



Investigating the Effect of Transformational Leadership In Mutual Fund Accounting and Administration

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Abstract

Mutual fund accounting firms are experiencing rapid change through the deployment of increased automation and artificial intelligence. Such an environment is an ideal playground for transformational leaders. This study investigated how the transformational leadership of midlevel managers influenced subordinates at a Mutual Fund Accounting and Administration division. The Leadership Practices Inventory was used to investigate how five components of transformational leadership were related to subordinates' job satisfaction, organizational commitment, and productivity. A partial least squares path modeling analysis was conducted. The results suggest that enabling others to act is significantly associated with subordinates' job satisfaction. Inspiring a shared vision is significantly associated with subordinates' organizational commitment. And modeling the way and inspiring a shared vision are associated with subordinates' productivity. This research provides empirical evidence to support the continued use of the Leadership Practices Inventory in future academic research and in transformational leadership training programs for practitioners.

Keywords: Transformational leader, leadership, Leadership Practices Inventory, LPI, organizational commitment, job satisfaction, productivity, mutual fund accounting

1 Introduction

Transformational leadership practices are most effective in organizations undergoing rapid change (Bass & Bass, 2008; Kouzes & Posner, 2017) because of its emphasis on organizational growth (Smith, Montagno, Kuzmenko, 2004). Organizations across a variety of industries are facing increasing levels of rapid change. According to one study, by McKiney & Company, between 400 and 800 million workers will have to acquire new skills and switch to new jobs by 2030 due to increased use of artificial intelligence (AI) and automation (Manyika et al., 2017). That's a lot of change! The accounting industry is no exception (Gass, 2018; Marr, 2018; Appatura, 2017). Accounting firms will need to hire or train increasing numbers of managers who can use transformational leadership practices in order to handle the tidal wave of change that is already underway. However, there is little extant literature dealing with transformational leadership at *Mutual Fund Accounting and Administration* (Fund Accounting) firms in the United States. These are organizations that perform the accounting functions and regulatory filings for mutual fund clients, which are registered investment companies. This study contributes to the scholarly literature supporting the use of transformational leadership within accounting firms.

There are several instruments available to measure the use of transformational leadership practices. The Multifactor Leadership Questionnaire (MLQ; Bass, & Avolio, 1990; 1997) is the most widely used instrument in academic research. The Leadership Practices Inventory (LPI; Posner, & Kouzes, 1988) is currently the second most widely used instrument in academic research. This is followed by the Transformational Leadership Questionnaire (TLQ, Alban-Metcalfe, & Alimo-Metcalfe, 2000; Alimo-Metcalfe, & Alban-Metcalfe, 2001). Then, the Global Transformational Leadership scale (GTL; Carless, Wearing, & Mann, 2000), the Leadership Behavior Questionnaire (LBQ; Sashkin, 1996), the Transformational Leadership Behavior Inventory (TLI; Podsakoff, Mackenzie, Moorman, & Fetter, 1990), the Campbell Leadership Index (CLI; Campbell, 1991), the Leadership Assessment Inventory (LAI; Burke, 1994), the Follower Belief Questionnaire (Behling, & McFillen, 1996), the Attributes of Leader Behavior Questionnaire (Behling, & McFillen, 1996), and the Executive Profile Survey (EPS; Lang, & Krug, 1983).

The results of this study were meant to inform leadership at corporate headquarters on the effectiveness of using transformational leadership at one of their Fund Accounting divisions. For this reason, we selected the Leadership Practices Inventory (LPI) developed by Posner and Kouzes (1988). The LPI is commonly used by practitioners (Bass & Riggio, 2006, Posner, 2016).

However, use of the LPI in academic research has been steadily increasing over the years. A search of "Leadership Practices Inventory" on Google

Scholar (include the quotes) yields thousands of research papers, and a search on ProQuest lists thousands of dissertations that used the LPI instrument. Additionally, the LPI is significantly correlated with the MLQ (Carless, Wearing, & Mann, 2000; Chen, & Barron, 2007). Our findings support the validity and reliability of the LPI suggesting that its use by both academics and practitioners should continue.

2. Theoretical Background

Transformational leaders can digest and handle complexity, ambiguity, and uncertainty (Tichy & Devanna, 1986). Transformational leadership is a catalyst for getting extraordinary things done in an organization (Kouzes & Posner, 2017). Bernard Bass (1985) summed up a *transformational leader* as “one who motivates us to do more than we originally expected to do” (p. 20). Whereas *Transactional leaders* use a carrot and stick method (Burns, 2003) to tap into lower order needs (Herzberg, 1968). They may also use coercion if a quid pro quo arrangement fails to properly motivate extrinsically. Transformational leaders tap into higher order needs (Herzberg, 1968) to intrinsically motivate using certain behaviors.

2.1 Transformational Leadership and the Leadership Practices Inventory

To ascertain these behaviors, Kouzes and Posner (2017) asked exceptional leaders a single question, “What did you do when you were at your personal best as a leader?” (p. xii). They found that leaders reported using five practices when they were at their personal best. These leaders Modeled the Way, Inspired a Shared Vision, Challenged the Process, Enabled Others to Act, and they Encouraged the Heart. These five practices together form a construct of transformational leadership behavior (Kouzes & Posner, 2017).

2.1.1 Model the Way

A leader with charisma inspires followers to identify with and copy him or her (Bass & Riggio, 2006). That is why it is imperative for a transformational leader to know himself or herself explicitly. They must be sure about their own personal values and beliefs (Tichy & Devanna, 1986). When times of high stress or crises occur, a leader who truly knows himself or herself is more likely to remain true to their personal values and beliefs despite the circumstances. Because of this consistency, leaders become role models for constituents by acting the way they expect others around them to act. Constituents are transformed as they internalize the values and beliefs modeled for them and then act accordingly (Kouzes, & Posner, 2017).

2.1.2 Inspire a Shared Vision

Transformational leaders align the objectives and goals of constituents, groups, teams, leaders, and the overall organization; they inspire followers to commit to a shared vision (Bass & Riggio, 2006). They are visionaries who can articulate dreams and images in a way that allows other people to share them (Tichy & Devanna, 1986). They imagine an achievable and exciting dream about the future of their organization. They are confident in their ability to explain their dream to constituents and in their ability to inspire others to make the dream come true. They inspire passion in others

by appealing to the shared ambitions of their constituents. Constituents are transformed as they discover unity in purpose. Then, they passionately pursue the organization’s shared vision (Kouzes, & Posner, 2017).

2.1.3 Challenge the Process

Transformational leaders challenge followers to develop their own leadership skills encouraging them to become creative problem solvers. They intellectually stimulate constituents to broaden their abilities (Bass & Riggio, 2006). Transformational leaders self-identify as change agents (Tichy & Devanna, 1986). They question the status quo. They are open to different possibilities and to the ideas of others. They can recognize good ideas and do not need the ideas to be their own. They allow for experimentation, which may end in failure but also in learning (Kouzes, & Posner, 2017). They are courageous calculated risk takers (Tichy & Devanna, 1986). They are always searching the business horizon for new opportunities to pursue. Constituents are transformed as they become more open to change and new ways of doing things. They become unstuck from the way things have always been and actively participate in the search for better ways of doing things and for new opportunities (Kouzes, & Posner, 2017).

2.1.4 Enable Others to Act

Transformational leaders are considerate of constituents at an individual level. They offer their followers individual support, coaching and mentoring (Bass & Riggio, 2006). They empower others to make decisions, build relationships, foster trust, and encourage team efforts. They develop competence in others by providing autonomy. They engage with constituents and get to know them. They trust people to do their job independently (Kouzes, & Posner, 2017). Transformational leaders believe in the abilities of other people and therefore empower them (Tichy & Devanna, 1986). They are transparent with constituents about what is going on and what is expected to happen in the future. They encourage participation, collaboration, and group decision making. Constituents are transformed when they realize that their ideas will be heard and when they realize that their opinions matter. They grow as they become more competent and independent over time through decision making and learning, which enables them to make good decisions on their own with confidence (Kouzes, & Posner, 2017).

2.1.5 Encourage the Heart

Transformational leaders listen to their constituents carefully and remember past conversations (Bass & Riggio, 2006). They recognize the contributions of their constituents and celebrate accomplishments with a personal touch that is only possible through relationship building. They show appreciation for individuals and teams through recognition and by creating a community feeling. Constituents are transformed when they feel, recognized, and appreciated for their contributions and when they feel part of a community at the organization (Kouzes, & Posner, 2017).

Transformational leaders transform the hearts and minds of constituents so that they can in turn take personal responsibility for the transformation of their organization (Burns, 2003; Tichy & Devanna, 1986). Leadership theory claims that using a transformational leadership style will result in more positive organizational outcomes (Bass & Riggio, 2006; Kouzes & Posner, 2017; Tichy & Devanna, 1986)

3. Hypotheses

Transformational leadership theorists claim a long list of benefits from the use of transformational leadership. Tichy and Devanna (1986) explained that transformed organizations will experience increased operating efficiency and competitiveness as they are revitalized by transforming leaders. Kouses and Posner (2017) asserted the following would result: higher performing teams, increased sales, increased customer satisfaction, renewed loyalty, greater organizational commitment, enhanced motivation, increased retention, reduced absenteeism, lower turnover rates, and a willingness to work hard. Bass and Riggio (2006) contended that employees would experience strong involvement, loyalty, satisfaction, less stress, higher sales, more goal attainment, commitment to their organization, and increased productivity.

Management at the firm where our study took place was concerned with the amount of time employees would spend answering our questionnaire. To limit the amount of time respondents would need to complete our survey, we limited our study to three organizational outcomes: organizational commitment, job satisfaction, and productivity.

3.1 Organizational Commitment

Burns (2003) explained that “creative [transforming] leadership sparks an evolution in followers toward committed, empowered participation in the struggle for meaningful change” (p. 224). Kouzes and Posner (2017) think that practicing the five leadership components, which form the construct of their transformational leadership theory, will foster “greater organizational commitment” (p. 22). Transformational leadership behaviors influence the commitment of organizational members most strongly toward the leader and the organization through affective commitment (Bass & Riggio, 2006; Bycio, Hackett, & Allen, 1995). Jaros, Jermier, Koehler, & Sincich (1993) described affective commitment as “...the degree to which an individual is psychologically attracted to an employing organization through feelings such as loyalty, affection, warmth, belongingness, fondness, pleasure, and so on” (p.954). Meyer & Allen (1991) defined affective commitment as an organizational member’s emotional attachment, identification, and involvement with an organization. Our review of the transformational leadership literature has led us to think the use of Posner and Kouzes’ (1988) five components of transformational leadership will increase the organizational commitment of employees at accounting firms. In other words, we expect the combined five transformational leadership components to be positively related to the organizational commitment of employees within the Fund Accounting division.

Hypothesis 1: The combined five components of transformational leadership are positively related to the organizational commitment of Fund Accounting employees.

3.2 Job Satisfaction

Transformational leadership behaviors such as gaining follower trust, empowering followers which increases self-efficacy, and creating a heightened positive affective atmosphere at the organization result in increased job satisfaction for organizational members (Bass & Riggio, 2006). Other

researchers found significance between Posner and Kouzes’ (1988) combined five components of transformational leadership and job satisfaction. For example, in critical care nursing (Moneke & Umeh, 2013) and in hospitality management (Emmanuel & Hassan, 2015). Based on the literature, we think using the five transformational leadership components will increase the job satisfaction of accountants. In other words, the combined five components will have a positive relationship with the job satisfaction of employees within the Fund Accounting division.

Hypothesis 2: The combined five components of transformational leadership are positively related to the job satisfaction of Fund Accounting employees.

3.3 Productivity

Bass (1985) said that transformational leaders would inspire individuals to higher levels of productivity. Kouzes and Posner (2017) stated that transformational leaders “enhance motivation and the willingness to work hard” (p. 22). Therefore, we speculate that the five components of transformational leadership will increase the productivity of employees at accounting firms. That is, the combined five components will have a positive relationship with the productivity of employees within the Fund Accounting division.

Hypothesis 3: The combined five components of transformational leadership are positively related to the productivity of Fund Accounting employees.

4. Method

The firm was undergoing a series of changes which included increased use of automation and AI and offshoring within the division where this survey took place; layoffs were anticipated. Additionally, management was concerned about the amount of time employees would spend answering the researcher’s questions. Therefore, a cross-sectional survey design was chosen to study the organization at a particular point in time. This study utilized direct data collection from participants using Likert scale survey instruments and a demographics questionnaire. This design was also selected because it was useful for describing the firm which the researchers thought would be more appealing to leadership at the firm.

4.1 Setting

This study took place at a U.S. Fund Accounting division on the East Coast, which was part of a larger global firm. Leadership at the firm openly used transformational leadership and supported corporate training programs for mid-level Group Managers on the use of transformational leadership practices. This made the division an ideal setting for investigating the effect of transformational leadership on Fund Accounting employees. However, leadership wished to keep the organization anonymous. They were also concerned about any disruption to productivity that might occur as a result of our collecting data. Therefore, we respectfully attempted to keep our questionnaire as brief as possible while attempting to achieve meaningful result

4.2 Sample

Transformational leadership theorists argue that transformational leadership practices may be used by any individual and at any level of hierarchy within an organization (Bass, 1985; Kouzes & Posner, 2017). For our study, we focused on the transformational leadership of midlevel management. We surveyed the constituents of all 25 Group Managers at the division. Our nonrandom sample included all 399 constituents who worked at the site for the 25 Group Managers. All constituents were over age 18 and were employed full-time at the division.

4.3 Independent Variables and Measures

The five components of Posner and Kouzes' (1988) transformational leadership construct were the independent variables: *Model the Way*, *Inspire a Shared Vision*, *Challenge the Process*, *Enable Others to Act*, and *Encourage the Heart*. The Leadership Practices Inventory for Observer (LPI-Observer) survey was used to measure constituents' perceived use of their Group Manager's transformational leadership practices. There were six 10-point Likert scale questions for each of the transformational leadership practices (1 = *almost never* to 10 = *almost always*); the LPI-Observer may not be shared in the public domain. The instrument exhibits good convergent validity, discriminant validity (Posner, & Kouzes, 1993), and internal consistency reliability with an average Cronbach alpha of .89 (Posner, 2016).

4.4 Dependent Variables and Measures

4.4.1 Organizational Commitment

Mowday, Steers, and Porter's (1979) Organizational Commitment Questionnaire was selected to measure constituents' level of organizational commitment. Mowday et al. (1979) operationalized organizational commitment "as the relative strength of an individual's identification with and involvement in a particular organization" (p. 226). The measure was comprised of 15 questions that were placed on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*): "I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful." "I talk up this organization to my friends as a great organization to work for." "I feel very little loyalty to this organization. (R)" "I would accept almost any type of job assignment in order to keep working for this organization." "I find my values and the organization's values are very similar." "I am proud to tell others that I am part of this organization." "I could just as well be working for a different organization as long as the type of work was similar. (R)" "This organization really inspires the very best in me in the way of job performance." "It would take very little change in my present circumstances to cause me to leave this organization. (R)" "I am extremely glad that I chose this organization to work for over the others I was considering at the time I joined." "There's not too much to be gained by sticking with this organization indefinitely. (R)" "Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. (R)" "I really care about the fate of this organization." "For me this is the best of all possible organizations for which to work." "Deciding to work for this organization was a definite mistake on my part. (R)".

The "(R)" denotes a necessity to reverse score the respondents' answers. The instrument exhibited test-retest reliability, convergent validity, discriminant validity, predictive validity, and internal consistent reliability with a median Cronbach alpha of .90 (Mowday et al., 1979). It is commonly used in academic research.

4.4.2 Job Satisfaction

Guy, Newman, and Mastracci (2008) developed their GNM Emotional Labor Questionnaire based on a review of the scholarly literature. We borrowed the five questions related to job satisfaction utilizing a 5-point Likert scale (1 = *strongly disagree* to 10 = *strongly agree*): "My performance appraisal accurately reflects how effective I am in my job." "My work is satisfying." "My job provides career development opportunities." "There is a lot of variety in the kinds of things I do." "I keep learning new things in my position." The instrument exhibited convergent validity, content validity (Guy & Lee, 2015), and internal consistency reliability, with a .79 Cronbach alpha (Guy et al., 2008). We operationalized job satisfaction as work that provides variety, learning, career development, and accurate performance appraisals (Guy et al., 2008).

4.4.3 Productivity

Employees in the Fund Accounting division were completing highly specialized knowledge work, which varied greatly between individual workers. Using a variety of measures to assess knowledge worker productivity has been recommended by researchers (Belcher, 1987) such as peer evaluations (Davenport, 2005), customer satisfaction, growth, profits, absenteeism, and employee appraisals (Lowe, 2010). However, management at the firm did not want to provide any information that was nonpublic for this study. Therefore, we used a self-assessment productivity questionnaire developed by McNesee-Smith (1991). The instrument was designed to measure the productivity of nurses, so verbiage related to nursing was removed in order to make the questionnaire more generalizable. There were 15 questions on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*): The instrument exhibited test-retest reliability and internal consistency reliability with an average Cronbach alpha of .92 (McNeese-Smith, 1995). McNesee-Smith (2001) operationalized productivity as "the contribution toward an organizational end result in relation to resources consumed" (p. 7).

4.5 Demographic Questionnaire

We included a demographic questionnaire to test for possible moderating effects. Respondents were asked to identify their current position at the firm, how many years they worked at the firm, their gender, age, and highest degree earned.

4-6 Analysis

Survey data was obtained from 251 constituents at the firm (63%). The leader surveys are not included in our analysis or results. The descriptive statistics, including mean, standard deviation, Cronbach alpha values, and a correlation matrix are provided in Table 1. The Cronbach alphas of all variables were in the range of 0.716 to 0.938, indicating satisfactory internal consistency of the measurement. A correlation matrix is also provided

in Table 1. The dataset was analyzed using linear regression to assess the relationships between the independent variables and the dependent variables.

The analysis was conducted in R statistical software package 3.5.2 with the Partial Least Squares Path Modeling (PLS-PM) package (Hanafi, 2007; Sanchez, 2013). PLS-PM is a statistical method for analyzing complex multivariate relationships among observed and latent variables. As a path analysis method rooted in regression, PLS-PM is different from many popular covariance-based structure equation modeling (SEM) methods offered in commercial software, such as LISREL, AMOS, M-Plus, etc. (Sanchez, 2013). The purpose of PLS-PM is more focused on predicting key target constructs, compared to SEM methods which target more at maximizing model fitness (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018; Hair, Sarstedt, Ringle, & Mena, 2012). Thus, PLS-PM is more suitable for exploratory studies, analysis of small-sized samples, and analyses that do not emphasize model fitness (Sanchez, 2013).

4.7 Result

The regression analysis results are presented in Table 2. The variance inflation factor (VIF) was examined (Table 2) to test the extent to which multi-collinearity among the independent variables might discount the result of regression analysis. A common rule of thumb is that a VIF less than 10 indicates acceptable tolerance against multi-collinearity (Besley, Kuh, & Welsch, 1980; O'Brien, 2007; Pearson, 2010).

Hypothesis 1 stated that the combined five components of transformational leadership will be positively related to (will increase) the organizational commitment of Fund Accounting employees. Table 2 shows the five components explained 39% of the variability in job satisfaction and is significant ($p < .001$). Therefore, Hypotheses 1 is supported.

Hypothesis 2 stated that the combined five components of transformational leadership will be positively related to the job satisfaction of Fund Accounting employees. Table 2 shows 23% of the variability in organizational commitment is explained by the combined components and is significant ($p < .001$). Therefore, Hypothesis 2 is supported.

Hypothesis 3 stated that the combined five components of transformational leadership are positively related to the productivity of Fund Accounting employees. Table 2 shows 10% of the variability in productivity is explained by the combined components of Posner and Kouzes (1988) transformational leadership practices and is significant ($p < .001$). Therefore, Hypothesis 3 is also supported.

These findings are in line with the results of other studies. McNessee-Smith (1991) reported 13% of the variability in organizational commitment, 9% of the variability in job satisfaction, and 5% of the variability in productivity could be explained by use of the five combined leadership practices at two hospitals in Seattle, Washington. Chiok Foong Loke (2001) reported 29% of the variability in job satisfaction, 22% of the variability in organizational commitment, and 9% of the variability in productivity could be explained by use of the five combined leadership practices at a hospital in Singapore. John (2006) reported 30% of the variability in organizational commitment, 24% of the variability in job satisfaction, and 6% of the variability in productivity could be explained by use of the five combined leadership practices at a private for-profit university in the western region of the U.S.

Additionally, among the five components of transformational leadership, the results in Table 2 showed Enabling Others to Act is positively and significantly associated with constituents' job satisfaction ($\beta = .15, p < .001$). Therefore, if the average leader rating for Enabling Others to Act is increased by 1 point by constituents, then the constituents' average job satisfaction will increase by .15% (assuming all other independent variables are held constant).

Inspiring a Shared Vision was significantly associated with constituents' organizational commitment ($\beta = .15, p < .001$) and productivity ($\beta = .09, p < .01$). This indicates that if the average leader rating for Inspiring a Shared Vision is increased by 1 point by constituents, then the constituents' average organizational commitment score will increase by .15% (assuming all other independent variables are held constant). Likewise, if the average leader rating for Inspiring a Shared Vision is increased by 1 point by constituents, then the constituents' average productivity will increase by .09% (assuming all other independent variables are held constant).

Modeling the Way was negatively and significantly associated with constituents' productivity ($\beta = -.08, p < .05$). This indicates that if the average leader rating for Modeling the Way is increased by 1 point by constituents, then the constituents' average productivity score will decrease by .08% (assuming all other independent variables are held constant). We did not find a significant relationship between any of the demographics with the independent or dependent variables.

5. Discussion

5.1 Theoretical Implications

Our study provides further evidence to support the claims made by transformational leadership theorists that transformational leadership practices impact the organizational commitment, job satisfaction, and productivity of constituents. Additionally, the literature shows that visionary behavior is the one practice held in common by all of the charismatic, transformational, and visionary theories of leadership (House, & Shamir, 1993). Our study provides additional support that visioning is important to successful organizational outcomes.

When it comes to job satisfaction, a person can report being satisfied and not be productive. However, productive people are also satisfied (Locke, 1976). In other words, satisfaction does not cause productivity, but productivity leads to satisfaction. This helps to explain why job satisfaction is impacted more by transformational leadership practices than productivity. We believe that both transformational leadership practices and employee productivity are impacting job satisfaction. Future research should investigate this possibility further. Additionally, according to Bass & Riggio (2006) satisfaction at work and organizational commitment are concomitants. Based on this belief, we expected job satisfaction and organizational commitment to be similarly affected by transformational leadership. However, based on our findings, we suspect people who are committed to the organization may be inclined to report they are satisfied with their job, but people satisfied with their job may not always be committed to the organization. Future research should investigate this possibility further.

We were surprised to see that a leader who increases their use of the Model the Way practice will lower constituent productivity. However, we think this is because autonomy may be stifled by a leader who is too often

present to Model the Way as this may serve to lower the self-confidence of constituents. Constituents may perceive too much Modeling the Way as micromanagement. It may be perceived as management by walking around, a style more effective for transactional managers than for transformational leaders.

Finally, our study provides empirical evidence in support of the continued use of the LPI in academic research and for practitioner use. Additionally, Posner and Kouzes (1993) confirmatory factor analysis (CFA) for the LPI indicates the existence of five transformational leadership practices. This contradicts the findings of Avolio, Bass, and Jung (1999) who's CFA on the Multifactor Leadership Questionnaire indicated there were only three factors of transformational leadership: idealized influence, intellectual stimulation, and individualized consideration. Although, they argued that the idealized influence factor should be split into two components (idealized influence – attributed charisma and idealized influence – behaviors) to foster greater understanding of transformational leader charisma and for manager training purposes (Bass, & Riggio, 2006) despite exhibiting weak discriminant validity (Avolio, et al., 1999) from a purely research perspective, rather than from a practitioner perspective. Future research should investigate the possibility that the transformational leadership component of the Full Range of Leadership Model (Bass & Riggio, 2006) may need to be updated to include five distinct transformational leadership practices, rather than the four factors described by Bass & Riggio (2006), which is arguably only three factors as previously stated. Respectfully, this would seem to be in line with Bernard Bass and Ronald Riggio's (2006) thinking when they wrote that "the ready availability of the MLQ, coupled with a bit of a bandwagon effect, may have somewhat stifled the development of other measures of transformational leadership..." (p. 27). "As research on transformational leadership continues, it will be advantageous to use multiple methods for assessing the construct" (Bass, & Riggio, 2006, p. 31).

5.2 Practical Implications

As pointed out by Bass and Riggio (2006) and by Kouzes and Posner (2017) organizations should encourage the use of transformational leadership to make extraordinary things happen in organizations. This is particularly true for organizations going through or expecting large amounts of change to occur. Our study provides further empirical evidence that transformational leadership practices by mid-level Group Managers does impact the organizational commitment, job satisfaction, and productivity of constituents at organizations. We recommend that the firm where our study took place, as well as other organizations expecting substantial change, institute human resource policies to encourage the use of transformational leadership. This should include a training program to help individuals learn how to effectively use the five practices developed by Kouzes and Posner.

5.3 Limitations

We did not attempt to explain fully what impacts organizational commitment, job satisfaction, or productivity. Future research should aim to include additional factors to explain those outcomes more fully. For example, the effect of other types of leadership, such as transactional leadership, were not investigated in this study, these may also influence organizational outcomes. Therefore, future studies should include a broader range of leadership styles.

For our research, we relied on a self-evaluating survey to measure productivity. Although that decision was heavily influenced by management at the organization, future research studies should attempt to include other types of measures, such as employee evaluations, attendance records, customer satisfaction, etc., to reduce bias.

Finally, to strengthen the argument for using transformational leadership practices we believe a longitudinal study, before and after transformational leadership training, which measures organizational commitment, job satisfaction, and productivity, would be more convincing. Future research should focus on showing the impact of employee perception of leadership behaviors and organizational outcomes before and after transformational leadership training.

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Table 1
Descriptive Statistics

Variable	Rating		Cronbach
Independent	Mean	SD	Alpha
1 Model the Way	6.36	2.60	0.88
2 Inspire a Shared Vision	6.17	2.63	0.91
3 Challenge the Process	6.89	2.53	0.90
4 Encourage the Heart	6.39	2.77	0.94
5 Enable Others to Act	7.19	2.30	0.83
Dependent			
6 Job Satisfaction	3.46	0.78	0.80
7 Organizational Commitment	3.44	0.72	0.72
8 Productivity	4.34	0.50	0.9

Table 1 (continued)

	1	2	3	4	5	6	7
2 Inspire a Shared Vision	0.90						
3 Challenge the Process	0.86	0.89					
4 Encourage the heart	0.88	0.85	0.84				
5 Enable Others to Act	0.85	0.82	0.88	0.83			
6 Job Satisfaction	0.56	0.58	0.57	0.55	0.61		
7 Organizational Commitment	0.42	0.46	0.39	0.37	0.41	0.61	
8 Productivity	0.19	0.27	0.24	0.20	0.25	0.37	0.39

Note: N = 251. All correlations are significant at $p < .01$, two-tailed tests.

Table 2
Regression Analysis

	Job Satisfaction				Organizational Commitment				Productivity				VIF
	Weight	SE	t	p-value	Weight	SE	t	p-value	Weight	SE	t	p-value	
Model the Way	-0.01	0.04	-0.25	0.806	0.02	0.04	0.36	0.716	-0.08	0.03	-2.30	0.022	7.88
Inspire a Shared Vision	0.08	0.04	1.96	0.051	0.15	0.04	3.50	0.000	0.09	0.03	0.00	0.004	7.37
Challenge the Process	-0.01	0.04	-0.29	0.775	-0.06	0.04	-1.41	0.160	-0.01	0.03	0.88	0.880	6.87
Encourage the heart	0.00	0.03	0.06	0.950	-0.04	0.03	-1.18	0.239	-0.01	0.03	0.66	0.662	5.43
Enable Others to Act	0.15	0.04	3.95	0.000	0.07	0.04	1.81	0.071	0.06	0.03	0.06	0.061	5.20
R-square				0.391				0.227				0.103	
Model p-value				0.000				0.000				0.000	