

Effect of green transformational leadership on green creativity: A study of tourist hotels



Swati Mittal*, Rajib Lochan Dhar

Department of Management Studies, Indian Institute of Technology Roorkee, Roorkee 247667, Uttarakhand, India

HIGHLIGHTS

- Green Transformational Leadership positively related to the green creativity.
- GOI mediated the relation of green transformational leadership and green creativity.
- Resource commitment acted as a mediator.
- The background of the study was Tourist hotels.

ARTICLE INFO

Article history:

Received 1 September 2015

Received in revised form

4 May 2016

Accepted 22 May 2016

Keywords:

Green transformational leadership

Green organizational identity

Green creativity

Resource commitment

Tourist hotels

ABSTRACT

This study examined the role played by green transformational leadership in promoting green creativity through green organizational identity. A survey questionnaire was used to collect data from managers and employees working in tourist hotels in Uttarakhand, India. In order to collect data for this study, 250 hotel employees and their 250 immediate supervisors were contacted. The findings of this study revealed that green transformational leadership had a positive influence on green organizational identity which leads to the promotion of green creativity in the organization. Further, it was also found that resource commitment acted as a moderator in the relationship between green organizational identity and green creativity. Hence, hotels have to increase their resource commitment for promotion of green creativity amongst their employees. On the basis of the study's findings, the implications for practitioners are discussed.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Sustainable growth has become the norm of the day, and there is an increased pressure on organizations to follow green practices for achieving sustainable competitive advantage (Hsieh, 2012; Park & Kim, 2014). Environmental security has become a crucial matter for the organizations; companies are creating different creative groups to reduce paper and water usage, to develop rain water harvesting premises, and to recycle water for sanitation purposes (Kala, 2011; Miles & Covin, 2000) for conserving the environment. Government has been promoting those organizations that have developed green services and products (Leonidou, Leonidou, Fotiadis, & Aykol, 2015) because these green practices or services contribute not only to the image of organization, but also result in

decreased cost. Thus, green services and environment friendly activities find a crucial place in the competitive environment of organizations (Fraj, Matute, & Melero, 2015). The last decade has witnessed speedy urbanization, depletion of natural resources, and increase in global carbon foot print in the name of economic development and this environmental degradation for the sake of economic development has become a major concern for the Indian government (Kumar, 2013; Ogra, 2008). Further, Uttarakhand has experienced major flood and earthquake as an outcome of routine urbanization and environmental degradation (Kala, 2014; Kumar, 2013). These calamities have aggravated the concern of the Government of India about dilapidation of environment, hence to the government has enforced stricter environmental norms across India. As a result, environmental deliberation has become a commonly used concept for global environmental change, thereby challenging more organizations to pay greater attention to avail green services such as green leadership and green creativity (Chen & Chang, 2013).

Abbreviations: GOI, Green organizational Identity.

* Corresponding author.

E-mail address: swatimittal96@gmail.com (S. Mittal).

Previous studies have shown that in the world's developed as well as developing economies the service sector has been found to be contributing to more than 70% of the gross domestic product (GDP), thus resulting in the promotion of creativity (Ostrom et al., 2010; Thakur & Hale, 2013; Tyagi, Dhar, & Sharma, 2016). The success of the tourist hotels primarily depends on creativity (Jaiswal & Dhar, 2015; Ostrom et al., 2010) related to the services provided. In addition, the introduction of innovative services can play a significant role in value creation. For example, the development of economic recovery, tourist activities, and recovery of environmental heritage of a site (Moller, Rajala, & Westerlund, 2008; Votsi, Mazaris, Kallimanis, & Pantis, 2014) are means of gaining larger market share and customer value (Chapman, Soosay, & Kandampully, 2003). Above all, the tourism and hotel industry has become one of the important service segments (Dhar, 2015; Narayan, Rajendran, Sai, & Gopalan, 2009), and so it needs to be fostered in order to make it more creative in its service orientation.

According to the World Tourism Organization, there has been a consistent rise in the tourism industry of the emerging economies like India (UNWTO, 2013). In this regard, according to the Indian Brand Equity Foundation (IBEF, 2013), a consistent growth has been observed in this sector which is evident through the contribution of US\$ 34.7 billion to the national GDP (IBEF, 2013). With a steep rise in the number of international tourists, India has become one of the preferred tourist destinations of South Asia (UNWTO, 2013). According to UNWTO, the international tourist arrival is expected to increase at a rate of 3.3% per year from 2010 to 2030.

Reports projecting industry growth trends to show that there is a great potential for the Indian tourism industry which can be further enhanced via providing memorable tourism experiences to the visitors (IBEF, 2013). Imparting of memorable experiences can be largely attained by offering better facilities as well as providing a wide range of cost effective and creative services (Leonidou, Leonidou, Fotiadis, & Zeriti, 2013). In today's competitive business environment, the success of a service oriented organization like a tourist hotel depends upon utilizing creative services that can satisfy the needs of the customers who always expect "something different and extra". Thus, creativity is gradually becoming an effective weapon to face market competition since the customers are becoming more aware and concerned about the environment (Fraj et al., 2015). The preservation of environment has become an area of critical importance; hence service organizations like tourist hotels have started to show their dedication to come up with environment friendly practices like green creativity (Chen & Chang, 2013; Leonidou et al., 2013). Creativity is vital for the development of novel and useful ideas which can lead to organizational development and performance (Amabile, 1988). In service organizations like hotels, creativity is the essential footstep in the innovation process, as it is a preliminary point for organizational innovation (Wang, Tsai, & Tsai, 2014). In this study, we adopted some concepts related to environmental innovation practices such as green transformational leadership, green organizational identity, green creativity and resource commitment. Green transformational leadership is a leader's behavior which motivates followers to fulfill environmental objectives and goals and encourages followers to perform beyond their expectation for achieving environmental performance such as green creativity (Bass, 1998; Chen & Chang, 2013).

Amabile (1988) and Chen and Chang (2013) defined green creativity as "the development of new ideas about green products, green services, green processes, or green practices that are judged to be original, novel, and useful" (p.113).

Nurturing green creativity among employees to produce innovative end results is the primary concern of managers (Chen & Chang, 2013; Zhu, Cordeiro, & Sarkis, 2013). Shalley, Zhou and

Oldham (2004) argued that creativity among the employees is recognized as an important element because it delineates the characteristics of the individual as well as depicts his or her ability to fulfill the duties under all circumstance. Similarly, some basic approaches have been adopted by past researchers to study the antecedents of creativity. In the first approach, managers deeply impact individuals by guiding employees to perform their work creatively (Gong, Huang, & Farh, 2009; Shalley & Gilson, 2004), thus making this approach their preferred leadership style. Based on these studies, Amabile, Schatzel, Moneta, and Kramer. (2004) suggested that the behavior of the leader plays a crucial role in promoting creativity amongst the employees. Studies in the past have shown that transformational leadership plays a significant role in promoting employee creativity (Gumusluoglu & Ilsev, 2009; Mittal & Dhar, 2015). Transformational leadership generates a supportive and motivating environment (Jung, Chow, & Wu, 2003) and organizes necessary contextual resources to individuals as an expression of creative behavior. Hence, this study makes an attempt to understand the relationship between transformational leadership and creativity of service in organizations like tourist hotels from environmental or green perspective. In the second approach, green organizational identity and commitment towards resources were found to play a crucial role in nourishing green creativity in the hotel industry (Daugherty, Richey, Genchev, & Chen, 2005; Garg & Dhar, 2014; Sethi, 2000).

This study aims to examine the role of green transformational leadership toward influencing green organizational identity and its subsequent impact on green creativity in tourist hotels. The study further tries to establish that resource commitment plays an interactive role in the relationship between green organizational identity and green creativity. Thus, the study adds to the existing literature in the following ways: First, a significant relation between green transformational leadership and green creativity is confirmed. Second, the mediating role of green organizational identity between green transformational leadership and green creativity has been explained. Third, the role of resource commitment as a moderator provides a better understanding of green creativity in tourist hotels. Thus, this study attempts to understand the role of green transformational leadership and green creativity in the context of tourist hotels. Furthermore, we examined the extent to which green organizational identity and resource commitment affect green creativity of the tourist hotels.

2. Theoretical foundation and hypotheses formulation

2.1. Green transformational leadership and green creativity

Organizational creativity highly depends upon leaders and their characteristics (Halbesleben, Novicevic, Harvey, & Buckley, 2003) because they play a leading role in enhancing environmental performance (Andriopoulos, 2001). Several studies have demonstrated that transformational leadership plays a key role in getting creative outcomes (Mittal & Dhar, 2015; Woodman, Sawyer, & Griffin, 1993). Transformational leadership has four dimensions, "intellectual stimulation, individualized consideration, charisma, and inspirational motivation" (Bass, 1985). The *charismatic* power of the transformational leader helps in coming up with inspirational thoughts amongst the followers which lead to acquiring respect amongst them and thus earning their loyalty. With the help of the *charismatic* power that the transformational leader possesses, he is able to create a feeling of collective responsibility within their followers. *Individualized consideration* helps the transformational leader to create a feeling of belongingness amongst their followers that lead to the development of concern for each other. Further, the transformational leader with the help of *inspirational motivation* is

not only able to create a vision for the organization but also helps the followers to show the path by which the vision can be transformed into a reality. Lastly, through the *intellectual stimulation* capability, the transformational leader is able to inspire the cognitive ability of their followers which in turn lead to the enhancement of their creative abilities (Avolio, Bass, & Jung, 1999; Gong et al., 2009).

In transformational leadership, the leader encourages initiative and creative thinking among followers (Gong et al., 2009; Mittal & Dhar, 2015). Thus, previous research shows that transformational leadership is highly correlated with employee creativity (Avolio et al., 1999; Gong et al., 2009; Shin & Zhou, 2003). A transformational leader could develop creativity among employees by stimulating and motivating the followers in the direction of higher levels of performance as well as encouraging them to think in a creative way (Jung et al., 2003; Sarros, Cooper, & Santora, 2008). Jung et al. (2003) believed that transformational leadership could help followers to develop new ideas for effective organizational performance. Wang et al. (2014) concluded that transformational leadership could develop high levels of creativity among employees in the hotel industry. In addition, the transformational leaders tend to create an innovative climate which empowers their followers to develop creative ideas for the organization (Keller, 2006; Zhang, Tsui, & Wang, 2011). In this work, we adopted the concept of “green transformational leadership”, which has been characterized by Bass (1998), Chen and Chang (2013) and Gardner and Avolio (1998) as “behaviors of leaders who motivate followers to achieve environmental goals and inspire followers to perform beyond expected levels of environmental performance” (p. 113). Chen and Chang (2013) stated that green transformational leadership is related to green creativity in electronics industry. On the basis of the above discussion, we hypothesize that green transformational leadership would be associated with green creativity in service industry (see Fig. 1).

Hypothesis 1. *Green transformational leadership positively relates to green creativity.*

2.2. Mediating role of green organizational identity

Organizational identity has been defined by Albert and Whetten (1985) as the “central, distinctive and enduring characteristic of an organization”, and it comprises three main elements: “ideational, definitional, and phenomenological” (Whetten, 2006, p.269). Organizational identity influences employees’ activities and gives an outline of reference that provides managerial clarification to strategic problems (Fiol, 1991). As a result, employees of an organization are shaped by its organizational identity (Chen, 2011). In this study, we have analyzed the significance of organizational identity through environmental perspective by taking into consideration ‘green organizational identity’ in tourist hotels. According to the definition given by Albert and Whetten (1985) and Chen (2011), green organizational identity acts “as an interpretive scheme about environmental management and protection that members collectively construct in order to provide meaning to their behaviors” (p. 394).

Organizational researchers have often expressed their desire to examine the relationship that exists between leadership and employee creativity (Gumusluoglu & Ilsev, 2009; Gupta, Singh, Kumar, & Bhattacharya, 2012). Wang et al. (2014) as well as Gumusluoglu and Ilsev (2009) observed that transformational leaders play a key role in determining employee creativity. Further, it was also found that green transformational leadership has a positive influence on green creativity (Chen & Chang, 2013; Liu, Liao, & Loi, 2012). Further, previous studies have established that

environmental leaders develop green organizational identity and influence employees to identify, believe, and think about the organization (Chen, 2011), which in turn enhances the employees’ creative activities and provides them an opportunity to indulge themselves in creative outcomes (Benet-Martínez, Leu, Lee, & Morris, 2002; Fernández, Junquera, & Ordiz, 2003). Green organizational identity motivates employees to establish meaningful relationships with customers as well as to find creative ways to solve problems (Sethi, 2000). Some studies have further highlighted the role that green transformational leadership plays in encouraging the promotion of green creativity in manufacturing as well as service industries (Mittal, *in press*). Moreover, few recent studies have shown that green organizational identity acts as a mediator between environmental leadership and green competitive advantage (Chen, 2011; Fernández et al., 2003). On the basis of this, it is presumed that when an organization adopts green transformational leadership, there is an increase in its green organizational identity, which ultimately leads to the rise in green creativity. Therefore, we propose that green organizational identity mediates the relationship between green transformational leadership and green creativity.

Hypothesis 2. *Green organizational identity mediates the relationship between green transformational leadership and green creativity.*

2.3. Resource commitment as a moderator

Resource commitment is defined as the distribution of “tangible and intangible entities available to the firm that enable it to produce efficiently and/or effectively a market offering that has value for some market segment(s)” (Hunt, 2000, p.85). It could further be explained as an organization that makes use of resources to regulate programs so that it can get better performance as an outcome (Daugherty et al., 2005). In resource commitment, researcher argues that an organization tries to utilize resources for getting benefit and developing creativity as well as implementing innovative practices for better performance (Hunt & Morgan, 1996). Richey et al. (2005) stated that an organization having command over its resources for implementing environmental practices such as environmental leadership for getting better performance in the form of creativity. Several researchers also stated that there is a positive and effective relationship between green organizational identity and environmental performance such as creativity (Chang & Chen, 2013; Chen & Chang, 2013). This study posits that there could be other factors such as commitment towards the available resources that influence the relationship between green organizational identity and green creativity. A study conducted by Rogers and Tibben-Lembke (1999) proved that not having enough financial and human resources can become a major barrier to flourishing environmental practices. On the other hand, even in the presence of higher green organizational identity, the organization would not be able to attain the desired level of green creativity if it lacks adequate resources (Chen, Lai, & Wen, 2006; Simpson, 2012). Some organizational researchers have found that higher level of green organizational identity would lead to higher level of green creativity. However, this study suggests that by committing higher amount of resources, an organization can develop its green creativity. A recent study has shown that resource commitment acts as a moderator between environmental innovation practices and environmental performance (Li, 2014). On the basis of this, it is presumed that when an organization is not able to provide higher level of resources, in spite of coming up with higher level of green organizational identity, the organization would not be able to achieve the desired level of green creativity. On the basis of the above discussion, it is hypothesized that the allocation of sufficient amount of

resources moderates the relationship between green organizational identity and green creativity.

Hypothesis 3. *Resource commitment moderates the effect of green organizational identity on green employee creativity such that the relationship gets strengthened when resource commitment is high rather than low.*

3. Research method

3.1. Sampling and data collection

For this study, data were collected from employees and managers of tourist hotels of Uttarakhand, India for examining the relationship shared by green transformational leadership, green organizational identity, resource commitment, and green creativity. The questionnaires were developed in English. However, for collecting data, the questionnaires were translated into Hindi (the local language). This was done with the help of two different bilingual experts for protecting conversion quality (Brislin, 1970).

For this study, we adopted a two-step data collection process. First, 35 tourist hotels were contacted for participation. The presentations were organized to create awareness amongst the hotel employees about the significance of the study with emphasis on its practical implications. In all, 29 hotel representatives agreed to participate in this research process. Second, with the cooperation of the human resource departments of various hotels, we planned a presentation session for the employees. In this session, we shared relevant information about the study with the participants as well as explained to them the significance of each survey item. Last, the cover letter, survey item (employee and manager survey) and return envelopes were distributed to the respondents who were requested to fill it personally and return the same to the human resource department for maintaining confidentiality of the respondent. In this process, green transformational leadership was rated by employees, whereas managers provided information regarding green organizational identity, resource commitment, and green creativity. Afterwards, the filled questionnaires were collected personally by the researcher from the hotel representatives. A total of 350 questionnaires were distributed among employees and the same number of questionnaires was distributed among managers. Out of the total questionnaires distributed, the aggregate sample included response of 250 employees and 250 supervisors which show that the response rate is 71.42%.

3.2. Measures

In this study, previously tested standard scales were used for measuring all the constructs. The study variables were measured on a five point Likert-type scale (where, 1 represented strongly disagree and 5 strongly agree).

3.2.1. Green transformational leadership

To measure green transformational leadership (GTL), we applied a six-item scale developed by Chen and Chang (2013), ($\alpha = 0.914$), who also put forth the validity and reliability of the scale. A sample item is “The leader inspires the organization members with the environmental plans”.

3.2.2. Green organizational identity

To assess green organizational identity (GOI), we adopted Chen's (2011) six items scale. A sample item is “The Company's employees are proud of the company's history about environmental management and protection” ($\alpha = 0.944$). This scale was previously validated and widely used to measure the green organizational identity

(Chang & Chen, 2013).

3.2.3. Resource commitment

Resource commitment (RC) was measured by a four-item scale developed by Li (2014). A number of resource commitment measuring scales exist but there is no clear consent as to which one of these is best. This scale was previously validated and widely used to measure the resource commitment in environmental perspective (Li, 2014). A sample item is, “We have sufficient financial resource to invest on environmental innovation practices” ($\alpha = 0.91$).

3.2.4. Green creativity

To measure green creativity (GC), we adopted a six-item scale used by Chen and Chang (2013) for assessing supervisors' ratings of their employees' green creative behavior at work. The Cronbach's α reliability value of this scale was 0.950. It shows that the measurement scale items reflect the overall concept of green creativity. The sample item is, “The members of the organization suggest new ways to achieve environmental goals”.

3.2.5. Control variables

The policies and practices of an organization develop over time, hence in this study; we controlled both the hotel tenure and hotel rating variables because these can influence employee performance and creative behavior (Collins & Smith, 2006; Richter, Hirst, van Knippenberg, & Baer, 2012). It was found that 20.4% hotels were between 1 and 5 years of tenure, 64% hotels were between 6 and 10 years of tenure, 8.4% hotels were between 11 and 15 years of tenure, and 7.2% hotels were above 16 years of tenure.

Hotel managers were requested to give ratings within the categories of 1, 2, 3, 4, and 5 stars as obligated by law. The ratings were coded as ‘1’, ‘2’, ‘3’, ‘4’, ‘5’ for 1 to 5 stars, respectively. 45.6% hotel managers gave ‘1 star’ rating, 39.2% managers gave ‘2 star’ rating, and 15.2% hotel managers gave a star rating equal to or above 3.

3.3. Analytic approach

The present study was analyzed at an individual level with the help of two statistical techniques—SPSS and AMOS 20th version. In the first step, confirmatory factor analysis (CFA) was conducted to evaluate the proposed measurement model. CFA acknowledged that there is a relation between the observed variables and their particular latent factors. To evaluate the fitness of the model, a range of fit-indices was used, namely, “comparative fit index (CFI); normed fit index (NFI); root mean square error of approximation (RMSEA); goodness-of-fit index (GFI); and adjusted goodness-of-fit index (AGFI)”. SPSS macro, that is, PROCESS, was used for path analysis of the hypothesized model. It gives an assessment of the proposed model and helps in the evaluation of variables in the form of supporting hypothesis, which develops the empirical findings.

4. Results

4.1. Convergent and discriminant validity

To evaluate the measurement model fit, CFA was performed which shows a very good model fit ($\chi^2 = 233.5$, degree of freedom (df) = 207, $p = 0.000$, GFI = 0.924, CFI = 0.994, NFI = 0.947, RMSEA = 0.023). The present study included the assessment of convergent and discriminant validity for evaluating the validity of the measurement model. Standardized factor loading, composite reliability (CR), and average variance extracted (AVE) of all constructs used in the measurement model are shown in Table 1. All the factor loadings of the model were found to be highly significant

Table 1
Reliability of the constructs and factor loadings of indicators.

Construct	Indicators	α /CR	AVE	MSV	ASV	Factor loadings	<i>t</i> - value
Green Transformational Leadership	The leader inspires the organization members with the environmental plans (GTL1).	0.914/0.914	0.673	0.226	0.136	0.866	14.052***
	The leader provides a clear environmental vision for the members to follow (GTL2).					0.873	13.185***
	The leader gets the organization members to work together for the same environmental goals (GTL3).					0.760	11.386***
	The leader encourages the organization members to achieve the environmental goals (GTL4).					0.794	11.953***
	The leader acts with considering environmental beliefs of the organization members (GTL5).					0.781	11.740***
	The leader stimulates the organization members to think about green ideas (GTL6).					0.843	12.453***
Green Organizational Identity	The company's managers and employees are proud of the company's history about environmental management and protection (GO1).	0.944/0.944	0.761	0.165	0.118	0.850	13.980***
	The company's managers and employees have a sense of pride about the company's environmental goals and missions (GO2).					0.875	13.391***
	The company's managers and employees feel that the company has carved out a significant position with respect to environmental management and protection (GO3).					0.916	14.082***
	The company's managers and employees feel that the company have formulated well-defined environmental goals and missions (GO4).					0.915	14.060***
	The company's managers and employees are knowledgeable about the company's environmental tradition and culture (GO5).					0.829	12.629***
	The company's managers and employees identify that the company highly pay attention to environmental management and protection (GO6).					0.844	12.878***
Resource Commitment	We have sufficient financial resource to invest on environmental innovation practices (RC1).	0.856/0.857	0.649	0.060	0.045	0.815	13.674***
	We have sufficient management resource to invest on environmental innovation practices (RC2).					0.841	12.603***
	We have sufficient investment on software establishment (e.g. introduction of technology, human resource training) for environmental innovation practices (RC3).					0.761	11.316***
	We have sufficient investment on hardware establishment (e.g. equipment and green material purchasing) for environmental innovation practices (RC4).					0.804	12.012***
Green Creativity	The members of the organization suggest new ways to achieve environmental goals (GC1).	0.949/0.950	0.759	0.226	0.150	0.877	14.063***
	The members of the organization propose new green ideas to improve environmental performance (GC2).					0.874	13.362***
	The members of the organization promote and champion new green ideas to others (GC3).					0.881	13.365***
	The members of the organization develop adequate plans for the implementation of new green ideas (GC4).					0.871	13.214***
	The members of the organization would rethink new green ideas (GC5).					0.837	12.665***
	The members of the organization would find out creative solutions to environmental problems (GC6).					0.886	13.465***

Note: N = 250, Significance level, ***denotes $p < 0.001$, **denotes $p < 0.01$ and * denotes $p < 0.05$.

CR – Composite Reliability, α – Cronbach Reliability.

AVE – Average Variance Extracted.

MSV – Maximum Shared Variance.

ASV – Average Shared Variance.

GTL – Green Transformational Leadership.

GOI – Green Organizational Identity.

RC – Resource Commitment.

GC – Green Creativity.

at 1 percent. The high reliability of the constructs was verified by the composite reliability and construct reliability (α) of all the constructs which is above the acceptable level of 0.70 (Fornell & Larcker, 1981). Table 2 shows the mean, standard deviation, and

correlation among the study variables. It also represents that intercorrelations among all variables were less than the square roots of the AVE in each variable, and this provides support for discriminant validity (Fornell & Larcker, 1981). There is another

Table 2
Correlations, means, standard deviations and Discriminant Validity.

N = 250	Mean	S.D	Correlation						
			1	2	3	4	5	6	
1. Hotel tenure	2.024	0.760	–						
2. Hotel rating	1.696	0.719	0.799*	–					
3. Green transformational leadership	3.020	0.878	0.096	0.097	(0.820)				
4. Green organizational identity	3.070	0.978	0.152*	0.170**	0.332**	(0.872)			
5. Resource commitment	2.938	0.963	0.094	0.128*	0.139*	0.158*	(0.805)		
6. Green creativity	3.040	0.960	0.224*	0.280**	0.431**	0.378**	0.199**	(0.871)	

Note: N = 250 **1.** Significance level, ***denotes $p < 0.001$, **denotes $p < 0.01$ and * denotes $p < 0.05$, **2.** For discriminant validity, the square roots of AVE are in parentheses along the diagonal.

technique to measure discriminant validity—“by comparing the values of average shared variance (ASV) and maximum shared variance (MSV) with AVE values. It exists when all MSV and ASV values are less than their respective AVE values” (Hair, Black, Babin, & Anderson, 2010). Table 1 shows that all related values satisfied this condition. Thus, discriminant validity is supported in the measurement model.

Additionally, Harman's one factor test was performed to check common method bias. Common method bias is a general problem in behavioral research as the same respondents assess all study variables. To deal with this problem, Harman's one factor test and common method variance technique were used (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Six items of GOI, four items of resource commitment and 6 items of green creativity were entered in a principal component factor analysis. The results yielded that three factors in the model explained 37.67% of variance, which is less than 50%.

For common bias problem, we also used the common latent factor in AMOS suggested by Podsakoff et al. (2003). In this technique, all the scale items were loaded on their theoretical constructs and on a latent common method factor. This common factor controls common variance between all the observed variables of the model. The results show that common variance among all the variables was zero. Thus, common method bias is not an issue in this study.

5. Test of hypotheses

Table 3 contains the results of the SPSS PROCESS macro that was carried out for Hayes analysis (2013) which was performed to test

the proposed hypotheses 1 and 2. The PROCESS macro facilitates bootstrap approach for estimating the indirect effect along with the SOBEL test. Hypothesis 1 proposed that green transformational leadership is related to green creativity. After controlling hotel tenure and hotel rating, it is observed that green transformational leadership is positively associated with green creativity ($\beta = 0.397$, $SE = 0.067$, $p < 0.001$), as shown in Table 3. Thus, hypothesis 1 is supported.

Hypothesis 2 stated that green organizational identity (GOI) mediated the relationship between green transformational leadership and green creativity. Table 3 demonstrates the results for hypothesis 2. Green transformational leadership demonstrated significant as well as positive relation to GOI ($\beta = 0.365$, $t = 5.309$, $p < 0.001$). The relationship between GOI and green creativity was found to be positively significant ($\beta = 0.239$, $t = 4.016$, $p < 0.001$) which in turn controlled green transformational leadership that indirectly influenced green creativity through the effect of GOI. This indirect effect was found to be significant and positive ($\beta = 0.489$, $t = 7.324$, $p < 0.001$). The results of the SOBEL test (SOBEL $z = 3.167$, $p < 0.01$) revealed an indirect significant effect. Further, the analysis of the Bootstrap test verified the results of the SOBEL test with 95% CI and did not include zero (0.044, 0.161). Additionally, the direct effect of green transformational leadership on green creativity was found to be significant ($\beta = 0.397$, $t = 5.860$, $p < 0.001$). Hence, it is observed that after controlling hotel tenure and hotel rating, GOI partially mediated the relationship between green transformational leadership and green creativity.

Hypothesis 3 proposed that resource commitment moderated the relationship between green organizational identity and green creativity. Table 4 demonstrates the results of moderating analysis

Table 3
Regression results for Green organizational identity mediating between Green transformational leadership and Green creativity.

Variable	β	SE	t-value	P-value
Direct and total effects				
<i>Control variable</i>				
Hotel Tenure	−0.235	0.738	−0.319	0.749
Hotel Rating	2.013	0.781	2.574	0.010
Green creativity on Green transformational leadership				
Hotel Tenure	0.397	0.067	5.860	0.000
Hotel Rating	0.224	0.790	0.284	0.776
GOI on Green transformational leadership				
Hotel Tenure	0.365	0.068	5.309	0.000
Green creativity regressed on GOI, controlling for green transformational leadership				
Hotel Tenure	0.239	0.059	4.016	0.000
Hotel Rating	−0.181	0.760	−0.239	0.811
Green creativity regressed on Green transformational leadership, controlling for GOI				
Hotel Tenure	0.489	0.066	7.324	0.000
Hotel Rating	Value	SE	z	p-value
<i>Indirect effect and significance using normal distribution</i>				
Sobel	0.087	0.027	3.167	0.001
<i>Bootstrap results for indirect effect</i>				
Effect	0.087	0.029	0.044	0.161

Note: N = 250. **1.** GOI represents Green organizational identity. Bootstrap sample size = 1000, LL = lower limit, UL = upper limit, CI = confidence interval. **2.** P = 0.000 shows significant level.

Table 4
Regression results for Resource commitment moderating between Green organizational identity and Green creativity.

Variable	B	SE	t - value	p - value
<i>Control variable</i>				
Hotel tenure	-0.1757	0.784	-0.224	0.822
Hotel rating	2.096	0.929	2.256	0.0249
<i>Predictor variable</i>				
Green organizational identity	0.334	0.064	5.209	0.000
Resource commitment (Moderator)	0.2098	0.100	2.090	0.000
Interaction (Green organizational identity × Resource commitment)	0.017	0.016	1.055	0.037

Note: N = 250. Significance level, ***denotes $p < 0.001$, **denotes $p < 0.01$ and * denotes $p < 0.05$.

that was carried out after controlling hotel tenure and hotel rating which demonstrate that resource commitment positively and significantly moderates the effect of GOI on green creativity ($\beta = 0.017$, $t = 1.055$, $p < 0.05$), thereby supporting hypothesis 3.

A simple curve analysis (Preacher, Curran, & Bauer, 2006) was conducted to find green organizational identity and green creativity within high and low resource commitment (See Fig. 2). The results demonstrate that when resource commitment is high, GOI has a high impact on green creativity and when resource commitment is low, the relationship is weakened. Hence, hypothesis 3 is supported (see Figs. 3 and 4).

6. Discussion and implications

This study has brought forward some implications that might be useful not only for developing theories but these implications can also have some managerial value. This study can be regarded as one of the first to examine the role of green transformational leadership and green organizational identity on green creativity among the employees of Indian tourist hotels. The study empirically supports the fact that employees' perception about the transformational ways of their leader in guiding them to enhance GOI and their

beliefs about their ability to perform creatively have profuse impact on their creative performance.

On the basis of the recent studies (Gebauer, 2011; Wang et al., 2014), it is observed that green transformational leaders in the hospitality industry promote green creativity among their subordinates. This study examined the role of resource commitment as a moderator in influencing the relationship between green organizational commitment and green creativity. The findings of the study further disclose that green organizational identity acts as mediator between green transformational leadership and green creativity. Moreover, based on the finding, it is observed that green transformational leadership has a direct relationship with green creativity, hence managers in tourist hotels are advised to develop their leadership style so as to foster greater green creativity. Previous studies have shown that manufacturing organizations such as the electronics industry have focused much on developing their green transformational leadership so as to enhance green creativity (Chen & Chang, 2013). Based on these findings, it can be suggested that even service organizations such as tourist hotels can dedicate their precious resources towards developing green transformational leadership for enhancing 'green creativity'. This would not only help tourist hotels in supporting the government to shield the environment, but would also aid in brand building of hotels by developing a 'green image' of the tourist hotel industry. In this regard, the government can take the initiative of devising policies

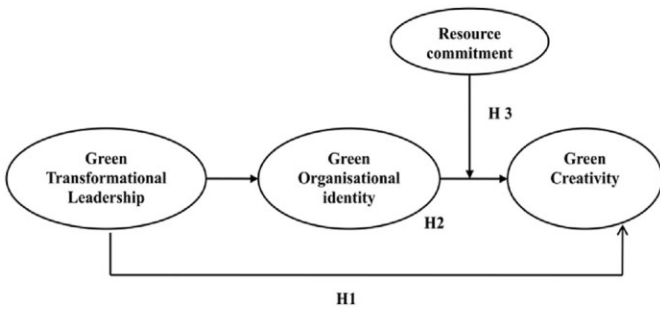


Fig. 1. Hypothesized research model.

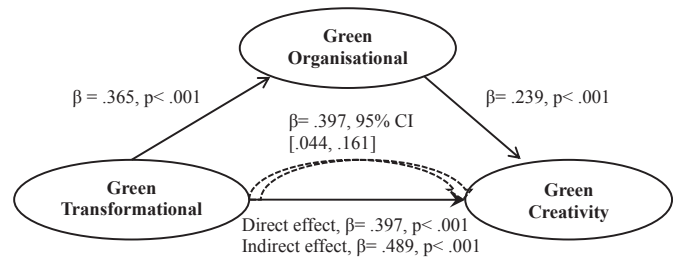


Fig. 3. Path result of mediation model.

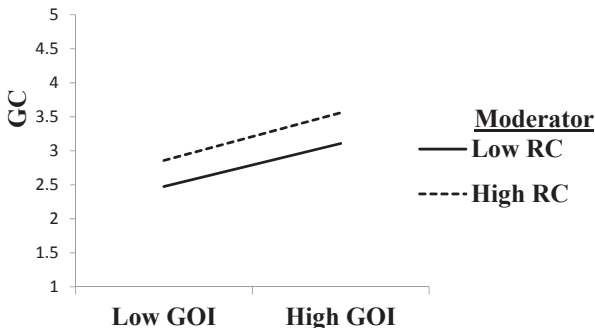


Fig. 2. Moderating effect of Resource Commitment on the relationship between Green.

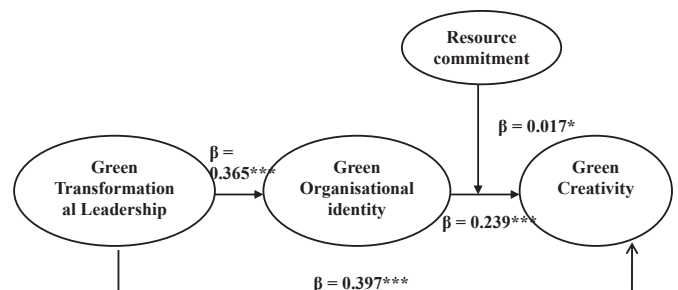


Fig. 4. Path results of full research model.

related to green creativity in such a way that the hotel industry gets inspired to develop green transformational leadership and green organisational identity, and develop creative work outcomes that are environment friendly.

The findings of this study further reveals that resource commitment plays a vital role in moderating the relationship between green organizational identity and green creativity. After analyzing the interaction effect, the results show that green organizational identity leads to a higher level of green creativity when resource commitment made by the organization is high. From the analysis, it can be inferred that if resource commitment made by the organization is low, even a high level of green organizational identity may not lead to greater levels of green creativity. Therefore, tourist hotels need to raise their green organizational identity as well as commit higher amount of resources in order to increase green creativity.

6.1. Theoretical implications

The findings of this study add to the literature on green transformational leadership, green organizational identity and green creativity in the context of tourist hotels. The study proposes a model to explain the ways in which green transformational leadership impacts green organizational identity, which further influences green creativity. On the basis of the findings, this study makes several specific theoretical contributions. First, the findings highlight that developing green organizational identity leads to increase in green creativity when the resource commitment of the organization is high. Second, the study confirms the indirect role that green transformational leadership plays in promoting green creativity.

Thirdly, green organizational identity acts as a mediator between green transformational leadership and green creativity in tourist hotels. Finally, this study adds to the literature on green creativity by studying its application in the tourist hotels.

Hence, green organisational identity and resource commitment are important variables that play a vital role in the relationship between green transformational leadership and green creativity. This study leads to the conclusion that service industries like tourist hotels could also significantly contribute towards caring for the environment by using a set of creative activities such as green transformational leadership and green creativity. Further, organizations are required to adopt effective leadership styles and come up with higher levels of green creativity.

6.2. Managerial implications

This study provides crucial suggestions for managers working in tourist hotels. Using green transformational leadership to come up with green organizational identity, it would require high level of resource commitment for enhancing their green creativity. If the organization desires to encourage green creativity amongst their employees, they would need to align the concept of green transformational leadership with green organizational identity into their long-run environmental strategies. Tourist hotel management can play an important role in developing environmental friendly service behavior by adopting green transformational leadership and green organizational identity. They can develop a culture that promotes environmental friendly attitudes through use of higher resource commitment and can bring change in the thought process of the organization towards environmental protection.

One of the most challenging activities to pursue would be committing a certain amount of organizational resources in order to devise eco-friendly creativity for the organization. In this regard, tourist hotel managers can play a vital role by acting as messengers

or representatives in the process of leading the change while developing eco-friendly behavior to reach excellence.

The environmental friendly practices such as green transformational leadership and green organizational identity can also increase green creativity by committing a greater amount of resources. Tourist hotel managers should conduct training programs to understand environmental friendly activities that they can resort to the promotion of green transformational leadership and green organizational identity amongst their employees to enhance their employees' green creativity. Leaders should try hard to develop the required skills within themselves and their employees to build green organizational identity and make available the required resources for achieving green creativity. Managers of organizations could be advised to train themselves as well as their employees for acquiring those skills that help in enhancing resource commitment towards the organization, so that employees do not waste their time, energy, and resources while performing those activities.

Lastly, the findings of the study suggest that tourist hotels of India, especially those of Uttarakhand, need to understand their responsibility toward the environment so that they can protect the environment and achieve a high level of green creativity. The findings of this study provide opportunity of developing eco-friendly activities to the tourist hotels, but at the same time it also becomes a challenge for those hotels. The opportunity relates to the understanding of the significance and role that developing green transformational leadership can play in increasing the green creativity of the organization. The challenge for these hotels would be to find ways of identifying and developing green transformational leadership so as to attain a high level of green creativity.

7. Limitations and directions for future work

While conducting this study, there were some limitations which need to be discussed. Firstly, the study being based on the tourist hotels operational in the Uttarakhand region of India, there is a need to conduct further studies in other regions as well as sectors such as banking industry, IT industry, and airlines in the future so as to generalize and validate the findings of this study. Second, cultural factors were not considered while examining the relationship between green transformational leadership and green creativity. Future studies can take the cultural factor into consideration while examining the relationship among the factors considered in the study. Finally, the design of the study is cross-sectional and is survey based. Since there was limited time, it was difficult for us to establish the casualty between the relationships established in this study. Hence, it is advised that more number of studies need to be carried out can which are longitudinal in nature so as to get an in-depth perspective of the complexities involved in achieving higher level environmental performance. Furthermore, future studies could consider those variables which were not included in this study such as hotel tenure, hotel rating, environmental organizational culture, and green dynamic capabilities for achieving effective environmental performance.

8. Conclusion

This study has examined the role that green transformational leadership plays in promoting green creativity among employees of tourist hotels. Further, it has also examined the intervening role of green organizational identity and resource commitment. Hence, this study has been able to provide a greater understanding of the determinants and outcomes of green activities such as green creativity in the context of tourist hotels. The presented findings may prove to be beneficial for the forerunners of the organizations

in the hospitality sectors to re-design their policies in a way that fosters an innovation driven climate in their organization. Therefore, the forerunners of the hotels are required to counsel their employees and redesign their training programmes so that the employees are able to develop environmental performance and work creatively.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <http://dx.doi.org/10.1016/j.tourman.2016.05.007>.

References

- Albert, S., & Whetten, D. (1985). Organizational identity. *Research in Organizational Behavior*, 7, 263–295.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behaviour*, 10(1), 123–167.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: perceived leader support. *The Leadership Quarterly*, 15(1), 5–32.
- Andriopoulos, C. (2001). Determinants of organisational creativity: a literature review. *Management Decision*, 39(10), 834–840.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441–462.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Erlbaum.
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. (2002). Negotiating biculturalism: cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-Cultural Psychology*, 33(5), 492–516.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216.
- Chang, C. H., & Chen, Y. S. (2013). Green organizational identity and green innovation. *Management Decision*, 51(5), 1056–1070.
- Chapman, R. L., Soosay, C., & Kandampully, J. (2003). Innovation in logistic services and the new business model: a conceptual framework. *International Journal of Physical Distribution & Logistics Management*, 33(7), 630–650.
- Chen, Y.-S. (2011). Green organizational identity: sources and consequence. *Management Decision*, 49(3), 384–404.
- Chen, Y. S., & Chang, C. H. (2013). The determinants of green product development performance: green dynamic capabilities, green transformational leadership, and green creativity. *Journal of Business Ethics*, 116(1), 107–119.
- Chen, Y. S., Lai, S. B., & Wen, C. T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of Business Ethics*, 67(4), 331–339.
- Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: the role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3), 544–560.
- Daugherty, P. J., Richey, R. G., Genchev, S. E., & Chen, H. (2005). Reverse logistics: superior performance through focused resource commitments to information technology. *Transportation Research Part E: Logistics and Transportation Review*, 41(2), 77–92.
- Dhar, R. L. (2015). Service quality and the training of employees: the mediating role of organizational commitment. *Tourism Management*, 46, 419–430.
- Fernández, E., Junquera, B., & Ordiz, M. (2003). Organizational culture and human resources in the environmental issue: a review of the literature. *International Journal of Human Resource Management*, 14(4), 634–656.
- Fiol, C. M. (1991). Managing culture as a competitive resource: an identity-based view of sustainable competitive advantage. *Journal of Management*, 17(1), 191–211.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fraj, E., Matute, J., & Melero, I. (2015). Environmental strategies and organizational competitiveness in the hotel industry: the role of learning and innovation as determinants of environmental success. *Tourism Management*, 46, 30–42.
- Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: a dramaturgical perspective. *Academy of management review*, 23(1), 32–58.
- Garg, S., & Dhar, R. L. (2014). Effects of stress, LMX and perceived organizational support on service quality: mediating effects of organizational commitment. *Journal of Hospitality and Tourism Management*, 21, 64–75.
- Gebauer, H. (2011). Exploring the contribution of management innovation to the evolution of dynamic capabilities. *Industrial Marketing Management*, 40(8), 1238–1250.
- Gong, Y., Huang, J. C., & Farh, J. L. (2009). Employee learning orientation, transformational leadership, and employee creativity: the mediating role of employee creative self-efficacy. *Academy of Management Journal*, 52(4), 765–778.
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461–473.
- Gupta, V., Singh, S., Kumar, S., & Bhattacharya, A. (2012). Linking leadership to employee creativity: a study of Indian R&D laboratories. *Indian Journal of Industrial Relations*, 48(1), 120–136.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Halbesleben, J. R. B., Novicevic, M. M., Harvey, M. G., & Buckley, M. R. (2003). Awareness of temporal complexity in leadership of creativity and innovation: a competency-based model. *Leadership Quarterly*, 14(4/5), 433–454.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: Guilford Press.
- Hsieh, Y. C. (2012). Hotel companies' environmental policies and practices: a content analysis of their web pages. *International Journal of Contemporary Hospitality Management*, 24(1), 97–121.
- Hunt, S. D. (2000). *A general theory of competition*. Thousand Oaks, CA: Sage Publications.
- Hunt, S. D., & Morgan, R. M. (1996). The resource-advantage theory of competition: dynamics, path dependencies, and evolutionary dimensions. *The Journal of Marketing*, 60(4), 107–114.
- Indian Brand Equity Foundation. (2013). *Tourism and hospitality August 2013*. Retrieved from <http://www.ibef.org/industry/tourism-hospitality-india.aspx>.
- Jaiswal, N. K., & Dhar, R. L. (2015). Transformational leadership, innovation climate, creative self-efficacy and employee creativity: a multilevel study. *International Journal of Hospitality Management*, 51, 30–41.
- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: hypotheses and some preliminary findings. *The Leadership Quarterly*, 14(4), 525–544.
- Kala, C. P. (2011). Save Ganga campaign and hydroelectric projects in Uttarakhand. *Current Science*, 101(5), 596–596.
- Kala, C. P. (2014). Deluge, disaster and development in Uttarakhand Himalayan region of India: challenges and lessons for disaster management. *International journal of disaster risk reduction*, 8, 143–152.
- Keller, R. T. (2006). Transformational leadership initiating structure, and substitutes for leadership: a longitudinal study of research and development project team performance. *Journal of Applied Psychology*, 91, 202–210.
- Kumar, A. (2013). Demystifying a himalayan tragedy: study of 2013 Uttarakhand disaster. *Ecology*, 1(3), 106–116.
- Leonidou, L. C., Leonidou, C. N., Fotiadis, T. A., & Aykol, B. (2015). Dynamic capabilities driving an eco-based advantage and performance in global hotel chains: the moderating effect of international strategy. *Tourism Management*, 50, 268–280.
- Leonidou, L. C., Leonidou, C. N., Fotiadis, T. A., & Zeriti, A. (2013). Resources and capabilities as drivers of hotel environmental marketing strategy: implications for competitive advantage and performance. *Tourism Management*, 35, 94–110.
- Li, Y. (2014). Environmental innovation practices and performance: moderating effect of resource commitment. *Journal of Cleaner Production*, 66, 450–458.
- Liu, D., Liao, H., & Loi, R. (2012). The dark side of leadership: a three-level investigation of the cascading effect of abusive supervision on employee creativity. *Academy of Management Journal*, 55(5), 1187–1212.
- Miles, M. P., & Covin, J. G. (2000). Environmental marketing: a source of reputational, competitive, and financial advantage. *Journal of business ethics*, 23(3), 299–311.
- Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity: mediating role of creative self-efficacy and moderating role of knowledge sharing. *Management Decision*, 53(5), 894–910.
- Mittal, S. (2016). Effects of transformational leadership on turnover intentions in IT SMEs. *International Journal of Manpower*. in press.
- Moller, K., Rajala, R., & Westerlund, M. (2008). Service innovation myopia? A new recipe for client-provider value creation. *California Management Review*, 50(3), 31–48.
- Narayan, B., Rajendran, C., Sai, L. P., & Gopalan, R. (2009). Dimensions of service quality in tourism—an Indian perspective. *Total Quality Management*, 20(1), 61–89.
- Ogra, M. V. (2008). Human-wildlife conflict and gender in protected area borderlands: a case study of costs, perceptions, and vulnerabilities from Uttarakhand (Uttaranchal), India. *Geoforum*, 39(3), 1408–1422.
- Ostrom, A. L., Bitner, M. J., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., et al. (2010). Moving forward and making a difference: research priorities for the science of service. *Journal of Service Research*, 13(1), 4–36.
- Park, J., & Kim, H. J. (2014). Environmental proactivity of hotel operations: antecedents and the moderating effect of ownership type. *International Journal of Hospitality Management*, 37, 1–10.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31(4), 437–448.
- Richey, R. G., Genchev, S. E., & Daugherty, P. J. (2005). The role of resource commitment and innovation in reverse logistics performance. *International*

- Journal of Physical Distribution & Logistics Management*, 35(4), 233–257.
- Richter, A. W., Hirst, G., van Knippenberg, D., & Baer, M. (2012). Creative self-efficacy and individual creativity in team contexts: cross-level interactions with team informational resources. *Journal of Applied Psychology*, 97(6), 1282–1290.
- Rogers, D. S., & Tibben-Lembke, R. S. (1999). *Going backwards: Reverse logistics trends and practices* (vol. 2). Pittsburgh, PA: Reverse Logistics Executive Council.
- Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership & Organizational Studies*, 15(2), 145–158.
- Sethi, R. (2000). Super ordinate identity in cross-functional product development teams: its antecedents and effect on new product performance. *Journal of the Academy of Marketing Science*, 28(3), 330–344.
- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: a review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1), 33–53.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: where should we go from here? *Journal of Management*, 30(6), 933–958.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: evidence from Korea. *Academy of Management Journal*, 46(6), 703–714.
- Simpson, D. (2012). Knowledge resources as a mediator of the relationship between recycling pressures and environmental performance. *Journal of Cleaner Production*, 22(1), 32–41.
- Thakur, R., & Hale, D. (2013). Service innovation: a comparative study of US and Indian service firms. *Journal of Business Research*, 66, 1108–1123.
- Tyagi, A., Dhar, R. L., & Sharma, J. (2016). Police culture, tourists and destinations: a study of Uttarakhand, India. *Tourism Management*, 52, 563–573.
- Votsi, N. E. P., Mazaris, A. D., Kallimanis, A. S., & Pantis, J. D. (2014). Natural quiet: an additional feature reflecting green tourism development in conservation areas of Greece. *Tourism Management Perspectives*, 11, 10–17.
- Wang, C. J., Tsai, H. T., & Tsai, M. T. (2014). Linking transformational leadership and employee creativity in the hospitality industry: the influences of creative role identity, creative self-efficacy, and job complexity. *Tourism Management*, 40, 79–89.
- Whetten, D. A. (2006). Albert and Whetten revisited: strengthening the concept of organizational identity. *Journal of Management Inquiry*, 15(3), 219–234.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18(2), 293–321.
- World Tourism Organization. (2013). *UNWTO tourism highlights, 2013 Edition*. Retrieved from http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights13_en_hr.pdf.
- Zhang, A. Y., Tsui, A. S., & Wang, D. X. (2011). Leadership behaviors and group creativity in Chinese organizations: the role of group processes. *Leadership Quarterly*, 22(5), 851–862.
- Zhu, Q., Cordeiro, J., & Sarkis, J. (2013). Institutional pressures, dynamic capabilities and environmental management systems: investigating the ISO 9000–Environmental management system implementation linkage. *Journal of Environmental Management*, 114, 232–242.



Ms. Swati Mittal is associated with the Department of Management of IIT Roorkee. Her area of research is Organizational Behavior and Human resources.

Dr. Rajib Lochan Dhar is working as an Assistant Professor at Indian Institute of Technology Roorkee, Department of Management Studies. His area of expertise lies in Research Methods, Service quality management, Organizational Behavior and International HRM.