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Effect of Multi-Level Transformational Leadership on Team Creativity: Moderating Role of Team Climate towards Comprehensive View of Sub-Saharan Africa

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Abstract:

The main purpose of these study was to observe the Effect of multi-Level transformational Leadership on individual and team creativity; moderating the role of team climate towards the Comprehensive View of Sub-Saharan Africa. We obtained data from 300 staff and 93 from 93 teams. We examined the effect of transformational leadership behavior on employee creativity in the team. Besides, with the link between transformational leadership and team creativity, the study explored the moderating role of team climate. Our analysis is based on the team-level process. The results also point to the scarcity of literature on the leadership process at the team level. Also, the outcome shows that transformative leadership has a strong and important effect on the creativity of teams. The result further showed that the association between transformational leadership conduct and team creativity was moderated favorably by the team climate. Finally, some theoretical and functional consequences were discussed by the study.

Keywords: Transformational leadership, team climate, team creativity

1. Introduction

There are many styles of leadership, and their relevance depends on a specific time or situation in the world today. Companies are working in a very lively atmosphere with the rapid advancement of technologies, needing organizations to offer goods & services with ingenuity and innovation. The importance of employee ingenuity for creativity has been stressed by a substantial amount of literature. Ouakouak, M. L., & Ouedraogo, N. (2017). Transformational Leadership (TFL) seems to attest to the current context. Prior studies have consistently shown a positive relationship between transformational leadership and team Creativity. 'Leadership' is described, according to Burns (1978), as the ability of a leader to attract, inspire, stimulate and fulfill followers and enable them to achieve their common goals. Bass (1985) argued that numerous leaders concentrate on supporters' needs, inspire staff to understand the company's purpose and encourage followers to seek community goals and self-development. Recent research has shown that mindfulness can have a positive effect on TFL by satisfying the desire for autonomy, integrity, and connectedness of leaders (Decuyper et al., 2018). By their charisma or idealized influence, encouragement or inspirational drive, intellectual stimulation, and individualized attention, transformational leaders accomplish the above objectives (Bass, 1985, 1995; Bass and Avolio, 1990).

The goal of this research was primarily to resolve the lack of team-level studies. The research directly explored the link between the creativity of the Transformational Leadership Behavior Team. The research also investigated the moderating role of the team climate in the connection between the actions of transformational leadership and the creativity of the team. The structure for this study was based on the principle of social exchange. The theory of social exchange discusses the interaction between leaders and followers in exchange. Therefore, concerning this analysis, in return for the team creativity of subordinates, the Transformational Leadership behavior of leaders provided the followers.

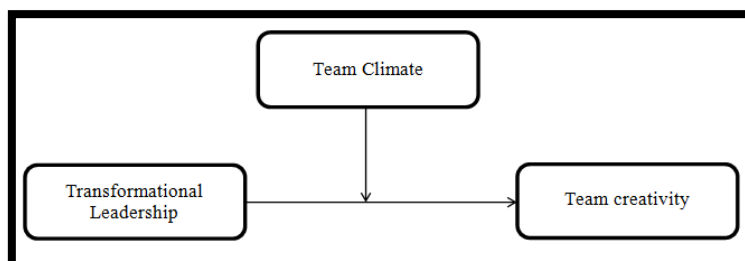


Figure 1: Study Framework

2. Literature Review

2.1. Transformational Leadership

Know a day's Transformational Leadership is the most valuable and important tool of change organizations and transforms people Squires, V. (2016). Northouse, PG (2016). Transformational leadership style is mainly attention on the majority of its development of followers explored. In another situation, recent scholars have verified the growing research benefits in trying to identify significant characteristics associated with transformational leaders (Hu et al., 2012; Judge & Long, 2012; Khoo & Burch, 2008; Rubin, Munz, & Bommer, 2005). Although transformational leaders may be identified as inspirational, motivational, and innovative leaders, the dispositional context to these leadership behaviors remains largely unexamined (Hu et al., 2012; Judge & Long, 2012). On the other hand, while Transformational Leadership has been connected to a wide spectrum of encouraging and desirable outcomes, there is also a lack of study exploring the fundamental systems and frameworks to understand how these leaders will produce these positive results (Avolio et al., 2004; Day & Antonakis, 2012; Dust et al., 2014; Huang, 2013; Northouse, 2016; Wang & Howell, 2010, 2012). To this end, the objective of this study is to try to attempt in the current literature to fill these gaps and contribute to a more comprehensive understanding of Transformational Leadership.

Transformational leadership behaviors include individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence (Bass, 1985; Bass & Avolio, 1994). Individualized concern applies to paying careful attention to each follower's desires for their success and personal development (Bass, 1985). Idealized influence applies to whether transformational figures serve as role models for their subordinates in such a way that the followers acknowledge the high level of morality and enthusiasm to meet the expectations of a leader they esteem, appreciate, and trust (Bass, 1985). Inspirational motivation stresses the motivation and inspiration of leaders by providing self-esteem to their commitment and setting challenges for the followers (Bass and Avolio, 1994). Intellectual motivation by being imaginative and inventive, allows followers to perform things separately.

2.2. Team Creativity

As the previous scholars examined that Team creativity may be characterized as a team of workers collaborating to create novel and useful ideas about products, services, processes, and procedures (Amabile, 1988; Shin & Zhou, 2007). Although individual creativity is primarily related to the abilities and personality related to individual creativity (Amabile, 1996; Zhou, 2003), The creativity of the team requires a team process in which team members create, share and criticize the ideas of each other together (Pirola-Merlo & Mann, 2004). researchers have paid attention to leadership among the different antecedents of team creativity since leaders play an important role in the group process. According to social exchange theory, leaders' team consideration creates a moral obligation in exchange from the followers Emerson, R. M. (1987). Transformational leadership is a key element in growing productivity since such leaders are concerned with the professional growth, teamwork, and team morale of persistent workers to be able to perform tasks Getachew, D. S. & Zhou, E. (2018). Team members with the necessary skills and assurance from a strong role model for example transformational leaders boost their collective efficacy Bandura, 2000; Ng, (2017).

Transformational leaders provide intellectual stimulation and personal examples with their followers, encouraging them to think 'outside the box' (Jung et al., 2003). They inspire followers to challenge existing assumptions by stressing the value of unconventional techniques, and teams of working strategies currently have (Bass, 1985). In Woodman et al (1993).s theory of organizational creativity, suggested to be one of the first genuine multi-level models of creativity, the value of context was further stressed (Drazin et al., 1999; West & Sacramento, 2012).

- H1. Transformational leadership positively influence Team creativity

2.3. Team Climate

Team climate is founded on the premise that, as members of teams, the successful social creation of conducive environmental company climate is initially created and then integrated at the corporate level Anderson, N., & West, M. A. (1996) as experiences are exchanged and expectations are more commonly built (Anderson & West, 1998; Hosking & Anderson, 130 1992). In general, there is more agreement between perceptions of team atmosphere among members of the same team than between teams (Anderson & West, 1998; Carter & West, 1998).

West, M. A., Sacramento, C. A., and Fay, D. (2006) suggest that the team climate is a quantitative variable and that monitoring it will produce feedback and progress towards more productive team creativity. Senior leaders control the hierarchical skilled staff and the overall organizational climate to create a favorable team climate Shadur, Kienzle, & Rodwell, (1999); Stinglhamber & Vandenberg, 2003, D. S., & Zhou, E. 2018). Thus, we can argue that the positive impact of Transformational leadership behavior on team creativity strengthens by team climate. Hence, we hypothesize:

- H2. Team climate is moderate the relationship between Transformational leadership and Team creativity.

3. Method

Ethiopian Telecommunication is the target organization for our data collection. The questionnaires were addressed to 374 out of the total survey respondents of 393. Of the total number of questionnaires provided to 393 respondents, at a response rate of 95.2 %, 374 questionnaires were completed and returned for review and 374 (95.2 %) of these returned questionnaires were filled in and returned correctly, while 19(4.8 %) questionnaires were found to be inaccurate and discarded. Male representatives were overwhelmingly 65 (76%) and females were 21 (76%). (24 %). 35 (41 %) between 25 and 35 years of age or younger, 32 (37%) between 35 and 45, 12 (14 %) between 45 and 55, and 7 (8 %) over 55 years of age. Concerning education, 48(56 %), 33 (38 %) Master's degree, and 5(6%) Ph.D., most of the leaders

have a degree holder in their education. Regarding Wise Experience 3 to 5 years 14(16 %) 5 to 10 years of experience 32(37 %), 10 to 15 years of experience 17(20 %) and over 20 years of corporate experience is 15(20 %) (17 %). The demographic of followers comprises 190(66 %) males and 98 (34%) females. 23(8 %), 160(56 %) from 25 and 35 years or younger, 74 (26 %) from 35 and 45, 26 (9 %) between 45 and 55, and 5(2 %) more than 55 years are age-wise below 25 years. In terms of education, the majority of leaders have a degree holder in their education, 235(82 %), 45(16 %) Master's degree, and 8(3%) Ph.D., holder. Experience wise 3 to 5 years 23 (8 %) 5 to 10 years of experience 45 (16%), 10 to 15 years of experience 89 (31 %) and over 20 years of corporate experience is 766 (16 %) (26 %).

3.1. Measurement Scale

A five-point Likert scale was used for collecting data. 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree), every item was scored. The instrument for Transformational leadership was adapted from (Avolio, Bass, & Jung, 1999). Three team environment articles have been used (Tierney and farmer 2002). The ingenuity of teams was assessed with five elements adapted from (Tierney and farmer 2002 and Graen,1999).

3.2. Measurement Model

The model of measurement is the section of the model that addresses the relation between the latent variables and their measurements. We collected data from employees of an Ethiopian telecommunications company. It is also important to check the distinctive or discriminating validity of these measures. The hypothesized three-factor model, two-factor model, and a single factor model were tested using Confirmatory factor Analysis. Both the convergent validity and the discriminant validity were evaluated in line with previous research to approximate the validity of the model. In comparison to Cronbach Alpha, the composite reliability index for each build is over 0.7, and the extracted average variance (AVE) for each case is greater than 0.5. The calculation model measurements indicate that for all goods, the standard factor loadings are above 0.7, which ensures sufficient convergent validity (Hair et al., 1999).

Fit indexes	Structural model	Threshold	Values
Chi-square	χ^2 (p-value)	P value >0.05	0.06
	Df		
	χ^2/df	Between 1-3	1.887
Incremental fit index	CFI	>0.95	0.97
Absolute fit index	RMSEA	<0.05	0.15
	GFI	>0.95	0.98

Table 1: Model Fit Statistics

Df	=	degree of freedom
GFI	=	Goodness of fit index
CFI	=	comparative fit index
RMSEA	=	Root mean square error of approximation

3.3. Data Aggregation

The research is based on a summary at the team level. Since we have to collect data from individual participants. To form team-level variables, we need to incorporate these individual variables. The most used processes of aggregation are the degree to which individual-level data within the team is consistent (Klein & Kozlowski, 2000). We measured inter-rater agreement (r_{wg}) and inter-member durability to analyze the suitability of the data aggregation (Chan, 1998). The findings for TFL actions (median r_{wg} =.92; mean r_{wg} =.77; ICC1=.13; ICC2=.45) and innovation of the team (median r_{wg} =.89; mean r_{wg} =.76; ICC1=.13; ICC2=.45) show that it is possible to aggregate variables at the team level (Chan, 1998).

N	93 teams	Mean	1	2	3
a.	Transformational leadership	3.7	.93		
b.	Team climate	3.67	.68**	.91	
c.	Team creativity	3.56	.65**	.68**	.85

Table 2: Mean, Correlations, Coefficient of Alpha

**P < .01 (Two-Tailed)

3.4. Regression Analysis

Transformational leadership has a positive significant impact on team creativity ($r = .45$, $p < .001$) supporting Hypothesis 1, as seen in Table above Model 1. To test Hypothesis 2, as a measure of team creativity, we have filled an engagement concept comprising disruptive leadership and team climate.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. An error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.377 ^a	0.142	0.14	0.38686	0.142	61.68	1	372	0	0.857
a. Predictors: (Constant) Transformational Leadership Behavior										
b. Dependent Variable: Team Creativity										
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.323 ^a	0.104	0.102	0.5992	0.104	43.197	1	372	0	0.793
a. Predictors: (Constant), Transformational Leadership Behavior										
b. Dependent Variable: Team climate										
1	.210 ^a	0.044	0.042	0.61889	0.044	17.2	1	372	0	0.755
a. Predictors: (Constant), Team Creativity										
b. Dependent Variable: Team climate										
1	.377 ^a	0.142	0.14	0.38686	0.142	61.68	1	372	0	
2	.390 ^b	0.152	0.148	0.38515	0.01	4.31	1	371	0.039	
a. Predictors: (Constant), Transformational Leadership Behavior										
b. Predictors: (Constant), Transformational Leadership Behavior, c. Transformational Leadership Behavior*Team climate2										

Table 3: Regression Result

4. Discussion and Conclusion

The goal of this study was to provide a better understanding of the relationship between TFL and creativity at the individual and team levels. The analysis adds to the limited studies at the team level. In particular, the purpose of this analysis is to explore the effects on team creativity of Transformational Leadership practice. The study also noted the moderating role of Team Climate in the relationship between the actions of transformational leadership and the creativity of the team.

Additionally, there would be some real contributions to the analysis. further, TFL leaders improved the team creativity of employees. Thus, to stimulate the creativity of followers, leaders need to demonstrate better TFL behavior. Second, by creating a team climate such as policy and procedures, senior leaders can assist lower leaders and employees. Therefore, both transformational leaders and team climate can have a greater positive collective effect than autonomy on team creativity.

For this analysis, the cross-sectional existence of the data may be seen as one constraint. Other limitations of the study, sample representation must be considered, since only Ethiopian telecommunication companies from the construction sector were included. For future research, the investigation could analyze transformational leadership relationships in firms from other companies and sectors. Again, more research that further explores this problem is needed, particularly given the widespread reliance on TFL in the context of today's organizations.

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