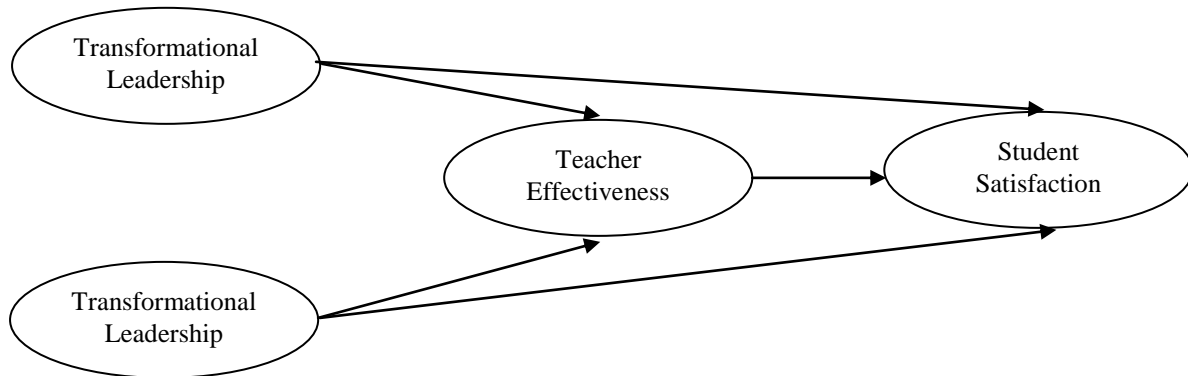
Figure 1: Conceptual Model

Conceptual model of this study is exhibited in Figure 1 above. Management teachers' leadership styles (transformational and transactional) are expected to affect graduate management students' satisfaction directly and indirectly through teacher effectiveness as a mediator. Three main hypotheses discussed in this section assume that teacher effectiveness mediates the relationships between transformational and transactional leadership styles and student satisfaction.

3. METHOD AND MATERIALS

The population for this study comprised of graduate management teachers and students in a business school in Kathmandu, Nepal. During the time of this study, there were 138 graduate level students studying 17 different courses under 23 management teachers. The sample consisted 113 students and 13 teachers for 11 courses offered during the time of survey. The teachers responded to a written questionnaire on transformational and transactional leadership styles and the students responded to a written questionnaire on teacher effectiveness and student satisfaction. The students and the teachers comprised the population of different age and sex.

Teacher leadership style was measured by an abridged version of Multifactor Leadership Questionnaire (MLQ-6S) developed by Bass and Avolio (1992, as cited in Kihara, Bwisa, & Kihoro, 2016). The tool is a five-point scale ranging from 1=not at all to 5=frequently if not always consisting of 21items. The shortened version consisted of 18 items excluding a non-leadership factor, the laissez-faire style. The 18 items included four dimensions of transformational leadership style (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) and two dimensions of transformational leadership style (contingent reward and management by exception). The reliability of transformational style was α=0.630 and that for transactional style was α=0.620. An example of transformational item (idealized influence) was "I make others feel good to be around me" and transactional item (contingent reward) was "I tell others what to do if they want to be rewarded for their work".

Teacher effectiveness was measured by four items based on Bass (1985, as cited in Krishnan, 2005) leadership and work unit effective scale. Respondents evaluated the effectiviness of their teachers on a scale ranging from 1= not effective to 5=extremely effective. The reliability of the scale was α=0.932. An example of an effectiveness item included, "How effective is your instructor in meeting the requirments of the course?"

Student satisfaction was measured using four items of satisfaction on a five-point scale ranging from 1=very dissatisfied to 5=very satisfied. Responses were collected from students for the teachers and courses offered during the time of survey. The reliability of the scale was α=0.884. An example of the satisfaction item included, "In all, I am satisfied with my instructor."

4. RESULTS

The sample consisted of 11 management teachers and 113 graduate management students of a business school. Average age of the teacher was 41 years. Among them, nine were male and two were female; and six were part time and five were full time teachers. Results showed that four teachers exhibited transformational style, six exhibited transactional style, while one exhibited equal on both styles. Both the female teachers showed transactional style. Average age of the students was 24 years, they were 51 percent male and 49 percent female.

Table 1: Descriptive statistics

Study Variables	Mean	Standard Deviation
Transformational Leadership Style	3.796	0.289
Idealized Influence	3.640	0.474
Inspirational Motivation	3.897	0.404
Intellectual Stimulation	3.605	0.369
Individualized Consideration	4.041	0.583
Transactional Leadership Style	3.975	0.352
Contingent Reward	3.891	0.481
Management by Exception	4.059	0.512
Teacher Effectiveness	3.339	0.983
Student Satisfaction	3.600	0.960

Note: N = 113; All scales are from 1 to 5

Means and standard deviations of the study variables are presented in Table 1. Higher mean of transactional leadership (M=3.975, SD=0.352) implied that the management teachers exhibited transactional styles more frequently than transformational style (M=3.796, SD=0.286). Slightly above average mean values of teacher effectiveness (M=3.339, SD=0.983) and student satisfaction M=3.60, SD=0.960) indicated that the graduate management students perceive their teachers to be effective and they are fairly satisfied than dissatisfied with their teachers.

Strengths and directions of relationship among the study variables were assessed through correlations (see Table 2). Results showed that correlations between leadership styles and student satisfaction were positive and statistically significant for both transformational (r=0.428, *p*=0.000) and transactional (r=0.253, *p*=0.007) styles. Correlations of leadership styles with teacher effectiveness showed significant result in case of transformational style (r=0.315, *p*=0.001) and insignificant result in case of transactional style (r=0.138, *p*=0.145). Similarly, correlation between teacher effectiveness and student satisfaction was also found to be positive and statistically significant (r=0.808, *p*=0.000).

Table 2: Correlation coefficients between study variables

Study Variables	TF	TS	TE
Transformational Leadership Style of management teacher (TF)	-		
Transactional Leadership Style of management teacher (TS)	0.348**	-	
Teacher Effectiveness of management teachers (TE)	0.315**	0.138	-
Student Satisfaction of graduate management students (SS)	0.428**	0.253**	0.808**

Notes: N = 113;   ** p < 0.01

To determine which leadership dimension of transformational style most contributed to student satisfaction, a multiple regression analysis was performed (see Table 3). Results identified individualized consideration (F=8.346, p=0.000) as the only dimension contributing significantly to student satisfaction. This result answered the second research question.

Table 3: Regression analysis for leadership dimensions and student satisfaction

Independent Variables	Standardized Coefficient β	Significance *p*-value
Idealized Influence	-0.059	0.634
Inspirational Motivation	0.126	0.255
Intellectual Stimulation	0.000	0.998
Individualized Consideration	0.455	0.000

Dependent Variable: Student Satisfaction

Table 4 presents the results of regression analyses following four steps suggested by Baron and Kenny (1986) to test for mediations relationship. Step 1 in this table tested hypothesis *H1*. The results indicated that transformational leadership style (*β*=0.383, *p*=0.000) positively affected student satisfaction but transactional style did not affect student satisfaction (*β*=0.119, *p*=0.195). R-square for the model was 0.195.

Hypothesis *H2* was tested by relating the independent variable (leadership styles) and the mediating variable (teacher

effectiveness). The results in step 2 indicated that the transformational style was positively related to teacher effectiveness (β=0.303, p=0.002). However, transaction style did not affect teacher effectiveness (β=0.032, p=0.739). R-square for the model was 0.100. To test hypothesis *H3* for full mediation, the relationship between the leadership style and student satisfaction must disappear when teacher effectiveness is included in the equation. However, if leadership style is still significant, the finding supports partial mediation. Teacher effectiveness and leadership style were simultaneously entered into the equations to test the mediation effect.

Table 4: Regression analysis testing mediation of teacher effectiveness

Independent Variables	Dependent Variables	
	Teacher Effectiveness β	Student Satisfaction β
Step 1		
Transformational Style		0.383**
Transactional Style		0.119
F		13.342**
R-square		0.195
Step 2		
Transformational Style	0.303**	
Transactional Style	0.032	
F	6.104**	
R-square	0.100	
Step 3 and 4		
Transformational Style		0.160**
Transactional Style		0.095
Teacher Effectiveness		0.744**
F		82.239**
R-square		0.694

Note: N = 113;   ** $p < 0.01$

The results in steps 3 and 4 indicated that the relationship between transformational leadership style and student satisfaction diminished in presence of teacher effectiveness (β=0.160, p=0.008), which mean that teacher effectiveness partially mediated the relationship between transformational leadership style and student satisfaction. According to Baron and Kenny (1986), reduction in relationship between the independent and dependent variables in the presence of mediator, while remaining significant, is an evidence of partial mediation. The relationship between teacher effectiveness and student satisfaction was statistically significant ($\beta = 0.744$, p =0.000). These results partially support *H3*. Since the relationship between transactional leadership style with student satisfaction and teacher effectiveness were both found to be insignificant, it was deemed not necessary to investigate the mediating effect considering transactional style.

5.   DISCUSSION

There were three objectives of this study: first, to identify the degree to which graduate management teachers use transformational and transactional leadership styles. Second, to examine which leadership style and dimension of leadership styles is best able to predict the satisfaction of graduate management students in the business school. And third, to investigate the mediating effect of teacher effectiveness in the relationship between teacher leadership style and student satisfaction. Overall, the present study explored the issues of the relationship between leadership, effectiveness, and satisfaction. The results demonstrate that teachers' effectiveness is significantly predicted by teachers' transformational leadership style and is also a significant predictor of student satisfaction. Moreover, teacher effectiveness was found to partially mediate the relationship between teachers' transformational leadership and student satisfaction, with teachers' transformational style predicting student satisfaction. These empirical results confirm that teacher effectiveness is considered to be stimulus for transformational teaching and a crucial component of learning satisfaction.

This study found a mix of both transformational and transactional styles among management teachers, though majority exhibited transactional style, the frequency at which the teachers practiced either of leadership styles was "fairly often". At the dimension level, the study indicates that graduate management students prefer teachers who engage in transformational behaviors associated with individualized consideration. This is consistence with the previous research (e.g., Bass, 1990) about individualized consideration and followers' satisfaction which reported that overall satisfaction of group members is enhanced when their leaders show that they care by demonstrating their consideration for their individual subordinates. Also, according to Bass (1990), individualized consideration is consistently and highly correlated with subjective and objective measures of the leader's effectiveness.

Northouse (2013) noted that individualized consideration is associated with leaders who treat subordinates different according to their individual needs and capabilities. Waldeck (2007) discovered that when students believe their education is personalized, they report greater learning outcomes and satisfaction. Furthermore, Bolkan and Goodboy (2009) emphasize that teacher who employ transformational leadership in classroom; focus on individualized consideration where students are treated according to their individual needs and capabilities. According to these authors, such teachers are effective to foster learning outcomes because students perceive such learning as personalized through the individual consideration of each student.

The outcome of the study showing positive relationship between transformational leadership style and teacher effectiveness, supports the hypothesis and confirms leadership theories that consider effectiveness depends on the type of style a leader uses (Northouse, 2013). Further, it supports the literature that considers being effective in teaching is important for teachers as leaders (Bowman, 2004). This finding is also in line with Aydin et al., (2013) claim that transformational leadership leads to effective learning environment in educational setting.

The result of the study demonstrates that teachers' transformational style positively affects students' satisfaction. This result is consistent with previous finding, showing that the role of transformational leadership is crucial in cultivating positive outcomes for followers (Krishnan, 2005). Students appreciate teachers who give them personal attention, encourage them to look at problems in a new way, and engage in shared learning (Bowman, 2004). Findings of this study also presented the same pattern of relationship between transformational leadership style with outcome variable. It appears that students' perceptions of transformational behaviors as having important consequences for their involvement in learning process. Previous studies have consistently shown that transformational leadership has significant effects on follower outcomes (e.g., Kurland, et al., 2010; Ross & Gary, 2006). Here, the highlight is on transformational leadership and its effectiveness to increase positive outcomes as satisfaction for students. Teachers of good business schools actively promote effective learning environment by playing a key role in creating and providing conditions for students to learn best.

The results also indicate that teachers' transactional leadership style has no effect on their teaching effectiveness and student satisfaction. One possible explanation is that teachers' transactional style, which is basically grounded in using conventional rewards and penalties to gain compliance from followers (Northouse, 2013), does not encourage students to engage in learning. Moreover, reward or punishment, contingent on performance through transactional leadership is insufficient to motivate students leading to their dissatisfaction.

Finally, the findings of this study demonstrate that teacher effectiveness functions as a partial mediator between transformational teacher's leadership style and student satisfaction. This means that transformational teachers have the ability to be effective to enhance positive outcome for students. This empirical result supports the assertion that the ability of leaders to be effective appears to be crucial to enhance followers' satisfaction (Aydin, et al., 2013). This study's findings imply that graduate management students will be more satisfied in learning process when their teachers are effective to inspire as well as create idealized influence, motivate, intellectually stimulate, and more importantly, pay attention to their individual concerns and needs.

6. LIMITATION, IMPLICATIONS AND DIRECTION FOR FUTURE RESEARCH

There are several limitations in this study. Leadership style questionnaire was self-rated by the graduate management teachers that may lead to rater bias. A more common practice is to rate by the followers (students). This study used only student satisfaction as the outcome variable, which limits the possibility of comparing the results with other possible outcomes. Although efforts was made to collect perceptions of all graduate management students, the sample collected from a single business school may still limit the generability of the results.

Despite various limitations, the results of this study are still reliable and can provide several important theoretical and practical implications. This study provides an empirical support to claim that transformational leadership styles of management teachers affect their own effectiveness as well as satisfaction of graduate management students in a business school. This confirms teacher's transformational style to be used as a predictor of his/her effective teaching and student satisfaction in an educational setting. This also implies that for better learning environment, business schools need to engage more teachers with transformational styles who can give individualized considerations to their students. Yet, another implication relates to improving teacher-student relationships. Teachers can be trained and developed for transformational leadership enhancing to treat students more on one-to one basis in order to elevate their goals and develop their skills. As shown by this study, such relationship would promote more satisfied students.

Results of this study direct a number of avenues for future research. Examining the proposed relationships across varied cultural and geographic settings may unfold possible interesting findings. Investigating leadership styles from students' perspectives might be another fruitful direction for future research. Considering more outcome variables such as student's effort, commitment, and academic performance may be of interest in the educational setting studies. Also,

efforts to investigate other potential mediators of relationships between teacher's leadership styles and outcomes for students would shed more light on the specifics of these relationships. A few probable variables for investigating mediator effects would include personality traits, self-efficacy, and group work.

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