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Transformational leadership and employee creativity across cultures

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Received 6 May 2019
Revised 6 August 2019
Accepted 18 September 2019

Abstract

Purpose – The study compares the impact of four components of transformational leadership (TL), namely, idealized influence (II), inspirational motivation, intellectual stimulation (IS), and individualized consideration (IC) on employee creativity (EC) at the workplace between Turkey and Algeria, taking into account the mediating effect of employee's creative role identity (CRI).

Design/methodology/approach – Data were collected from 688 managers working for conglomerate companies in both countries and the analysis was performed using a two-stage structural equation modeling (SEM) for model and hypothesis testing.

Findings – The findings highlighted that managers from both countries have divergent stances toward TL's impact on EC; Algerian managers recognized the impact relationship between CRI and EC. Meanwhile, Turkish managers believed in the efficiency of every component independently.

Research limitations/implications – When generalizing the research results, a debate might arise in regards to both the data collection instrument and the data being collected from two companies only. Therefore, upcoming research might opt for using further data collection methods and expand the data collection sources to cover larger targets.

Practical implications – The study's findings help in assisting managers and decision-makers in both countries into strategically adjusting their managerial approaches accordingly and appropriately stimulating EC at the workplace.

Social implications – The findings provided insights into elevating and strengthening a mere formal leader–member relationship to a personally satisfying and mutually beneficial social bond.

Originality/value – Throughout literature, the light was shed on the fundamental, yet, infrequently discussed link between TL components and employee CRI. The comparative nature and findings of our study could be considered building blocks for further academic research about leadership in both countries.

Keywords Cross-cultural management, Turkey, SEM, Algeria, Transformational leadership, Creative role identity

Paper type Research paper

Introduction

As Kotter once stated 'Only through leadership can one truly develop and nurture culture that is adaptive, when examining to change' (Sarros *et al.*, 2011), and during this globalization era of ours, leaders in organizations aiming toward establishing international business ventures are daily faced with culture discerning and employee management challenges (Sarros *et al.*, 2014). Subsequently, they navigate in some unpredictable and capricious organizational settings. Fortunately, in such circumstances, Transformational Leadership (TL) is sought to be the tool of managing and motivating employees at the workplace (Leong and Fischer, 2011).

In fact, the concept was first introduced by Burns (1978) in his descriptive research on political leaders, and further advanced by Bass (1985) who worked on extending Burns works toward a measurable perspective. Although TL has been addressed by many scholars (Bass, 1985; Tichy and Devanna, 1986; Trice and Beyer, 1986; Conger and Kanungo, 1987;



Journal of Management Development
Vol. 39 No. 4, 2020
pp. 475-498
© Emerald Publishing Limited
0262-1711
DOI 10.1108/JMD-05-2019-0153

Yukl, 1989; Podsakoff *et al.*, 1990), it is Bass and Avolio (1994), who, through their foundational works, initiated its study from managerial and organizational perspectives (Dong *et al.*, 2017).

Although the last four decades of TL research has generated significant and instructive findings undertaking the concept in several Western settings (Welbourne *et al.*, 1998; Maslanka, 2004; Burns *et al.*, 2008; Shaari *et al.*, 2011; Odumeru and Feanyi, 2013; Jyoti and Dev, 2015; Mozammel and Haan, 2016; Ngaithe *et al.*, 2016) and highlighting its potent impact on employees (Kark *et al.*, 2003; Bolden *et al.*, 2003; Nemanich and Keller, 2007; Gong *et al.*, 2009; McCleskey, 2014; Jyoti and Dev, 2015; Çekmecelioğlu and Özbağ, 2016; Ngaithe *et al.*, 2016). It is worth to note that little attention has been allocated to investigating the concept in non-Western settings. Specifically, a genuine shortage of studies is perceived when it comes to TL's contribution and impact on employee creativity (EC) in non-Western organizational settings.

While addressing this gap, this study undertakes a comparison of the impact of TL on EC. In this vein, it seeks to investigate the mediating role, creative role identity (CRI) has in this relationship in the non-Western settings of Turkey and Algeria. In which, few empirical research from both countries has already generated intriguing findings (Erkutlu, 2008; Taslak, 2008; Güzel and Akgündüz, 2011; Akbolat *et al.*, 2013; BinAbderahman, 2011; Akyol *et al.*, 2013; Yavuz, 2009; Eren and Titizoğlu, 2014; Ouedi, 2014; Ziani, 2014; Brahim *et al.*, 2015; Reouai, 2016) and plotted the way toward investigating and understanding the implications of this leadership style on both organizational cultures.

In Algeria, TL represents a newly introduced and gradually rising concept despite attempts to apply and investigate it in various organizational settings (academia, administration, and banks). Therefore, most empirical research has generated scattered findings, revolving around managers allocating more attention to this leadership approach as a powerful instrument of strengthening leader–member exchange relations and highlighting its positive linkage to organizational performance and employee satisfaction (BinAbderahman, 2011; Ziani, 2014; Ouedi, 2014; Brahim *et al.*, 2015; Reouai, 2016). However, TL was in some cases found to be disregarded by managers (BinAbderahman, 2011; Brahim *et al.*, 2015).

On the other hand, TL research in Turkey has witnessed more divergence, thus has a wider coverage of the concepts in terms of its fields of investigation. Therefore, many Turkish studies generated several fundamental insights endorsing TL for increasing followers' emotional burnout and charisma (Güzel and Akgündüz, 2011), team members' motivation (Akyol *et al.*, 2013), career satisfaction (Avci and Turunç, 2012; Eren and Titizoglu, 2014), employee motivation, and emotional commitment (Akbolat *et al.*, 2013), in addition to organizational leadership and effectiveness (Dong *et al.*, 2017).

In times where Turkish–Algerian business ventures are emerging and expanding; our study builds on Jyoti and Dev (2015) and Loi *et al.* (2015) findings on TL impact on workplace creativity, along to the findings of Koseoglu *et al.* (2017) on CRI's organizational implications and aims to facilitate the understanding and comparison of TL managerial perspective in Turkey and Algeria. The literature stems from the foundational leadership works of (Bass, 1990; Alban-metcalfe *et al.*, 1998; Rowold, 2005; Bass *et al.*, 2003; Piccolo *et al.*, 2006; Burns *et al.*, 2008; Gong *et al.*, 2009; Anthony, 2017) on TL components' implications and suggests a conceptual model to assess this impact relationship all based on the theory of planned behavior (TPB).

In the process, it offers new perspectives on the outcomes of TL practice in both countries and seeks to advance the understanding of both organizational cultures. Furthermore, our study contributes to TL literature and practice through taking primary steps toward extracting a linkage between TL and CRI in business settings, investigating the mediating role of CRI in regards to workplace creativity, and most essentially, suggesting a cross-cultural TL comparative model that is applicable to any cultural setting.

Transformational leadership and employee creativity

In essence, TL stands as a unique leadership philosophy and one of the most effective and contemporary leadership styles till date (Derue *et al.*, 2011; Mozammel and Haan, 2016; Ra'ed Masa'deh *et al.*, 2016). Resting on the assertion that certain leader behaviors can direct followers toward an advanced level of thinking (Mozammel and Haan, 2016; Anthony, 2017), through developing an intersimulating relationship with the aim of converting a follower into a leader and a leader into a moral agent (Russell, 2011). TL is also defined as the process of expanding and broadening the interests and needs of followers, increasing their morale and motivation, and ensuring that they understand and adhere to their goals systematically (Brian Joo and Lim, 2013; Rafferty and Griffin, 2004). Thus, a transformational leader works on raising awareness, interest, and creativity among his followers (McCleskey, 2014) through shifting their focus from mere existence toward achievement and growth (Bolden *et al.*, 2003). From an organizational perspective, a manager who brings up change and renewal to the organization and advances its efficiency is sought to be transformational as well (Burns *et al.*, 2008).

On the other hand, creativity in business settings is commonly perceived as the ability to come up with innovative products, novel approaches, and functional processes (Proctor, 2014; Koseoglu *et al.*, 2017). It is therefore defined as employees' ability to generate original, improved, and innovative ideas, products, and procedures with high execution potential and performance improving content in a structured process (Sirkwoo, 2015; Koseoglu *et al.*, 2017). In which, managers maintain the ability to contribute to, support, and stimulate their followers' creativity (Amabile and Pillemer, 2012; Koseoglu *et al.*, 2017). Building on that, managers exhibiting TL behavior are highly expected to elevate and boost their followers' creativity (Gong *et al.*, 2009) through engaging in creative behaviors themselves whenever the situation calls for it, thus inciting followers to act similarly (Basadur, 2014). This can be perceived as a form of a leader–member exchange manifesting at a specific level of the leader–member relationship (Keskes, 2013), with an impact perceived in various work aspects such as job commitment, job satisfaction, and EC (Jyoti and Dev, 2015; Ra'ed Masa'deh *et al.*, 2016).

Taking into account the roles of predicting, shaping, and influencing EC played by the four components of the TL, namely, II, motivational inspiration (MI), intellectual stimulation (IS), and individualized consideration (IC) (Keskes, 2013; McCleskey, 2014; Sirkwoo, 2015), our study undertakes a systematical investigation and comparison of the impact these components exert on EC in Turkey and Algeria.

Leaders are expected to transmit a transformational behavior through an IS of their followers (Salter *et al.*, 2014). Challenging and questioning followers' efforts and suggestions in a problem-solving context will ultimately lead them to reframing problems more accurately, targeting issues pragmatically, and approaching former situations innovatively (Jyoti and Dev, 2015; Cekmecelioğlu and Özbağ, 2016). This momentum stimulates employees to develop creative and generative thinking, due to the encouragement of their leaders to think 'out of the box' (Amabile and Pillemer, 2012; Martin, *et al.*, 2016). As an innovative and groundbreaking solution comes likely from an employee who expresses himself creatively to a leader who accepts and encourages his critics, suggestions, and proposed solutions (Amabile and Pillemer, 2012; Porter and Heppelmann, 2015). From the aforementioned literature, we posit the first research hypothesis to be tested as follows:

H1. Intellectual stimulation positively impacts employee creativity.

TL is also expected to be linked to EC through II (McCleskey, 2014), whereas leaders with noble values, strong and ethical beliefs, and a responsible sense of mission are those who followers look up to, imitate, and resort into when handling problematic situations (Jyoti and Dev, 2015). These ideal beliefs flow from leaders to their followers, who in turn, perceive them to be outstanding (Cekmecelioğlu and Özbağ, 2016). Furthermore, communicating confidence and charisma to followers is found to contribute into elevating their creativity development

process' pace (Salter *et al.*, 2014). From the aforementioned literature, we posit our second research hypothesis as follows:

H2. Idealized Influence positively impacts employee creativity.

TL's IC focuses on how leaders pay attention to each employee's own needs for achievement and growth (Gong *et al.*, 2009; Odumeru and Feanyi, 2013; Sirkwoo, 2015). Leaders, aware of each of their follower's individual uniqueness, talents, and capabilities, could better understand and appropriately categorize the suitable tasks and missions to be assigned to them accordingly (Anthony, 2017). This increases the chances of expanding followers' creativity and divergent thinking in the workplace (Derue *et al.*, 2011). Thus, the third hypothesis accumulates these positive effects as follows:

H3. Individualized consideration positively impacts employee creativity.

Inspirational motivation is the extent to which leaders are able to motivate their followers through articulating and communicating high expectations through inspirational visions (Gardner *et al.*, 2011; Keskes, 2013; Odumeru and Feanyi, 2013; Ngaithe *et al.*, 2016). This component contributes into cultivating a creative work environment, where followers are encouraged to take-in interpersonal risks, perform beyond usual expectations, and generate innovative content (Sirkwoo, 2015). A leadership-reframing work confirmed that leaders communicating confidence to their followers, inspire them to perceive every challenging situation as a new opportunity and to always seek out new and creative approaches (Gong *et al.*, 2009). This can certainly contribute into cultivating a creative problem-solving atmosphere at the workplace (Gong *et al.*, 2009; Gardner *et al.*, 2011). Therefore, the fourth hypothesis to be posited is as follows:

H4. Inspirational motivation positively impacts employee creativity.

Creative role identity and employee creativity

There is evidence that individuals develop expectations about themselves and later behave accordingly (Tierney and Farmer, 2011). So is the case of employees differing in the extent to which they identify and perceive themselves after being creatively empowered by their leaders (Shaari *et al.*, 2011; Tierney and Farmer, 2011). This happens through internalizing and associating the information received from external sources and perceiving it as a part of their predefined role identity (Koseoglu *et al.*, 2017). Whereas, role identity is the self-view or the meaning credited to one's self in regards to a specific role (Tierney and Farmer, 2011; Keskes, 2013) and is used by individuals as a cognitive schema to provide meaning to their inner-believed roles, and it also helps to interpret events or channel behavioral options (Shaari *et al.*, 2011). Recent studies suggested that work environment factors such as the style of leadership may influence the creative behaviors of employees (Tierney and Farmer, 2011; Shaari *et al.*, 2011; Bacha, 2013; Koseoglu *et al.*, 2017). Koseoglu *et al.* (2017) suggested that leaders manifesting TL are found to possess an ability to influence their employees' perceived creative role identity through establishing clear goals, providing creative possibilities, and adequate support to attain them. Furthermore, leaders can also influence their employee's creative role identity through broadening their established goals and boosting their confidence at the workplace as well (Gardner *et al.*, 2011; Sirkwoo, 2015).

II or charisma positively affects employees' perceptions of themselves as future leaders (Odumeru and Feanyi, 2013). Meanwhile, leaders providing inspirational motivation and guidance to followers, increase their self-confidence levels and their willingness to behave relatively among each other (Koseoglu *et al.*, 2017). Furthermore, IS enables leaders to intellectually challenge and inspire their followers' self-perception as intellects (Tierney and

Farmer, 2011). Finally, IC as for understanding and appreciating the development and needs of every follower aside provides a sense of particularity and uniqueness which reflects on the organizational output (Lunenburg, 2010; Bacha, 2013; Salter *et al.*, 2014). Therefore, the fifth hypothesis is posited as follows:

H5. Creative role identity mediates TL and employee creativity.

Conceptual framework

In this study, we suggest a model stemming from the TPB (Marcoux *et al.*, 1997; Armitage and Conner, 2001; Lee *et al.*, 2010). The latter mainly helps conceptualize and understand how followers' creative behavior could be influenced through every TL component in Turkey and Algeria. The research model given in the following emulates our concept containing six constructs, namely, II, MI, IS, IC, CRI and EC.

Methods

Data collection and sampling

We collected data through a self-administrated questionnaire designed to assess TL impact on CRI and EC over a two-month period. The study sample was taken from two of the biggest private conglomerates in Algeria and Turkey, with similarities of being successful family businesses with a powerful dominance in Africa and Asia. The Turkish company is one of the major manufacturers of internationally exported food products. Whereas, the Algerian one is the country's largest private conglomerate operating in the agro-food sector. In addition, both companies' expansion strategies involve very important and successful international joint ventures and mergers. This organizational and sampling frame was chosen mainly due to an anticipation of the existence of a more accentuated link between CRI and EC in private rather than public settings, where management and leader–member exchange relations seem to be more rigid in both countries.

The questionnaire was developed from the present literature, using measurements adopted and modified from previously identified scales to avoid scale proliferation. The constructs were later operationalized using both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) (Anderson and Gerbing, 1988). We have received 710 questionnaires in total, with a response rate of 75 percent, which the population of interest was managers, team leaders, and heads of department. We excluded incomplete surveys and outliers and obtained a final sample of 688 respondents, 332 of which were Algerian, and 356 were Turkish. The questionnaire was distributed to respondents during their working hours, and later analyzed using SPSS 23 and AMOS 22 package programs. Following a two-step structural equation modeling (SEM) approach as suggested by Anderson and Gerbing, 1988, the aim of the analysis was to compare and contrast the different TL approaches in both countries and test the validity of the research hypotheses.

The Turkish sample was comprised of 356 respondents where 63.8 percent of them were female managers and 36.2 percent were male. 50.8 percent of the respondents held a bachelor's degree, and 5.6 percent of the respondents were PhD. The managers' interaction with their followers was reported by a 60 percent interaction rate for a 'More than 20 times a week' frequency, implying regular contact with followers, and reinforcing the results of the analysis due to the long interaction lapse.

On the other hand, the Algerian sample was comprised of 332 respondents where 49.7 percent of respondents were male and 50.3 percent were female. 73.5 percent of the managers held a bachelor's degree, and 9.9 percent held a PhD. 94.5 percent of Turkish respondents performed managerial tasks for more than six years, whereas 80 percent of Algerian respondents performed managerial tasks for the same time lapse. The leader–follower

interaction was also high; it reached 65 percent for a 'More than 10 times weekly' frequency for Algerian respondents.

For a reliability check, the value of Cronbach's alpha was $\alpha = 0.912$ for the Turkish sample and $\alpha = 0.752$ for the Algerian one, indicating greater stability, consistency, and suitability of both samples to perform the SEM analysis (Kline, 2016).

Nonresponse bias. We have checked the data set for nonresponse bias through comparing the responses of early and late waves of returned surveys as suggested by Dubey *et al.*, 2015; Dubey *et al.*, 2017a, b. Both samples were ranked according to the dates of response-reception into equal groups. Based on the six selected variables, the first 33 percent early respondents were compared against the 33 percent late respondents for the Turkish sample, whereas the early 40 percent respondents were compared against the 40 percent late ones for the Algerian sample. The results of *t*-tests performed on the two groups yielded no statistically significant differences with $p < 0.05$; thus, nonresponse bias was deemed neither a major issue for both data sets nor a significant threat to validity.

Measures

Transformational leadership

This construct involved four subcomponents, namely, II, Inspirational Motivation, IS, and IC. Therefore, to be operationalized, the assessment of every components' impact on EC was attempted through a section taking place in our five Likert questionnaire through an assessment of agreement ranging from 'Strongly Disagree' to 5 'Strongly Agree' (Brown, 2011; Dubey *et al.*, 2017a, b) (see Appendix A) as follows:

Idealized influence. Our six-item measure of II was derived from the Multifactor Leadership Questionnaire (MLQ-5X) which is the standard instrument for assessing TL behavior (Avolio and Bass, 2004; Rowold, 2005) in a way that is consistent with our theoretical context and arguments. Accordingly, managers from both companies were asked to assess the extent to which they agreed with the following statements: (1) 'I often make others feel good around me', (2) 'I express confidence to my followers', (3) 'I instill pride into my followers', (4) 'No matter what, I go beyond self-interest for the group's benefit', (5) 'Ethical implications are always considered while making my decisions', and (6) 'I often lead by example'. The assessed constructs' reliability of scale resulted into $\alpha = 0.740$ for the Algerian Sample and $\alpha = 0.780$ for the Turkish one confirming the reliability of both samples.

Inspirational motivation. This construct was reserved the second section of the questionnaire with a seven-item measure adopted from both 'The Multifactor Leadership Questionnaire' (Rowold, 2005) and the 'Minnesota Satisfaction Questionnaire' (Weiss, 1977). After being modified to fit the context of our literature, respondents were asked to assess the extent to which they agreed with the following questions: (1) 'I always articulate a precise vision of the future to my followers', (2) 'I express exactly what I want while interacting with my followers', (3) 'I always promote having a clear mission among my followers', (4) 'I demonstrate a commitment to our vision', (5) 'I believe in helping followers to see purpose in their work', (6) 'I set high standards for my followers', and (7) 'I work enthusiastically towards instilling an optimism spirit in my followers'. The reliability of this construct was $\alpha = 0.987$ for the Turkish sample and $\alpha = 0.705$ for the Algerian one.

Intellectual stimulation. The measurement of this construct was also essential to understand how far it impacted employee CRI and creativity alike. Therefore, its five-item measure was adopted from 'The Transformational Leadership Survey' developed by Ogola, *et al.*, 2017, in addition to the MLQ by Rowold, 2005. Respondents were asked to assess their intellect-stimulating behavior toward their followers through rating the following statements: (1) 'I encourage thinking about usual business problems in new ways', (2) 'I often provide followers with creative ways of looking at puzzling things', (3) 'I encourage followers to be more creative', (4) 'I never criticize my followers publicly for their mistakes',

and (5) 'I can discard an old rule I set earlier in case my follower suggested a better option'. The reliability of this construct was $\alpha = 0.836$ for the Turkish sample and $\alpha = 0.744$ for the Algerian sample.

Individualized consideration. As the last TL component to be measured, a six-item measure was adopted from both the following: the 'Multifactor Leadership Questionnaire' by Rowold (2005) and the 'Transformational Leadership Scale' proposed by Rafferty and Griffin (2004). Mainly, respondents were asked to assess their agreement with the following statements: (1) 'Constantly helping others develop themselves doesn't waste my time', (2) 'I allocate special attention to each followers' needs', (3) 'I suggest customized trainings for each follower', (4) 'The leader must be aware of each follower's specific need of development at work', (5) 'If necessary, I would opt for one-on-one coaching', (6) 'Feeling considered encourages followers to become more creative at work'. The reliability of this measure was up to $\alpha = 0.728$ for the Turkey sample and $\alpha = 0.833$ for the Algerian one.

Creative role identity

As identified in the research model, all TL-related constructs were assumed to impact employee CRI. Thus, to assess this measure, a seven-item measure was adopted from both the 'Leader-Member Exchange Scale' developed by Eby and Dobbins, 1997 and the 'Quality of Team Member Exchange Scale' employed by Eisenberger *et al.*, 2010. Respondents were asked to assess to which extent TL components contributed into their CRI as follows: (1) 'Leaders' exhibited charisma affects the extent to which a follower considers himself creative at work', (2) 'I believe providing followers with creative ways of looking at puzzling things reinforces their creative role identity', (3) 'A followers succeeding at solving a challenging task believes he is likely to be more creative at solving other work-related tasks', (4) 'The special consideration allocated to a follower reinforces their willingness to perform creatively', (5) 'I believe that transformational leadership enhances employees perception of their workplace creativity', and (6) 'I believe creative role identity is part of the creativity process at the workplace'. The reliability of the construct was $\alpha = 0.708$ for the Turkish sample and $\alpha = 0.710$ for the Algerian one.

Employee creativity

Our final six-item measure for EC was derived from the works of (Eisenberger *et al.*, 2010) on leader–member exchange and employee affective organizational commitment along to the 'Multifactor Leadership Questionnaire' (Rowold, 2005). Managers were asked to assess how far they agreed with the following statements: (1) 'The flow of charisma from the leader to his followers contributes into increasing their willingness to be creative', (2) 'Providing innovative problem-solving approaches increases employee creativity', (3) 'After succeeding a challenging task, followers tend to behave more creatively facing new challenges', (4) 'After attending trainings specialized to their area, followers tend to perform their same regular tasks creatively', and (5) 'An employee perception of his creative role identity is certainly reflected in his actual creative behavior level'. The reliability checks of this measure was $\alpha = 0.749$ for the Turkish sample and $\alpha = 0.815$ for the Algerian sample indicating the measure to be reliable.

Analysis and results

As mentioned earlier, our analysis follows an SEM approach as recommended by Anderson and Gerbing (1988) and applied by several studies (e.g: Simsek *et al.*, 2005; Lubatkin *et al.*, 2006). The first phase involves the fit of the model through EFA than CFA. Meanwhile, the second phase involves testing the validity of the structural model and hypotheses (OKE, 2016). SEM was particularly an applicable approach in our study as it allowed the estimation

of multiple associations while incorporating observed and latent constructs into these associations (Cao *et al.*, 2010). In the following, we report results of both phases, along with the results of testing each individual hypothesis.

Exploratory factor analysis

Prior to EFA, the Bartlett's test of sphericity and Kaiser–Meyer–Olkin (KMO) tests resulted into the values of 0.847 for the Turkish sample and 0.792 for the Algerian one. The KMO test was significant, and both data sets were therefore deemed adequate for a principal components analysis (cutoff is 0.6) (Pallant, 2007). The sphericity test was also significant, $p < 0.001$, implying sufficient correlation between variables (Anderson and Braak, 2003). EFA reduced variables into six independent factors with Eigen's values greater than 1.0, explaining 74.626 percent of the total variance for Turkey and 60.069 percent for Algeria and retained 27 items from the Algerian sample, and 26 items from the Turkish one (Table I) and (Table II).

Confirmatory factor analysis

As per Byrne (2013) recommendation, the relationship between factors extracted during EFA is subject to confirmation through a CFA. Thus, CFA was performed on both models using

	Turkey components					
Item	Factor 1 II	Factor 2 IM	Factor 3 IS	Factor 4 IC	Factor 5 CRI	Factor 6 EC
II1				0.882		
II2				0.606		
II3				0.904		
II4				0.628		
IM1	0.944					
IM2	0.939					
IM4	0.935					
IM5	0.942					
IM6	0.951					
IM7	0.928					
IS1		0.689				
IS2		0.694				
IS3		0.877				
IS5		0.879				
IS6		0.883				
IC3						0.826
IC5						0.722
IC6						0.821
CRI3					0.807	
CRI4					0.833	
CRI5					0.716	
CRI6					0.636	
EC2			0.807			
EC3			0.893			
EC4			0.654			
EC5			0.803			
Initial eigenvalues	8.095	3.527	2.395	2.030	1.749	1.606
Variance (%)	31.134	13.567	9.211	7.808	6.728	6.178
Cumulative (%)	31.134	44.700	53.912	61.720	68.448	74.626

Note: Appendix A contains codes with statements

Table I.
Factor loading for outcome variable (Turkey)

Item	Algeria components Factors 1 II	Factor 2 IM	Factor 3 IS	Factor 4 IC	Factor 5 CRI	Factor 6 EC
II1				0.723		
II2				0.757		
II3				0.753		
II4				0.720		
II5				0.629		
IM3					0.654	
IM4					0.765	
IM5					0.799	
IM6					0.642	
IS1		0.747				
IS2		0.741				
IS3		0.819				
IS4		0.720				
IS5		0.759				
IC1	0.815					
IC2	0.662					
IC3	0.812					
IC4	0.875					
IC5	0.643					
CRI1						0.696
CRI3						0.700
CRI4						0.718
CRI5						0.729
EC1			0.850			
EC2			0.894			
EC3			0.648			
EC4			0.762			
Initial eigenvalues	5.263	2.932	2.566	2.209	1.848	1.400
Variance (%)	19.491	10.859	9.504	8.183	6.845	5.187
Cumulative (%)	19.491	30.350	39.855	48.037	54.883	60.069

Note: Appendix A contains codes with statements

Table II.
Factor loading for outcome variable (Algeria)

the 'Maximum Likelihood Estimation' method based on fit indices with thresholds as follows: normed chi-square (χ^2/df) below 5.0, comparative fit index (CFI) and goodness of fit index (GFI) above 0.9, and RMSEA's cutoff is above 0.08 (Hair *et al.*, 2010; Byrne, 2013; Kline, 2016). Table III displays CFA results for both samples indicating both models to be fitting the data with modification indices and attaining the required model fitness level.

Validity

As displayed in Table IV, the convergent validity of all the scales was supported and all the estimated coefficients of all indicators were significant since almost all the average variance extracted (AVE) estimates were equal or higher than 0.50 for both countries (Dubey *et al.*, 2017a, b). However, when it comes to CRI and EC estimates and according to Malhotra

Country	Model	χ^2	df	χ^2/df	CFI	GFI	RMSEA
Turkey	Revised	362.532	191	1.898	0.973	0.918	0.050
Algeria	Revised	214.12	194	1.104	0.964	0.941	0.018

Table III.
Confirmatory factor analysis

Table IV.
Validity results for Turkey and Algeria

Turkey Construct	CR	AVE	MSV	MaxR (H)	II	MI	IS	IC	CRI	EC
II	0.987	0.926	0.249	0.988	0.962					0.158**
MI	0.846	0.582	0.182	0.872	0.255***	**0.763**				**0.244*** **
IS	0.785	0.569	0.111	0.891	0.142*	0.216***	**0.754**			**0.334*** **
IC	0.809	0.600	0.249	0.952	0.499***	0.287***	0.237***	**0.774**		**0.184****
CRI	0.702	0.442	0.186	0.714	0.432***	0.427***	0.210**	0.294***	**0.665**	**0.277*** **
EC	0.756	0.524	0.111	0.835						**0.724**

Algeria Construct	CR	AVE	MSV	MaxR (H)	II	MI	IS	IC	CRI	EC
II	0.844	0.583	0.106	0.900	**0.763**					
MI	0.755	0.513	0.106	0.803	0.326***	**0.716**				
IS	0.842	0.581	0.068	0.906	0.120†	0.240**	**0.762**			
IC	0.754	0.506	0.005	0.759	−0.068	−0.050	−0.013	**0.711**		
CRI	0.725	0.362	0.068	0.789	0.108	−0.172*	0.260**	−0.054	**0.602**	
EC	0.730	0.481	0.039	0.761	−0.136†	0.008	0.199**	0.059	**−0.092**	**0.694**

Notes: Significance of Correlations: †$p < 0.100$, *$p < 0.050$, **$p < 0.010$, ***$p < 0.001$
CR: composite reliability; AVE: average variance extracted; MSV: maximum shared squared variance
The bold values stand for the square roots of AVE . Their significance level however is 0.5 and above according to (Gaskin, 2016).

and Birks (2007), the validity of the measurement model can be established through composite reliability (CR) alone (Gaskin, 2016). Therefore, we deem both models valid.

Common method bias

To check both samples for common method bias (CMB), the 'Harman's Single Factor Method' was used. Results revealed one factor explaining up to 27.067 percent of the total variance for the Turkish sample and 25.231 percent for the Algerian one (less than 50 percent of the variance), implying no potential CMB in both samples (Gaskin, 2016).

Structural model assessment

Based on the estimate of standardized regression weight, standard error of regression weight (SE), critical ratio of regression weight (CR), and level of significance for regression weight (*P*) displayed in (Table V), along with the model testing results

Algeria			Std. reg. weight	S.E.	C.R.	*P*	Label
Creative role identity	←	Individualized consideration	0.062	0.038	1.637	0.102	
Creative role identity	←	Intellectual stimulation	−0.157	0.052	−3.036	0.002	
Creative role identity	←	Inspirational motivation	−0.035	0.055	−0.638	0.524	
Creative role identity	←	Idealized influence	−0.041	0.066	−0.621	0.534	
Employee creativity	←	Creative role identity	0.572	0.179	3.200	0.001	
Statistics			Suggested		Obtained		
Chi-square significance			≥0.05		0.000		
Normed Chi-square			≤5.00		1.451		
CFI			≥0.90		0.960		
RMSEA			≤0.08		0.037		
Turkey			Std. reg. weight	S.E.	C.R.	*P*	Label
Creative role identity	←	Individualized consideration	0.206	0.053	3.901	***	
Creative role identity	←	Intellectual stimulation	0.207	0.051	4.075	***	
Creative role identity	←	Inspirational motivation	0.051	0.015	3.474	***	
Creative role identity	←	Idealized influence	0.053	0.025	2.127	0.033	
Employee creativity	←	Creative role identity	0.182	0.189	0.963	0.335	
Statistics			Suggested		Obtained		
Chi-square significance			≥0.05		0.000		
Normed Chi-square			≤5.00		2.933		
CFI			≥0.90		0.940		
RMSEA			≤0.08		0.074		

Notes: Estimate = standardized regression weight. S.E. = standard error of regression weight C.R. = critical ratio of regression weight. *P* = level of significance for regression weight

Table V.
Estimates of the hypothesized model

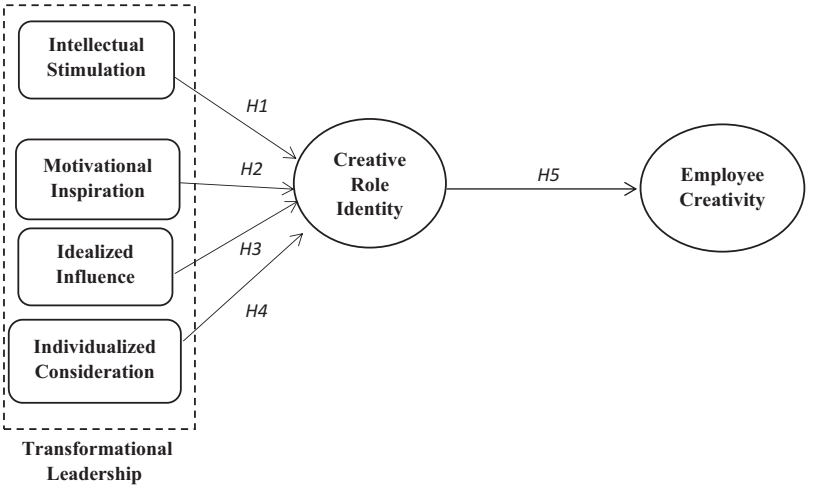


Figure1.
Conceptual research model

displayed in Figures 1–3; the value of estimated constructs below $p < 0.005$ indicate hypotheses validness (Anderson and Gerbing, 1988). Therefore, for the Turkish sample H1, H2, H3, and H4 were deemed valid. However, H5 was not supported with $p = 0.335$. In fact, IS and IC had the highest regression weight values of 0.207 and 0.206, respectively, which implicates that among the four components of TL, Turkish managers believe that IS and IC have the most impact on EC. Whereas, II and MI with respective regression weights of 0.053 and 0.051, are perceived less impactful compared to the previous TL components, but nonetheless impactful. An interesting analysis output was that of H5, with a regression weight of 1.82 and a p value of 0.335 implying that Turkish managers do not perceive an existing impact of CRI on EC.

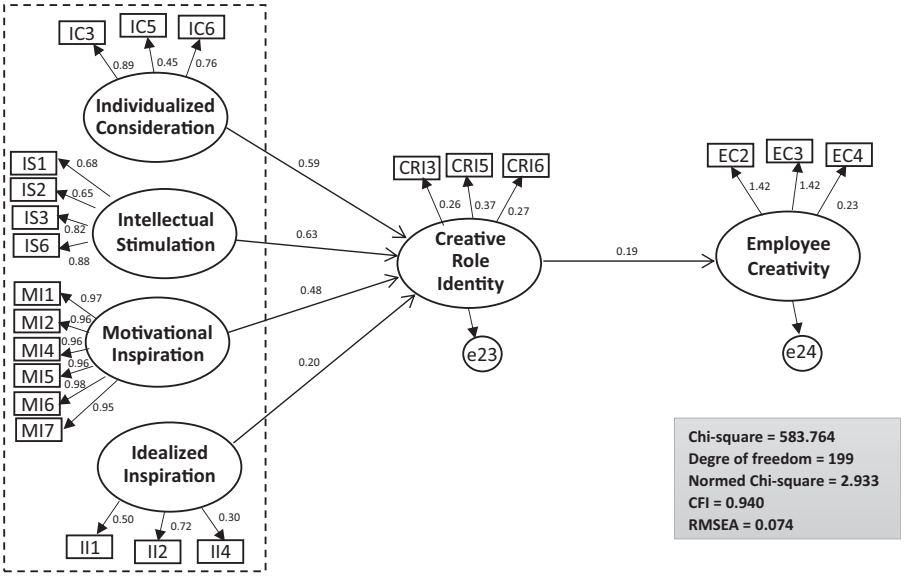


Figure 2.
Final structural model (Turkey)

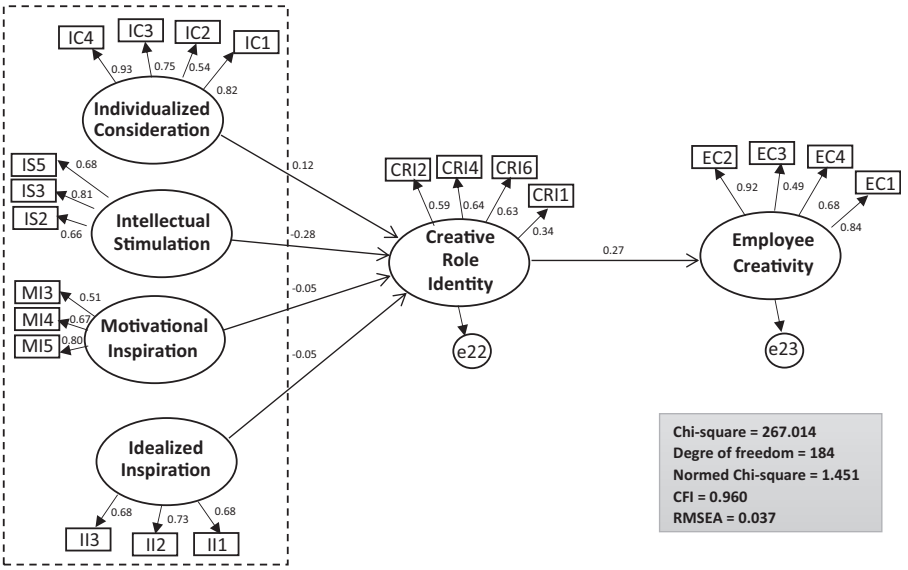


Figure 3.
Final structural model (Algeria)

On the other hand, the *p* values of the estimated constructs of the Algerian sample indicate that H2 and H5 were supported; meanwhile, H1, H3, and H4 had *p* values above the cutoff of 0.005 and were therefore deemed, not supported. Moreover, the highest of regression weights were those of CRI (0.572) meaning that Algerian managers perceived it to have a significant impact on EC. Nevertheless, considering its regression weight (−0.157), we can assume they believed that although IS had a certain impact on CRI, it was not significantly potent. As for the rest of TL components, our study did not find a significant influence of IC, IM, or II on EC when it comes to the Algerian sample (Table V.).

Discussion

Although some empirical research has undertaken TL and creativity association (Gong *et al.*, 2009; Brian Joo and Lim, 2013; Loi *et al.*, 2015; Jyoti and Dev, 2015; Çekmecelioğlu and Özbağ, 2016), none of it investigated the mediating role of CRI in this impact relationship. Besides, most of the research was performed in Western settings. Therefore, our study suggested a comparison of two non-Western managerial perspectives and organizational settings as a foundational investigation of TL implications on the workplace creativity. Moreover, the study attempts to advance the theoretical legitimacy of CRI's impact on EC and proposes a model to assess it. Therefore, through testing the hypothesized structural model, we concluded the following findings:

Transformational leadership impact on employee creativity

When it comes to TL components, through testing H1, we found that managers perceived a positive link between IC and EC in Turkey and a negative one in Algeria. This not only supports (Taslak, 2008) findings from the Turkish side but it also opens the door for new question on investigating the underlying cultural and organizational motives behind such managerial stance in Algeria (Ziani, 2014; Ouedi, 2014; Reouai, 2016). On the other hand, IS was perceived to positively impact EC in both countries, and H2 was therefore supported. This finding is in alignment with both Güzel and Akgündüz (2011) and Akyol *et al.* (2013)

findings in Turkey, where they proved IS to increase employee charisma and motivation. IM was found to be impactful only in Turkey (H3), which is in alignment with the Turkish study of Akbolat *et al.* (2013) and represents an important insight for Algerian researchers, in terms of investigating the hindering reasons behind perceiving IM as nonimpactful. Furthermore, we surprisingly found that II is perceived to be nonimpactful on EC (H4) both in Turkey and Algeria. The Turkish recommendations BinAbderahman (2011) of Yavuz (2009) that leader's charisma should be preceded by other TL components, along with those of BinAbderahman (2011) and Brahim *et al.* (2015) who insisted on leaders allocating more attention into being a role model at the workplace in terms of work ethics and self-confidence, in addition to endorsing the need of shedding the light on this critical component.

Creative role identity moderating impact on employee creativity

In regards to the findings related to CRI direct impact on EC, we were surprised to find out through hypothesis testing that Turkish managers perceived CRI to be nonimpactful on EC, unlike posited in H5. However, Algerian managers perceived the opposite. Despite of the Algerian perspective being in alignment with Koseoglu *et al.* (2017) findings, such conclusion spark various questions about the understanding of the TL's hindering aspects in terms of organizational culture and leader–member exchange relationships. Perhaps, this literature-based hypothesis did prove right in Turkey because of the tendency of Turkish organizational and culture to lean toward uncertainty avoidance (Hofstede, 2017). Implying that employees might consider themselves put in an uncertain situation, once their creativity is challenged by their managers. As a reaction, they might prefer to avoid the situation, rather than exhibiting involvement. This, in fact, is in alignment with findings of few studies undertaking Turkish organizational culture and behavior (Giritli *et al.*, 2014; Porkka, 2016), and it is considered one of the major findings of Hofstede on Turkish organizational behavior (Hofstede, 2017).

On the other hand, The Algerian managers perceived CRI to impact EC and that was only through IS. Such finding was expected, as the Algerian organizational culture tends to not focus much on team-based work but rather on individualism (Ziani, 2014; Ouedi, 2014; Reouai, 2016). A common finding was concluded when H2 was validated as a workplace creativity booster, which is in alignment with some studies from both countries (Taslak, 2008; BinAbderahman, 2011; Brahim *et al.*, 2015), and represents a critical topic to be investigated, as for the nature of intellectual challenges and motivational approaches to be employed by managers from both countries to unite followers toward achieving a common vision in the most creative ways.

Implications

Our study found that TL was impactful on EC in Algeria when mediated by CRI. More specifically, TL was found to be positively impacting CRI through IS, which in turn, positively influenced EC. In Turkey, TL was found to affect only EC, and CRI was not found to mediate TL and EC. These findings aim to offer some valuable suggestions for managers in both countries, to make use of in both their leadership approaches and mutual business collaborations.

Algerian managers should focus more on establishing stronger leader–member exchange relationships with their followers, through allocating more time and varying managerial mechanisms to better understand, motivate, and influence followers. In this vein, focusing on the IC of followers advances mutual appreciation, respect to the leaders, along with increasing followers sense of responsibility, thus, implicating more creativity at the workplace (Ouedi, 2014). Furthermore, being more of an individualistic organizational culture (Reouai, 2016), Algerian employees tend to be more creative in a setting where their individual needs for achievement are being recognized, oriented, and fulfilled by leaders (Ziani, 2014). Finally, IM

is also to be prompted by Algerian managers, through communicating precise and detailed long- and short-term visions for employees to look forward to and follow, which will ultimately unify and concretize organizational goals both creatively and effectively.

Furthermore, the research framework of this study was developed based on one of the most applied theories in social sciences (Jan and Ammari, 2016), and it has a good potential to be expanded to investigate different samples of current Turkish–Algerian joint ventures. It can be applied into different research fields in the aim of advancing the understanding of organizational culture and behavior and better allocating potential resources in both countries.

Limitations

Despite its contribution to the literature and practice of TL and EC, the study is not free from limitations. Mainly in terms of the data collection method, self-administrated questionnaires have a major disadvantage of lacking control over the data collection process, leading to misinterpretations of the questions by the respondents, thus, potential validity issues. Therefore, giving the different cultural settings of the research, future studies could collect data from the respondents directly, as in semi-structured interviews, which will enhance reliability and validity of the respondent's answers.

Another limitation is the small sample size and the mono field of application. Future research might increase the sample size in addition to applying the model into other TL study fields, which will test and widen the findings of this study toward different sectors.

The last limitation involves the constructs affecting CRI and TL on a multilevel basis. A further increase in the number of these constructs will offer more in-depth understanding of the corporate hierarchy's impact on workplace creativity in both countries.

Conclusion

In conclusion, this research has worked on linking CRI to TL and EC, in a way that offers a comparative perspective and a contribution to the literature and practice of TL from different approaches of two non-Western organizational settings. It can be considered a building block in the study of TL across cultures.

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Appendix A. Questionnaire

Idealized influence

Instructions: This section helps the researchers understand how your II-related behavior affects your followers. Please read each statement and choose the number that indicates how much the statement applies to you.

Idealized influence		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
II1	I often make others feel good around me	1	2	3	4	5
II2	I express confidence to my followers	1	2	3	4	5
II3	I instill pride into my followers	1	2	3	4	5
II4	No matter what, I go beyond self-interest for the group's benefit	1	2	3	4	5
II5	Ethical implications are always considered while making my decisions	1	2	3	4	5
II6	I often lead by example	1	2	3	4	5

Motivational inspiration

Instructions: This section helps the researchers understand how your MI-related behavior affects your followers. Please read each statement and choose the number that indicates how much the statement applies to you.

	Motivational inspiration	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
MI1	I always articulate a precise vision of the future to my followers	1	2	3	4	5
MI2	I express exactly what I want while interacting with my followers	1	2	3	4	5
MI3	I always promote having a clear mission among my followers	1	2	3	4	5
MI4	I demonstrate a commitment to our vision	1	2	3	4	5
MI5	I believe in helping followers to see purpose in their work	1	2	3	4	5
MI6	I set high standards for my followers	1	2	3	4	5
MI7	I work enthusiastically towards instilling an optimism spirit in my followers	1	2	3	4	5

Intellectual stimulation

Instructions: This section helps the researchers understand how your IS-related behavior affects your followers. Please read each statement and choose the number that indicates how much the statement applies to you.

	Intellectual stimulation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
IS1	I encourage thinking about usual business problems in new ways	1	2	3	4	5
IS2	I often provide followers with creative ways of looking at puzzling things	1	2	3	4	5
IS3	I encourage followers to be more creative	1	2	3	4	5
IS4	I never criticize my followers publicly for their mistakes	1	2	3	4	5
IS5	I can discard an old rule I set earlier in case my follower suggested a better option	1	2	3	4	5

Individualized consideration

Instructions: This section helps the researchers understand how your IC-related behavior affects your followers. Please read each statement and choose the number that indicates how much the statement applies to you.

Individualized consideration		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
IC1	Constantly helping others develop themselves doesn't waste my time	1	2	3	4	5
IC2	I allocate special attention to each followers' needs	1	2	3	4	5
IC3	I suggest customized trainings for each follower	1	2	3	4	5
IC4	The leader must be aware of each follower's specific need of development at work	1	2	3	4	5
IC5	If necessary, I would opt for one-on-one coaching	1	2	3	4	5
IC6	Feeling considered encourages followers to become more creative at work	1	2	3	4	5

Creative role identity

Instructions: This section helps the researchers understand how CRI behavior affects your followers' creativity. Please read each statement and choose the number that indicates how much the statement applies to you.

Creative role identity		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
CRI1	Leaders' exhibited charisma affects the extent to which a follower considers himself creative at work	1	2	3	4	5
CRI2	I believe providing followers with creative ways of looking at puzzling things reinforces their CRI	1	2	3	4	5
CRI3	A followers succeeding at solving a challenging task believes he is likely to be more creative at solving other work-related tasks					
CRI4	The special consideration allocated to a follower reinforces their willingness to perform creatively	1	2	3	4	5
CRI5	I believe that transformational leadership enhances employees' perception of their workplace creativity	1	2	3	4	5
CRI6	I believe CRI is part of the creativity process at the workplace	1	2	3	4	5

Employee creativity

Instructions: this section helps the researchers understand how your overall transformational behavior affects followers' creativity. Please read each statement and choose the number that indicates how much the statement applies to you.

Employee creativity		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
EC1	The flow of charisma from the leader to his followers contributes into increasing their willingness to be creative	1	2	3	4	5
EC2	Providing innovative problem-solving approaches increases EC	1	2	3	4	5
EC3	After succeeding a challenging task, followers tend to behave more creatively facing new challenges	1	2	3	4	5
EC4	After attending trainings specialized to their area, followers tend to perform their same regular tasks creatively	1	2	3	4	5
EC5	An employee perception of his CRI is certainly reflected in his actual creative behavior level	1	2	3	4	5

Professional background

Instructions: Please tick (√) the boxes applicable to you.

1. How long have you been performing managerial tasks?

☐ Less than 3 months ☐ 1 to 2 years
☐ 3 to 6 months ☐ 3 to 5 years
☐ 7 to 11 months ☐ over 6 years

2. How often do you directly interact with followers?

☐ Less than twice a week ☐ 10 times per week
☐ Up to 4 times weekly ☐ More than 10 times per week

1. GENDER
☐ Male ☐ Female
2. AGE GROUP
☐ 25-29 ☐ 30-35 ☐ 35-40 ☐ Over 40
3. HIGHEST EDUCATION LEVEL
☐ Diploma ☐ Bachelor ☐ Masters ☐ PhD ☐
4. JOB TITLE
☐ Manager ☐ Head of department ☐ Team leader
5. NATIONALITY
☐ Turkish ☐ Algerian

Thank you very much, for participating in this survey.

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