The impact of transformational leadership on team performance and satisfaction: the mediating role of trust

Ligia PETAN¹

Abstract. Much of the research in leadership focuses on investigating the types of leader behaviors that determine positive follower outcomes. Due to the increasing global dimensions of today's business practice and the growing collaboration between employees based in branches from companies around the world, it has become more important than ever to understand which leadership styles are most appropriate in determining positive follower outcomes. In the search for potential determinants of positive team outcomes, transformational leadership and trust have emerged as two important factors. According to Bass (1985), transformational leadership motivates followers by making them more aware of the importance of task outcomes, determining followers to transcend their own self-interest for the sake of the organization or team, and through activating follower higher order needs. Leaders with transformational leadership style characteristics are supportive, encouraging, and able to provide the necessary help in the face of obstacles and hardships. In addition, when employees trust their leaders, they are likely to perform better and be more satisfied. Drawing on previous research of transformational leadership, trust in the leadership, team performance, and satisfaction, the present endeavor develops a model, which proposes that transformational leadership positively influences team performance and satisfaction, both directly and indirectly, being partially mediated by trust in the leader. The paper tested the impact of transformational leadership on team performance and satisfaction, while considering the role of trust, among employees (N=121) of face-to-face and virtual teams from various industries mainly in Romania and USA. The results indicated that transformational leadership had only a direct influence on team performance, and a direct and indirect positive influence on team satisfaction. The impact of transformational leadership on team satisfaction was partially mediated by follower's trust in the leader. Based on the results

Ph.D. candidate, School of Business and Leadership, Regent University, Virginia Beach, U.S.A., ligipet@mail.regent.edu.

of the present research, implications for leadership theory and practice of leadership are discussed.

Keywords: transformational leadership; performance; satisfaction; trust.

Introduction

After more than 20 years of research, transformational leadership behavior has been associated with a variety of positive outcomes (Bommer, Rubin, & Baldwin, 2004) such as employee satisfaction (Podsakoff, MacKenzie, Moorman & Fetter, 1990), organizational commitment (Bycio, Hackett & Allen, 1995), extra effort (Seltzer & Bass, 1990), turnover intention (Bycio et al., 1995), and organizational citizenship and employee performance (Podsakoff, MacKenzie, Paine & Bachrach, 2000; MacKenzie, Podsakoff & Rich, 2001). At the same time, there have been rapid developments in communication technology, which changed the dynamic of current organizations and enabled the development of virtual teams. The need to study leadership styles appropriate for both face-to-face and virtual environments soon emerged and led to new conceptualizations such as e-leadership (Avolio, Kahai & Dodge, 2000). Avolio and Kahai (2003) supported e-leadership must be set in the context of defining leadership in general. Previous studies associated transformational leadership with positive outcomes and follower perceptions in virtual teams as well (Kahai, Sosik & Avolio, 2003; Ruggieri, 2009; Purvanova & Bono, 2009). Trust in the leadership is considered one of the key elements, necessary in determining whether the leader will manage to bring about organizational effectiveness at all levels (individual, team, and unit) (Burke, Sims, Lazzara & Salas, 2007). The present endeavor builds on previous research, which links transformational leadership to positive team outcomes, while considering the mediating role of trust. More specifically, the study investigates the direct and indirect impact of transformational leadership on two outcomes, team performance and satisfaction.

Theoretical background and hypotheses

Transformational leadership

According to Bass (1985), transformational leadership motivates followers by making them more aware of the importance of task outcomes, determining followers to transcend their own self-interest for the sake of the organization or team, and through activating follower higher order needs. Leaders who present transformational leadership style characteristics are supportive, encouraging, and able to provide the necessary help in the face of obstacles and hardships. Yukl (2006) emphasized the influence of such leadership determines followers to feel trust and exceed expectations. Transformational leadership includes four types of behavior: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation. Idealized influence appeals to follower emotions and determines identification with the leader. Individualized consideration refers to the provision of support, encouragement, and coaching to followers. Inspirational motivation involves the transmittal of vision by using symbols to channel follower effort and model behaviors. Lastly, intellectual stimulation is a behavior that appeals to follower awareness of problems and influences the follower to "view problems from a new perspective" (Yukl, p. 262).

When discussing the influence process, Yukl underlined that transformational leadership behaviours like inspirational motivation and individualized consideration are likely to increase the self-efficacy of individuals and the collective efficacy of teams (the confidence of team members in the ability to achieve the set objectives). Thus, self-efficacy closely relates to team performance, but is not identical to it. Yukl also noted that leaders could improve the performance of their team through motivating team members to commit to attaining shared common objectives, clarifying tasks, team organization, support mutual trust, and cooperation within the team. According to Yukl, trust and cooperation play an important role since "even a talented, well-organized team may fail in carrying out its mission unless there is a high level of cooperation and mutual trust among its members" (p. 327). Bass (1999) argued that unlike transactional leadership, which practices contingent reinforcement of followers, the transformational leader inspires, intellectually stimulates, and is considerate of them. Bass and Avolio (1998) supported that transformational leaders are role models for followers and "can be counted

on to do the right thing, demonstrating high standards of ethical and moral conduct" (p. 136). According to Avolio, Zhu, Koh, and Bhatia (2004), transformational leaders may use individualized consideration and intellectual stimulation to empower followers by challenging their beliefs, mindsets, and values.

Transformational leadership and follower performance

Previous research associated transformational leadership with follower performance in various domains. In a study of the influence of transformational and transactional leadership on the performance of sales people, MacKenzie et al. (2001) found that transformational leadership influenced the sales people in the sample to perform above their normal duty and had a stronger direct and indirect effect with sales performance as compared to transactional leadership. Kahai et al. (2000) showed that transformational leadership is likely to contribute to group performance by overcoming social loafing among group members.

Dionne, Yammarino, Atwater, and Spangler (2004) discussed the specific link between transformational leadership and team performance. In their conceptual model, Dionne et al. posited that idealized influence/inspirational motivation, intellectual stimulation and individualized consideration could produce intermediate outcomes such as shared vision, team commitment, and empowered team environment, and functional team conflict. The researchers argued these intermediate outcomes might positively affect team communication, cohesion and conflict management. Pillai and Williams (2004) found that transformational leadership was related to perceptions of unit performance and commitment thorough self-efficacy and cohesiveness. In addition, transformational leadership also influenced commitment and perceptions of unit performance directly. Menges, Walter, Vogel, and Bruch (2011) showed that transformational leadership climate positively influences the organization's affective climate and its workforce performance.

Transformational leadership and follower satisfaction

Bono and Judge (2003) found a positive relationship between transformational leadership and job satisfaction. Their research indicated that when external factors (such as transformational leadership) can

influence the extent to which individuals perceive their work activities to be important and self-congruent, and when individuals have such perceptions, they experience job satisfaction and are more willing to work harder on a simple task. Medley and Larochelle (1995) found that transformational leadership style was positively related to nurse satisfaction. Nielsen, Yarker, Randall, and Munir (2009) went further into researching the mechanisms that link transformational leadership to follower satisfaction and considered the mediating role of team efficacy. They found that team efficacy partially mediated the relationship between transformational leadership and job satisfaction.

Trust in leadership

The present endeavor is mainly concerned with trust in the leader, which has been considered one of the most important variables that mediates the effectiveness of transformational leadership (Podsakoff et al., 1990; Yukl, 2006). Kirkpatrick and Locke (1996) supported transformational leadership increased follower trust by leader demonstrating concern for followers' needs, capability and persistence in achieving the vision and possibly through showing that he/she is able to sacrifice for the sake of the group. The process of building trust in the leader also involves empowerment of the followers to make their own decisions (Avolio & Bass, 1995) and leadership role modeling (Bass & Avolio, 1990). Arnold, Barling, and Kelloway (2001) found that transformational leadership increased trust, commitment and team efficacy, recommending that transformational leadership style is a better way to engender trust.

In virtual teams, the development and maintenance of an appropriate level of trust is associated with an exchange of both verbal and non-verbal cues, which involves the use of both emailing and video conferencing (Zaccaro & Bader, 2003). According to Zaccaro and Bader (2003), effective teams gradually develop high degree of cohesion and trust. Previous studies underlined that in the specific virtual team context, the role of the leader consists of making sure that the team has the cognitive, social, and material resources to achieve tasks and goals, and that leaders play a critical role in creating an environment of trust where people can open and share their thoughts and feelings (Zaccaro & Bader, 2003; Zeffane, 2010). Acknowledging the importance of trust in virtual teams, Jarvenpaa

and Shaw (1998) argued that trust is the only thing that prevents "geographical and organizational distances of team members from turning into unmanageable psychological distances" (p. 47).

A direct link between transformational leadership and trust was found by Gillespie and Mann (2004), who showed that transformational leadership behaviors were positively correlated with team members' trust in the leader. The leader builds trust in the team members through providing rewards contingent upon achievement of objectives, consulting team members when making important decisions, and by communicating a collective value-driven vision. Connell, Ferres, and Travaglione (2003) found that transformational leadership was a significant predictor of trust in leadership and that turnover intent and commitment were significant outcomes. Thus, the process of building trust represents an important step for the leaders to obtain positive work-related outcomes from their followers. Regarding the mediation, previous research indicated that trust appeared as an important mediator in the relationship between transformational leadership and some measures of performance, including satisfaction, in traditional teams (Jung & Avolio, 2000). Jung and Avolio (2000) found that transformational leadership had both a direct and indirect influence on follower performance. Trust in leadership had a mediating effect on the relationship between transformational leadership and follower performance (measured in terms of quality of outcomes and satisfaction with the leader). When employees trust their leaders they are likely to perform better and be more satisfied. As seen above, previous research indicated that transformational leadership is positively related to trust (Yukl, 2006) and various positive team outcomes. Yukl (2006) highlighted that trust in the leader helps followers exceed expectations in their performance. The influence is direct and indirect, mediate by follower's trust in leadership (Jung & Avolio, 2000). The present research proposes the mediating effect of trust extends from satisfaction with the leader to team satisfaction as well. To sum up, the present model proposes that transformational leadership is positively related to both team performance and satisfaction (as perceived by the team members). The positive influence of transformational leadership is both direct and indirect, mediated by trust in leadership. Considering the above-described relationships, the present model proposes to test both the direct and

indirect effect of transformational leadership on team performance and satisfaction as follows:

H1: Transformational leadership positively influences team performance.

H2: Transformational leadership positively influences team satisfaction.

H3: Trust will partially mediate the positive effect of transformational leadership on team performance and satisfaction.

Method

Participants

Part of the participants in the present study come from a convenience sample in a large company based in Romania (N=28). The greater part of the surveys (N=93) was gathered with the help of snowball sampling. The sample consisted of 121 respondents (44.6% male and 55.4 female) mainly from Romania (63.6%) and the USA (30.6%), with one additional respondent from each of the following countries: Italy, Mexico, UK, Mexico, Norway, Spain, Rwanda, and Brazil. In what the typology of the team is concerned, most individuals worked in face-to-face teams (65.3%), followed by individuals who were part of a mixed type of team (32.2%), and virtual team members (2.5%). The other demographic characteristics are presented in Tables 1-3 below.

Table 1. Demographic information (Age)						
Age	Employee %					
18-24	15.7%					
5-30 39.7%						
31-40	31.4%					
41-60	13.2%					
Over 60 years old	-					
Table 2. Demographic information (tenure with leader)						
Tenure	Employee %					
Less than 2 years	50.4%					
2-5 years	33.9%					

5-10 years	12.4%					
Over 10 years	3.3%					
Table 3. Demographic information (industry type)						
Industry type	Employee %					
Aerospace/Aviation/ Automotive	23.1%					
Agriculture / Forestry / Fishing	.8%					
Business / Professional Services	9.1%					
Communications	.8%					
Education	14.9%					
Finance / Banking / Insurance	7.4%					
Food service	1.7%					
Government/Military	6.6%					
Healthcare / Medical	5.0%					
Legal	.8%					
Manufacturing	.8%					
Marketing / Market Research / Public Relations	2.5%					
Media / Printing / Publishing	6.6%					
Retail	-					
Telecommunications	1.7%					
Other	18.2%					

Measures

The questionnaire includes questions on all the variables under study, as follows. The Global Transformational Leadership Scale (Carless, Wearing & Mann, 2000) was employed to measure transformational leadership. Carless et al. developed a questionnaire that covers the following leadership aspects: vision, staff development, supportive leadership, empowerment, innovative thinking, and lead by example, and charisma. The response format is a 5-point Likert scale ranging from "Rarely or never" to "Very frequently, if not always". The employees were asked how frequently the leader engaged in the described behavior. Support for convergent and discriminant validity was found in the study that validated Global Transformational Leadership Scale. The seven items that make up the scale

measure a single construct. Cronbach's alpha indicated a value of .93. One sample item is "My team leader fosters trust, involvement and cooperation among team members." The performance and satisfaction of team members were assessed through the nine items from Lurey and Raisinghani (2001). The items were used to assess performance and satisfaction in virtual teams, and they are considered appropriate for the context of the present study as well. The virtual team phrase in the following item "In the future I would be interested in participating in another virtual team" was replaced with "In the future I would be interested in participating in another similar team" to better reflect the context of the present research. The items are part of an extensive virtual team survey, which aimed to find information about how virtual teams were designed, the systems used to support teams, and these have/have not helped the team succeed in achieving business objectives. The response format is a 5-point Likert scale ranging from "Strongly agree" to "Not applicable." One sample item is "In the past, the team has been effective in reaching its goals." The reliability measures indicated a value of .82 for both of the dimensions. Lastly, the twelve perceived trustworthiness items developed by Mayer and Davis (1999) were employed to assess trust in leadership. The instrument was developed to measure perceived trustworthiness along its three main dimensions: benevolence, integrity, and competence. The items are designed from the trustor's point of view with regard to the trustee. The response format is a 7-point Likert scale from "Strongly disagree" to "Strongly agree." As in previous research, the items will be aggregated to compute an overall measure of trustworthiness. A sample item is "This manager has a strong sense of justice." Cronbach's alpha indicated a .94 value. The word "manager" has been replaced with "team leader" to better fit the purpose of the present research. The reliability scores for the present sample are presented in Table 4.

Table 4. Reliability of the Scales

Scale	Number of items	Cronbach's Alpha		
The Global Transformational Leadership Scale	7	.921		
Performance	4	.756		
Satisfaction	5	.803		
Perceived trustworthiness	12	.961		

In addition, the study included the following control variables: team typology, tenure with the leader, frequency of communication, culture (country), industry type, and team size. Team typology refers to whether the individual works in a face-to-face, virtual or mixed team. Because of the global context in which teams operate, national culture was also found to influence team dynamics and trust. Data on culture will be obtained by asking participants to fill in the country of origin and will be coded according to Hofstede's (1980) classification of countries as having individualistic or collectivistic cultures.

A small-scale pilot study was conducted with 10 respondents who gave feedback on the questionnaire. The sample consisted of respondents from Romania, Sweden, and the USA. The respondents reported they understood the questions. Cabanda, Fields, and Winston (2011) noted that a pilot study would help ensure items in the questionnaire are valid and reliable. The scales that will be used are developed and have been validated by previous studies, thus ensuring content validity.

Procedure

The research was conducted via online Google Docs Forms survey system through the administration of questionnaires. In order to have a better view of how transformational leadership influences team performance and satisfaction of team members, the present endeavor used team members from a large company in Romania and from various other industries with the help of snowball technique. The survey contained 36 questions and based on pilot testing, took approximately 7 minutes to complete. The questionnaire was administered in English. In the pilot test phase, the Romanian respondents reported a good understanding of all the items in the questionnaire. In many companies in Romania, employees use English on a daily basis. The respondents from the large company were recruited with the help of a contact from inside the company. Upon signing a confidentiality agreement, the HR Department agreed for the author's contact inside the company to send the link to the survey. The other participants were recruited through Facebook. The author sent personal messages to contacts in Facebook, asking them to fill out the survey and to forward it to their contacts as well. Each questionnaire had an opening statement regarding the purpose of the research and an informed consent

making the participants aware that the completion of the survey represents the agreement to participate in the study.

Results

The survey results were entered into SPSS (version 18.0). Descriptive statistics revealed the characteristics of the sample. Apart from the demographic characteristics, a few other features of the sample are worth noting. Regarding the frequency of communication, 54.5% respondents reported communicating with their leader more several times a day, 10.7% once a day, 22.3% several times a week, and 12.4% every other week. In what the size of the team is concerned, 24% participants reported being part of a team with less than 5 members, 37.2% respondents reported being part of teams with 5-10 members, 20.7% indicated being part of teams with 10-15 members, while 18.2% reported working in teams with over 15 members.

The reliability analysis indicated acceptable values, with Cronbach alpha values over the .7 (Kerlinger and Lee). Following the reliability analysis, the items that comprised each scale were computed and the aggregated variables for transformational leadership, performance, satisfaction, and perceived trustworthiness were further employed for testing the hypotheses. Correlation analysis was employed to see whether there were any significant correlations between the dependent, independent and control variables. Pearson's Product Moment Correlations Matrix (Table 5), indicated a few significant correlations. Team performance was significantly correlated with team satisfaction (r=.43, p<.01), transformational leadership (.44, p<.01), trust (r=.36, p<.01) and significantly and negatively correlated with the age of the respondents (r=-.23, p<.05). Team satisfaction was significantly correlated with transformational leadership (r=.68, p<.01) trust (r=.70, p<.01) and gender (r=.20, p<.05). Transformational leadership was significantly correlated with trust (r=.84, p<.01). The results indicated other significant correlations between trust and gender (r=-.18, p<.05), age and tenure with the leader (r=.27, p<.01), country and tenure (r=.29, p<.01), age and communication frequency (r=.29, p<.01), industry type and communication frequency (r=.26, p<.01), country and age (r=.21, p<.05), and industry type and country (r=.19, p<.05). The means and

standard deviations for the criterion, predictor, and control variables are shown in Table 6.

Table 5. Pearson's Product Moment Correlations Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Team performance	-	.432**	.443**	.360**	.046	.105	065	.095	.030	229*	040	088
Team satisfaction		-	.677**	.708**	.027	024	.083	.094	196*	136	.047	.106
Transformational leadership			-	.841**	.062	.060	084	.170	177	080	.027	.152
Trust				-	.013	026	052	.163	180*	100	.013	.096
Team typology					-	083	.032	.157	176	.028	106	.011
Tenure						-	.047	.065	.123	.269**	.291**	.119
Communication frequency							-	.000	045	.291**	.094	.260**
Team size								-	083	025	087	025
Gender									-	151	063	.056
Age										-	.212*	.174
Country											-	.194*
Industry type												-

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 6. Descriptive Statistics (N=121)

Variable	M	SD
Team performance	3.8760	.58641
Team satisfaction	3.9669	.61174
Transformational leadership	3.5348	.86002
Trust	5.2073	1.31441
Team typology	1.6694	.93442
Tenure	1.6860	.81683
Communication frequency	1.9256	1.12669
Team size	2.3306	1.03592
Gender	1.5537	.49917
Age	2.4215	.91060
Country	1.5950	1.28179
Industry type	7.3223	5.48971

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Multiple linear regression was employed to investigate the ability of transformational leadership to predict team performance and satisfaction as perceived by the team members, and the mediating effect of trust in the team leader. To test the first hypothesis, the control variables of team typology, tenure with the leader, communication frequency, country, industry type, team size, and age were entered in the first step, while the predictor, transformational leadership, was entered in the second step. Age was included because of the significant correlation with team performance. Hair, Black, Babin, Anderson, and Tatham (2006) mentioned that 15-20 observations per independent variable are required with multiple regression in order to make generalizations. The present model follows the minimum of 15 observations per independent variable guideline. The first model did not significantly contribute to explaining the variance in the dependent variable (p=.11). The second model was significant, indicating that transformational leadership explains 18% of the variance in team performance (R^2 =.28, F(8,112)= 5.349, p<.001). Transformational leadership significantly predicted team performance (β=.44, p<.001) in support for the first hypothesis. In addition, age significantly and negatively predicted team performance (β =-.23, p<.05).

To test the second hypothesis, the control variables of team typology, tenure with the leader, communication frequency, country, industry type, team size and gender were entered in the first step, while the predictor, transformational leadership, was entered in the second step. Gender was added to the control variables due to its significant correlation with team satisfaction. The first model with the control variables was not significant (p=.42). The second model was significant and transformational leadership explained 44% of the variance in team satisfaction (R^2 =.50, F(8,112)=13.953, p<.001). Transformational leadership significantly predicted team satisfaction (β =.69, p<.001) and thus supporting the second hypothesis. In addition, communication frequency significantly predicted team satisfaction (β =.18, p<.05).

The mediation hypothesis was tested through regression analysis following Baron and Kenny's (1986) guidelines. In investigating whether trust mediates the relationship between transformational leadership and team performance a series of linear regressions were performed. The first part of the mediational hypothesis was not supported (Figure 1). Transformational

leadership was significantly related to both the proposed mediator – trust $(R^2=.70, F(1,119)=288.608, p<.001)$ and the outcome variable – team performance $(R^2=.20, F(1,119)=29.051, p<.001)$. When controlling for the independent variable, the mediator did not have a significant relationship with team performance (p=78), thus rejecting the mediation hypothesis.

The second part of the mediational hypothesis was supported (Figure 2). Transformational leadership was significantly related to both the proposed mediator – trust (R²=.70, F(1,119)=288.608, p<.001) and the outcome variable – team satisfaction (R²=.46, F(1,119)=100.424, p<.001). When controlling for the independent variable, the mediator continued to have a significant relationship with team satisfaction, thus confirming the mediation hypothesis. Finally, when testing for the direct effect of the independent variable on the dependent variable and controlled for the mediator, the relation remained significant indicating a partial correlation. The beta value for the moderator (.48) is greater than the beta value for the independent variable (.27), indicating a considerable mediating impact. According to Preacher and Hayes (2004) there are several ways to calculate the indirect effect of transformational leadership on team satisfaction. One way is represented by c-c²=.402 in Figure 2.

Discussion

The first two hypotheses were supported, while the third hypothesis was only partially supported. First of all, the results indicate a positive and significant direct relationship between transformational leadership and team performance. The result is in line with the work of Pillai and Williams (2004), who showed that transformational leadership influenced perceptions of performance directly, and Jung and Avolio (2000), who showed the direct effect of transformational leadership on follower performance. An unexpected negative significant relationship between age and team member performance was also found, indicating that the younger the respondents, the greater the level of perceived team performance. A significant relationship was also found between transformational leadership and team satisfaction. This finding supports previous research by Bono and Judge (2003), who also found a positive

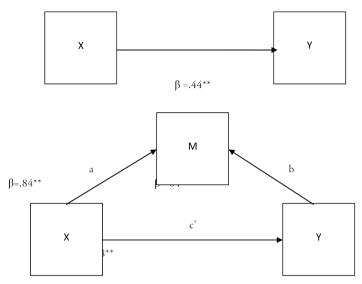


Figure 1. Model testing hypothesis that trust mediates the relationship between transformational leadership and team performance. * p <.05. ** p < .01. ** p < .001.

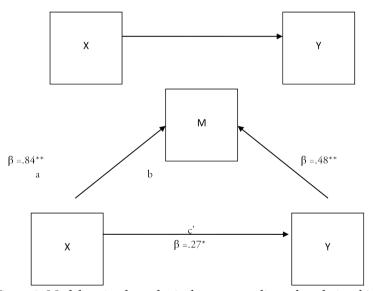


Figure 2. Model testing hypothesis that trust mediates the relationship between transformational leadership and team satisfaction. * p <.05. ** p <.01. ** p <.001.

direct relationship between transformational leadership and satisfaction. While Bono and Judge measured job satisfaction, the present study was more specific in testing satisfaction within the team. The indirect effect of transformational leadership on team performance and satisfaction was also tested. The result of the multiple linear regressions indicated that trust only mediates the relationship between transformational leadership and team satisfaction. The lack of mediation for team performance is contrary to the findings of Jung and Avolio, who found that trust had mediating effects on the relationship between transformational leadership and various measures of performance. This may be due to the fact that Jung and Avolio measured performance with the help of external evaluators, who evaluated performance in terms of quality. Further analysis is required to explore the mediating effect of trust on follower performance within the context of teams. Taking further the work of Jung and Avolio who evaluated the mediating effects of trust on the relationship between transformational leadership and satisfaction (with the leader), the above analysis also confirmed a mediation effect when satisfaction was measured by assessing the satisfaction of the respondents with their respective teams.

The present descriptive cross-sectional study gathered data from respondents coming from a variety of industries in nine different countries. Considering the topic of the research and the measures involved, selfreports were considered appropriate to evaluate the leadership of the team leader, perceived team performance and satisfaction, and follower's trust in the leader. The questionnaire assembles different scales and appropriate reliability evidence was displayed in support for the inclusion of the scales. According to Conway and Lance (2010), this constitutes an important step in ruling out substantial method effects. The limitation of the study refers to the fact that much of the variance in team performance remained unexplained. As seen above, transformational leadership accounts for 18% of the variance in team performance. Future research should take into consideration other variables that influence team performance, such as type of communication used by teams, trust climate (Curşeu, 2006; Lin et al., 2008) or other leadership styles. To strengthen the internal validity of the study, an experimental approach to studying the proposed hypotheses could be adopted.

The present research links transformational leadership to team performance and satisfaction, while considering the mediating role of trust in the leadership. Prior studies indicated that transformational leaders positively influence follower's trust, which in turn leads followers to exceed expectations in their performance (Yukl, 2006). The model tested the positive influence of transformational leadership on both team performance and satisfaction and the mediating role of trust in a sample with members of teams from nine countries and various industries. As teams, both face-to-face and virtual, become increasingly frequent in large companies, understanding the impact of leadership team performance and team satisfaction is critical. Unlike previous studies, which have employed teams from various universities (Jung & Avolio, 2000; Jarvenpaa & Leidner, 1999; Arnold et al., 2001), the present research studied the proposed relationships in face-to-face and virtual teams working from various industries, thus making possible the generalization of results to various domains. The results revealed that transformational leadership has a positive and significant relationship with team performance and team satisfaction. In addition, trust was found to partially mediate the relationship between transformational leadership and team satisfaction. The results are relevant for programs developing leadership in teams, which should consider including aspects of transformational leadership because of their positive influence on team performance and satisfaction in employees from diverse cultural backgrounds. In addition, due to the large sample of Romanian employees included in the study, the results indicate transformational leadership is effective to maintain the satisfaction of Romanian followers.

References

- Arnold, K.A., Barling, J., and Kelloway, J. K. (2001). Transformational leadership or the iron cage: which predicts trust, commitment, and team efficacy. *Leadership and Organization Development Journal*, 22(7/8), 315-320.
- Avolio, B.J., and Bass, B.M. (1995). Individual consideration viewed at multiple levels of analysis: a multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6(2), 199-218.
- Avolio, B.J., Kahai, S.S., and Dodge, G.E. (2000). E-leadership: Implications for theory, research, and practice. *The Leadership Quarterly*, 11(4), 615-668.

Avolio, B.J., and Kahai, S.S. (2003). Adding the "e" to e-leadership: How it may impact your leadership. *Organizational Dynamics*, 31(4), 325-338.

- Avolio, B.J., Zhu, W., Koh, W., and Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 25, 951-968.
- Bass, B.M. (1985). *Leadership and performance beyond expectation*. New York, NY: Free Press.
- Bass, B.M.(1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32.
- Bass, B.M., and Avolio, B.J. (1990). The implications of transformational and transactional leadership for individual, team, and organizational development. In R. Woodman and W. Passmore (Eds.), *Research in Organizational Change and Development* (pp. 231-272). Greenwich, Conn: JAI Press.
- Baron, R.M., and Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bommer, W.H., Rubin, R.S., and Baldwin, T.T. (2004). Setting the stage for effective leadership: Antecedents of transformational leadership behavior. *The Leadership Quarterly*, 15(2), 195–210.
- Bono, J. E., and Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5), 554-571.
- Burke, C.S., Sims, D.E., Lazzara, E.H., and Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly*, 18(6), 606-632.
- Bycio, P., Hacket, R.D., and Allen, J.S. (1995). Further assessment of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80(4), 468-478.
- Cabanda, E., Fields, D., and Winston, B. (2011). *Organizational PhD-Quantitative research methods*. New York, NY: McGraw-Hill Higher Education. Retrieved from http://create.mcgraw-hill.com/shop/.
- Carless, S.A., Wearing, A.J., and Mann, L. (2000). A short measure of transformational leadership. *Journal of Business and Psychology*, 14(3), 389-405.

Connell, J., Ferres, N., and Travaglione, T. (2003). Engendering trust in manager-subordinate relationships: Predictors and outcomes. *Personnel Review*, 32(5), 569-587.

- Conway, J.M., and Lance, C.E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25(3), 325-334.
- Curşeu, P. L. (2006). Emergent states in virtual teams: a complex adaptive system perspective. *Journal of information technology*, 21(4), 249-261.
- Dionne, S.D., Yammarino, F.J., Atwater, L.E., and Spangler, W.D. (2004). Transformational leadership and team performance. *Journal of Organizational Change*, 17(2), 177-193.
- Gillespie, N.A., and Mann, L. (2004). Transformational leadership and shared values: The building blocks of trust. *Journal of Managerial Psychology*, 19(6), 588-607.
- Hair, Jr., J.F., Black, W.C., Babin, B.J., Anderson, R.E., and Tatham, R.L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage Publications.
- Jarvenpaa, S.L., and Shaw, T. (1998). Global virtual teams: Integrating models of trust. In P. Sieber and J. Griese (Eds.), *Organizational virtualness* (pp. 35-51). Bern: Simova Verlag (VoNET).
- Jarvenpaa, S.L., and Leidner, D.E. (1999). Communication and trust in virtual teams. *Organization Science*, 10(6), 791-815.
- Jung, D.I., and Avolio, B.J. (2000). Opening the black box: an experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8), 949-964.
- Kahai, S.D., Sosik, J.J. and Avolio, B.J. (2003). Effects of leadership style, anonymity, and rewards on creativity-relevant processes and outcomes in a an electronic meeting system context. *The Leadership Quarterly*, 14(4-5), 499-524.
- Kerlinger, F.N., and Lee, H.B. (2000). *Foundations of behavioral research* (4th ed.). Belmont, Ca: Cengage Learning.
- Kirkpatrick, S., and Locke, E. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81(1), 36-51.
- Lin, C., Standing, C., and Liu, Y.-C. (2008). A model to develop effective virtual teams. *Decision Support Systems*, 45(4), 1031-1045.

Lurey, J.S., and Raisinghani, M.S. (2001). An empirical study of best practices in virtual teams. *Information and Management*, 38(8), 523-544.

- MacKenzie, S.B., Podsakoff, P.M., and Rich, G.A. (2001). Transformational and transactional leadership and Salesperson performance. *Journal of Academy of Marketing Science*, 29(2), 115-134.
- Mayer, R.C., and Davis, J.H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123-136.
- Medley, F. and Larochelle, D.R. (1995). Transformational leadership and job satisfaction. *Nursing Management*, 26(9), 64JJ-64NN.
- Menges, J.I., Walter, F., Vogel, B., and Bruch, H. (2011). Transformational leadership climate: Performance linkages, mechanisms, and boundary conditions at the organizational level. *The Leadership Quarterly*, 22(5), 893-909.
- Nielsen, K., Yarker, J., Randall, R., and Munir, F. (2009). The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 46, 1236-1244.
- Pillai, R., and Williams, E.A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment and performance. *Journal of Organizational Change*, 17(2), 144-159.
- Podsakoff, P., Mackenzie, S., Paine, J., and Bachrach, D. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Podsakoff, P., Mackenzie, S., Moorman, R., and Fetter R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. *Leadership Quarterly*, 1(2), 107-142.
- Preacher, K.J., and Hayes, A.F. (2004). SPPS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments and Computers*, 36(4), 717-731.
- Purvanova, R.K., and Bono, J.E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *The Leadership Quarterly*, 20(3), 343-357.
- Ruggieri, S. (2009). Leadership in virtual teams: A comparison of transformational and transactional leaders. *Social Behavior and Personality*, 37(8), 1017-022.
- Seltzer, J., and Bass, B. (1990). Transformational leadership: Beyond initiation and consideration. *Journal of Management*, 16(4), 693-703.

Staples, D.S., and Zhao, L. (2006). The effects of cultural diversity in virtual teams versus face-to-face teams. *Group Decision and Negotiation*, 15(4), 389-406.

- Yukl, G. (2006). *Leadership in organizations* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Zaccaro, S.J., and Bader, P. (2003). E-leadership and the challenges of leading e-teams: Minimizing the bad, maximizing the good. *Organizational Dynamics*, 31(4), 377-387.
- Zakaria, N., Amelinckx, A., and Wilemon, D. (2004). Working together apart? Building a knowledge-sharing culture for global virtual teams. *Creativity and Innovation Management*, 13(1), 15-29.
- Zeffane, R. (2010). The central role of communication effectiveness in building trust climates: A longitudinal confirmatory study. *Proceedings of the European Conference on Management, Leadership and Governance* (pp. 393-400). October 28-29, 2010, Wroclaw, Poland.