

RESEARCH ARTICLE

Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help?

Serdar Çop¹ | Victor Oluwafemi Olorunsola²  | Uju Violet Alola^{1,3} 

¹Department of Tourism Guidance, Istanbul Gelisim University, Istanbul, Turkey

²Department of Tourism and Hospitality Management, Eastern Mediterranean University North Cyprus via Mersin 10, Turkey

³Department of Economics and Management, South Ural State University, Chelyabinsk, Russia

Correspondence

Uju Violet Alola, Department of Tourism Guidance, Istanbul Gelisim University, Istanbul, Turkey.

Email: uvalola@gelisim.edu.tr

Abstract

The race to gain competitive advantage through the formulation of a sustainable business strategy is key for the survival in the global business sphere. Even more importantly is the quest to deploy an effective green strategy to combat the numerous negative impact industrialization has on the environment. Researches pointed out the role of leaders and stakeholder's engagement in bringing about reform. This research focuses on how to build a robust psychological capital within an organization through the leader's transformative ability in combating environmental issues. This is necessary because research related to green transformational leadership and the effect on green team resilience has not been considered in literature. Drawing from the combination of three theories; broaden-and-build theory, job demand-resource theory, and conservation of resource theory, this study contributes to the extant literature by testing the effect of green transformational leadership via the mediating role of green work engagement to green team resilience. Using Amos 20 version to analyze 351 questionnaires that were collected from employees in four and five star hotels in Turkey, the result reviews that green transformational leadership has a positive effect on green work engagement and green team resilience, and green work engagement fully mediates the relationship between the variables. The theoretical and practical implications are discussed.

KEYWORDS

green team resilience, green transformational leadership, green work engagement, psychology capital, service industry, sustainability, team dynamics

1 | INTRODUCTION

Researches on teams and group dynamics have been a fascinating issue for both practitioners and researchers (Morgan, Fletcher, & Sarkar, 2019). Unfortunately, only a few researches have considered team psychological capital in relation to the ability to handle environmental responsibilities. De la Torre-Ruiz, Aragón-Correa, and Martín-Tapia (2015) classified teams into three in relation to environmental responsibilities, which are (a) environmental policy developer or strategy formulating team (top management team), (b) execution team

saddled with monitoring, controlling and aligning actions with organization environmental strategy, and (c) research and development team burdened with the responsibility of improving the environmental effect of organization process flow. Even though the scope of activity and decisions differ on these teams, the teams are conterminous in the obligation of formulating an environmental business strategy as a unit. Consequently, the capability to overcome difficult situations and evade possible negative outcome such as lowered team motivation, decrease in team prosaic attitude, and a decline in team performance is essential (Morgan, Fletcher, & Sarkar, 2019). The improvement of

knowledge in the areas of team psychology gives a great insight into improving communal functioning and also bolsters optimization of team performance in a highly competitive environment for better decision making and effectual business strategy formulation. Although researchers are keen on the importance of team psychological phenomenon, no investigation has been carried out on team resilience in response to environment related challenges.

The necessitation placed on business participants to deploy green conscious management system (Yu & Ramanathan, 2015) is now a core part of business strategy in different sectors and regions. This new status quo is fostered by the serious worldwide climate change, which poses numerous jeopardies to human and environmental well-being. Furthermore, environment conscious management system has been confirmed as a crucial driver for innovation cost reduction, and revenues increment (Dangelico, 2015).

According to Vandenbrande (2019), green practice with the aim of reducing negative environmental effects has significantly affected the way industries formulate strategies intended to reduce waste, conserve energy, foster healthy environmental practices, and so forth. Although sustainability was initially viewed as an added cost to operation, now business leaders view sustainability strategy as a critical tool to derive value. Furthermore, previous researches reveal that resolving sustainability-related problem should lead to innovation (Van Holt et al., 2020).

The snowballing instability of external business environment is a major aspect that has caused the acknowledgment of resources and organizational capabilities (mental and operational) as the primary basis of sustained competitive advantage and the footing for business strategy formulation (Dangelico, 2015). In addition, researchers have noted that businesses should depend on intangible resources to tackle the complexity of environmental sustainability concerns, adopting a method to satisfy varied stakeholder pressure (Singh, Del Giudice, Chierici, & Graziano, 2020). As stated in both extant and current studies, organizational culture (Brettel et al., 2015), psychological traits of workers (Palmer, Niemand, Stöckmann, Kraus, & Kailer, 2019), and the organization capacity (Morrow & Mowatt, 2020) play a large part in defining business strategy and organizational performance.

The concept of organizations' approach in managing challenges to gain competitive advantage is well expressed in literature. For example, resilience was noted to have a positive effect on environmental pressure and business outcomes in challenging work environment (Chen, McCabe, & Hyatt, 2017; Shatté et al., 2017). Also, it has been viewed as having a positive outcome on well-being (Pangallo, Zibarras, & Patterson, 2016), duty performance (Ceschi, Demerouti, Sartori, & Weller, 2017), and work engagement (Malik & Garg, 2017).

High psychological capital in organization is even more urgent in light of the worldwide drastic change in business environments, due to pandemic outbreak, impending economic recession, and the recent intensification of work pressure. As a result, employees of organizations are more predisposed to stressors, which might have a negative effect on business strategy formulation and ultimately organizational performance. The question every organization should have then is how do we develop green team resilience (GTR) in the face of

economic hostility or impending adversity against their green ethos, business and strategies? In order to achieve higher GTR, we posit that individual staff engagement towards green activity has to be high.

Studies have shown that engaged staff give businesses a high level of competitiveness because of the correlation with auspicious business outcomes (Kahn, 1990; Saks, 2006; Schaufeli, Salanova, González-Romá, & Bakker, 2002) and psychological outcome. A dimension of work engagement that fosters mental resilience more positively is vigor. An important question for organization will be how to get the staff to be engaged in green-related activities?

The growing implication of leaders' actions in stimulating engagement has been recognized by researchers and practitioners (Bal, De Cooman, & Mol, 2013; Bass et al., 2016; Schmitt, Den Hartog, & Belschak, 2016). Green transformational leadership (GTL) increases employee psychology and overall performance of the organizations. We argue from the stand point that the increase in the overall performance of an organization in a difficult business sphere that hinged on the level of green resilience of the team. In lieu of this, it is essential to investigate the role of GTL and its influence on the green work engagement (GWE), which is pertinent due to the lack of attention received in literature and given the importance to the overall organizational sustainability drive.

Transformational leaders has impact on business performance, for instance, staff behavior/attitude, staff engagement, economical performance (Barling, Christie, & Hopton, 2010), green performance (Ramus & Steger, 2000), and psychological performance. Even though much advancement in knowledge has been witnessed in this field, no existing research has explored the association amid GTL and GTR.

To fill this gap in research and answer the aforementioned questions, first, this study deliberates on the positive association between GTL and GTR. Second, the research adds to the literature and also discusses the concepts, GTR, and GWE. Furthermore, this study discusses and investigates the relationship between GTR and GWE. Third, the research critically explores the dynamics between GTL, GWE, and GTR. Finally, Bin Saeed et al. (2019) called for a research to examine the mediating role of motivational outcomes to further explain the effects of supportive climate such as leadership on employee behavior. In response to this call, we examined the mediating effect of GWE in the relationship between GTL and GTR.

2 | CLARIFICATION OF CONCEPTS AND HYPOTHESIS DEVELOPMENT

2.1 | Green team resilience

The concept of resilience has been mostly used in the context of organization and management as the ability to effectively interact with adverse circumstances, which can be as a result of either a significant turmoil or the aggregation of numerous negligible interferences (Sutcliffe & Vogus, 2003). This could be viewed from an individualistic level or even as a social psychological phenomenon in a team, group, or organization.

This research extended the previous study on GTR, also highlighting the antecedents. In alignment with the social identity theory (Tajfel & Turner, 1979), which states that individuals can identify with their team creed, thereby adopting the team's values, ethos, and norms, this implies that subsequent uniformity in attitudes and behavior will be achieved in the team. On this firm theory, this research posits the possibility of collective adoption of resilience towards green challenges within the organization or the team.

Research reveals that, in a related way to individualistic performance approach, individuals performing as team members have a tendency to display to a certain degree of consistency in behavior (Stewart, 2010). Giving the concept an insightful understanding, Totterdell (2000) stated that "team members will possibly react in the same way to communal activities and consequently respond mentally in concept" in the context of this research possessing similar level of GTR. Meneghel, Martínez, and Salanova (2016) showed evidence that team resilience enhances the overall performance of the team especially in role and additional role performance. Thus, in our scholastic endeavor, we paid attention to GTR, defining it as the capacity to recover from environmental-related struggles, catastrophe, difficulties, or any form of risk to the team. Furthermore, GTR can be stated to be the collective action of a team in effectively dealing with green-related challenges or stressors with a negative impact on the team performance psychology and overall well-being.

According to Eys et al. (2019), team resilience has emerged as a "captivating novel topic". It is a new concept being introduced to the green oriented organization. Psychological researchers have suggested that team resilience can be established via designed training programs and structured strategic interventions program (Alliger, Cerasoli, Tannenbaum, & Vessey, 2015; Amaral et al., 2015; Centobelli, Cerchione, & Ertz, 2020). Hence, slightly, it is astonishing that research aimed at advancing the knowledge on GTR and identifying its significance has been ignored.

2.2 | Green work engagement

Work engagement is defined as a proximal motivational component as results of performance (Menguc, Auh, Fisher, & Haddad, 2013). According to Bakker et al. (2008), engaged workers are usually seen to have heightened vigor for work. It has been cited in many researches including that of Bakker and Demerouti, (2008) and Bakker et al. (2008) that work engagement often gives rise to high-quality performance in an organization and embodies a positive work/task-oriented mental condition (Halbesleben & Wheeler, 2008). Work engagement has attracted the attention of researchers over the span of two decades (Amor, Vázquez, & Faiña, 2020), but the concept has not been defined in relation to green activities.

Schaufeli et al. (2002) defined work engagement as "a positive, satisfying, work-related mental state that is epitomized by vigor, devotion, and absorption." GWE can thus be related to a state of finding satisfaction and taking a positivism approach to green-related work. Work engagement is reflected as the positive reverse of

burnout. Engaged staff sustain a state of energetic and effectual association with their task and view stressful and demanding circumstance as challenges they want to undertake. This further implies that green-related work engagement is highly essential to maintain a constantly productive state of mind for employees of green organization.

2.3 | Establishing the relationship between GTL and GTR

Green transformational leaders articulate the organization's green vision in a seamless pattern, clarifying the subject questions such as "how do we achieve our green related goals?" and "what are our deliverables?" They further express self-assurance and positivity, constantly discussing about the organizations green norms, with their followers, and they provide their followers with the requisite resources to achieve their goals (Mittal and Dhar, 2016). Green transformational leaders provide sufficient models that equip the follower's psychological state and foster the belief that they can subdue obstacles and stimulate task-engaging behaviors, which brings in success (Bass & Stogdill, 1990).

Furthermore, investigations on the process of employee team's cooperative assets to positively adapting to unfavorable condition have largely being ignored (Morgan, Fletcher, & Sarkar, 2013). Extant data as regards team resilience have proposed that the quality of the relationship within the team is important for resilience (Stephens, Heaphy, Carmeli, Spreitzer, & Dutton, 2013). The study conceptualizes GTL as a social support system mainly because according to Meneghel et al. (2016), leaders epitomize high-grade relationships that are critical for resilience, both at the team level and at the individual level. Also, Carmeli et al. (2013) stated that team with resilience are able to effectively understand difficult circumstances and structure the best to overcome.

Furthermore, relationships play a vital role in building team's ability to react positively to environmental challenges. Transformational leadership foster relationship and also correlate with a high level of resilience among individuals within a team (Sommer, Howell, & Hadley, 2016). Harland, Harrison, Jones, and Reiter-Palmon (2005) stated that transformational leadership measurements of intellectual stimulation, attributed personality, influence, and empathy were shown to have a positive connection with team resilience. Past studies also showcase the negative connection between the inactive method of "management-by-exception" and team resilience, and no correlations between the active form of management-by-exception and resilience were found. Meneghel et al. (2016) discovered that members of staff views of a positive social situation were clearly linked to resilience, adopting the resource theory (Hobfoll, 1989).

In adopting resource theory, the availability of circumstantial resources from the communal environment affords certain degree of leverage for the improvement and development of individual resources in relation to resilience. The present study however takes a different approach by adopting broaden-and-build theory of positive emotions that suggests that positive emotions (enjoyment/happiness/

joy and perhaps interest/anticipation) enlarge people's consciousness and boost originality, diverse, and analytical point of view and corresponding actions (Fredrickson, 2001). With time, broadened behavioral range helps build abilities and resources. Furthermore, culture of learning and effective communication knowledge-sharing structure, which can be fostered by transformational leaders, are positively associated to workers' resilience (Malik & Garg, 2017). The research also claimed that the experience of positive organizational sphere gives rise to positive mental capacity such as the growth in resilience.

On the premise of broaden-and-build theory, our study posits that green transformational leaders can shape up workers' GTR by communicating green-related vision effectively, designing a concise structure and system to foster development of mental attitude towards green-related issues, and providing adequate feedback for the internal customers as regards ecological subjects. In lieu of this, this research maintains the stance that GTL will positively influence GTR. Therefore, we propose the following hypothesis:

H1. GTL has a positive relationship with GTR.

2.4 | Establishing the relationship between GTL and GWE

The importance of leaders structuring out actions to continuously stimulate their followers' engagement in different spheres has been recognized by both academics and practitioners. This insight has led to several researches exploring followers' perception of leaders' action in their sojourn to stimulate engagement (Bal et al., 2013; Bass et al., 2016; Schmitt et al., 2016). The study of Tims et al. (2011) evaluated the mediating effect of self-efficacy to the relationship that exists between transformational leadership and work engagement.

Schaufeli et al. (2002) further stated that rather than being a precise and impermanent state, the research refers to work engagement as more of a cognitive-affective state that is consistent as time passes. In alignment with other studies, we adopt and assess GWE as a trait not an alternative state (Xanthopoulou, Bakker, & Fischbach, 2013). As aforementioned, we posit that GWE reflects a vigor towards green-related activities, meaning an optimal level of energy, mental pliability, and diligence. It is also characterized by dedication, which encompasses enthusiasm, pride, motivation, and involvement in green-related activities. The final component absorption into green-related activities is characterized by engrossment and the ability not to be able to easily detach from green-related work and lose track of time when working (Schaufeli, Bakker, & Salanova, 2006).

In relating this study's variables, the research adopts job demand-resources (JD-Rs) model (Demerouti & Bakker, 2006) to explain the relationship between GTL and GWE. This model proposes that operational and functioning conditions at work can be categorized in two, which are demand and resources. Job demand refers to the area of the job that requires both or either physical or mental effort to sustain, usually related to specific physiological and psychological

demand (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) while job resources refer to job features that reduce or serve as palliative physiological and psychological costs of job demand, anchors for functionality in realizing job objectives, and structures stimulating personal growth and development (Demerouti et al., 2001).

Job resource is indicative of the drivers for work engagement (Bakker & Demerouti, 2008). Supervision, work diversity, coaching, prospects, voice, social support, avenue for learning, and growth, which could be identified as a system that can be structured by transformational leaders, are components of job resources (Schaufeli & Bakker, 2010). In light of this, the study establishes the fact that GTL will have a positive influence on GWE.

H2. GTL will have a positive relationship with GWE.

2.5 | Establishing the relationship between GWE and GTR

Studies have conveyed important inferences of work engagement on workers' attitude, ability to adapt at workplace, workers' performance, and commitment to work (Kimberley, Bakker, Demerouti, & Heuvel, 2015; Yalabik, Van Rossenberg, Kinnie, & Swart, 2015). Extant studies have revealed indication of the link between psychological factors and work engagement, but only a handful of researches critically investigate the dynamics of the relationship. Studies have described that work engagement and job resources, personal, and group resources have been connected mutually. A study by Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) also establishes that job resources and personal resources forecast work engagement level. Notwithstanding, only a few studies have studied the relationship between work engagement and GTR.

Teams with collective resilience have been noted to favorably adapt to challenges (Stoverink, Kirkman, Mistry, & Rosen, 2020). For example, resilient teams have positive qualities like collective optimism and an energetic outlook (Morgan, Fletcher, & Sarkar, 2017), inquisitiveness, and openness to new frontiers (Talat & Riaz, 2020). Team resilience in adaptive form to green-related challenges will cope effectively to green-related challenges and challenging the status quo. Thus, dedication, energetic, and confident staff show vigor at workplace, which eventually strengthen team resilience. Additionally, green resilient staff are proficient in building excellent associations and social support systems at workplace (Fredrickson, Tugade, Waugh, & Larkin, 2003), which leads to team resilience.

Successively, inferring from the conservation of resource theory (Hobfoll, 1989, 2001) and Frederickson's broaden-and-build theory (2001), this research debates that GWE fosters GTR as green work engaged employees display dedication absorption and vigor to green-related activities, which will eventually boost team resilience. Adopting conservation of resource theory Karatepe and Olugbade (2009) establish that staff with solid faith in their capabilities get more captivated and occupied with their task/work thereby exhibiting vigor, which we argue has a strong linkage with team

resilience. In light of this, we promote the notion that GWE will positively influence GTR. Thus we establish the following hypothesis.

H3. GWE is positively associated with GTR.

2.6 | The mediating role of green work engagement

The motivational pathway in the JD-R theory gives leverage in creating this hypothesis with reference to GWE as a mediator of the impacts of GTL on GTR. In the work space, supportive leaders applaud and also encourage workers' learning, progress, and expansion (Ibrahim, Suan, & Karatepe, 2019); this gesture has been seen to send solid indications to staffs that work goals are attainable.

Hotel staff with adequate leadership support have greater work engagement and consequently show appropriate results in work environment. As postulated by the JD-R theory (Bakker & Demerouti, 2017), personal resources can possess a parallel part as job resources, which means it can influence GWE positively. Work-engaged staff, which comes as a result of the presence of favorable mutual connections (GTL × GWE) tend to exhibit environmentally friendly conducts (Karatepe, Rezapouraghdam, & Hassannia, 2020).

Employees that are work engaged are probable towards demonstrating sustainable utilization of inadequate resources. This phenomenon is highly critical, because management of green organization especially hotels engages activates such as waste reduction, water conservation, and usage of energy recycling and reusing (Kim, Kim, Choi, & Phetvaroon, 2019; Pham, Tučková, & Jabbour, 2019). According to Bakker and Xanthopoulou (2013), personal resources (e.g., GWE) assist staff convert job resources (e.g., GTL) into appropriate result (e.g., GTR).

It seems that job resources are the closest facilitators of engagement (Bakker & Xanthopoulou, 2013; Ibrahim et al., 2019). This makes GTL a necessary formula for job resources. Staff with job resources like GTL, as well as knowledge of the work environment, are noted to be more engaged (Bakker & Demerouti, 2017).

Employees' cognitive evaluation of the perceived support in terms of green-related support gives rise to higher levels of GWE, which can also affect their GTR. The cognitive assessment leads to emotional reaction and further gives rise to a behavioral order, highpoints work engagement as a mediator of the influence of GTL on GTR (Karatepe & Vatankhah, 2014). The research therefore, places the mediating impact of GWE on the study variables. We propose the following hypothesis:

H4. GWE will mediate the effect of GTL on GTR.

3 | RESEARCH METHODOLOGY

3.1 | Sampling and procedures

The information was gotten from four and five star hotel in Turkey for the variables as shown in Figure 1. Before the questionnaires were

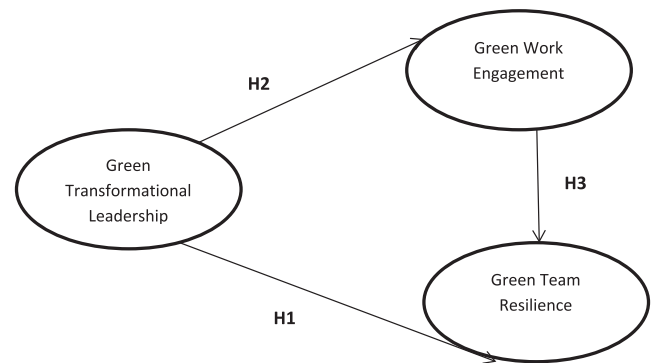


FIGURE 1 Study model

distributed, a letter was sent to the management of the hotels explaining the need for the data collection and obtaining permission to distribute the questionnaire. The questionnaires were subjected to back translation from English to Turkish by two language experts. This is to assure that the questionnaire when translated to Turkish language did not lose the initial intent of the questions (Tarkang, Alola, Nange, & Ozturen, 2020). A pilot study was conducted with a sample of five questionnaires; this is to ensure that the questions are readable and comprehensive (Kaya & Karatepe, 2020). However, there was no need for modifications of the questionnaire after the pilot study. The study distributed 500 questionnaires to employees in a sealed envelope and assured the employees on the confidentiality of the responses. This is one of the ways to decrease potential threat of common method and bias selection (Podsakoff et al., 2003). The incomplete questionnaires were removed, and the useable ones were coded for the study, yielding a response rate of 70.2%.

3.2 | Measurement

3.2.1 | Green transformational leadership

In the construct of GTL, we referred to the study of Chen and Chang (2013) that was adopted from the study of Podsakoff, Mackenzie, and Bommer (1996) for the measurement that includes six items. An example of sample questions includes (a) leaders of a green product development project makes members work in team for the same environmental goals. (b) The leader of a green product encourages the project team members to achieve environmental goals. (c) The leader of green product development project inspires the product members to think about green ideas. The Cronbach alpha for this scale is $\alpha = .849$. This score shows that the scales are reliable.

3.2.2 | Green work engagement

The construct of GWE was used from the shortened version of Utrecht engagement scale, and nine items were adapted from the study of Schaufeli et al. (2006). (a) My organization enables me to

go to work enthusiastically because my organization has a sustainable and green vision. (b) Because my organization is environmentally friendly, it gives me positive energy and enthusiasm. (c) The organization I work for inspires me because it is environmentally friendly. The items proved reliable with Cronbach alpha score of $\alpha = .749$.

3.2.3 | Green team resilience

GTR construct was adopted from the study of Mallak (1998), with seven items. Examples of the items include (a) the team perceives green activities experience; even though it is stressful, you still find a positive angle and move forward. (b) The team perceives changes in environmental activities as opportunity, not danger. (c) The team ensures access to adequate resources to allow positive adaptive response to approach a wide variety of possible green activities. We validated the Cronbach alpha ($\alpha = .873$).

4 | DATA ANALYSIS

Convergent, discriminant validity, and composite reliability (CR) were tested using the confirmatory factor analysis (CFA) (Anderson & Gerbing, 1988). Also, the SEM was deployed to assess the relationship. The indirect consequence was checked using a bootstrapping method with 5,000 sample size generated at 95% interval (Arbuckle, 2011). To check the model fit, the measurement and the structural models were assessed using the minimum discrepancy (CMIN), Tucker Lewis Index (TLI), incremental fit index (IFI), root mean square error approximation (RMSEA), comparative fit index (CFI), and adjusted goodness of fit index (AGFI) (Hair, Black, Babin, & Anderson, 2010).

4.1 | Results

4.1.1 | Sample characteristics

The demographic sample of the respondents as shown in Table 1 shows the sample of 351 employee responses comprising male 234 (66.7%) and female 117 (33.3%). The age group of the respondents ranges from 25 to 45 years. Respondents with age 25 years are below 96 (27.4%); most of the respondents were between the ages of 26 and 30 years (118 [33.6%]). The respondents were either high school degree holders 122 (34.8%) or associate degree holders 131 (37.3%). The scale items range from 1 (*strongly agreed*) to 5 (*strongly disagreed*).

4.2 | Measures of psychometric properties

Normality checks were used to test the study. The kurtosis score (0.762, -0.582, and -0.715) and the skewness score (-0.646, -0.293,

TABLE 1 Respondent's profile ($n = 351$)

	Frequency	%
Age		
25 and younger	96	27.4
26-30	118	33.6
31-35	81	23.1
36-40	54	15.4
41-45	2	.6
Gender		
Male	234	66.7
Female	117	33.3
Education		
Primary	33	9.4
High school	122	34.8
Associate	131	37.3
Undergraduate	63	17.9
Graduate	2	.6
Marital status		
Single	209	59.5
Married	142	40.5
Department		
F&B	108	30.8
Front office	76	21.7
House keeping	67	19.1
Sales & Marketing	38	10.8
Human resources	19	5.4
Security	43	12.3
Position		
Employee	211	60.1
Intermediate manager	103	29.3
Senior manager	37	10.5
Hotel star rating		
4 Star	179	51.0
5 Star	172	49.9

Abbreviation: F&B, food and beverage.

and -0.357) are shown, respectively. The factor loading loaded well in their respective column.

The CFA loaded above the threshold of 0.50 except for one item from GTL that loaded below the threshold (Alola et al., 2018, Fornell & Larcker, 1981). As established in Table 2, all the loadings are significant with the following fit indices CMIN 417.218, CMIN/DF = 2.03, degree of freedom (DF) = 206, goodness of fit (GFI) = 0.897, AGFI = 0.874, IFI = 0.929, TLI = 0.920, CFI = 0.929, RMSEA = 0.054, standardized root mean square residual (SRMR) = 0.052 (Hair et al., 2010). The study also established the discriminate validity with the average variance extracted (AVE). The result shows that the value of the AVE for each construct is greater than the squared validity of the other construct. This demonstrates the support of discriminate

TABLE 2 Scale items and confirmatory factor analysis result

Construct and items	Standardized loadings	α	AVE	CR
Green transformational leadership		.842	.509	.849
Item 1	0.875			
Item 2	***			
Item 3	0.916			
Item 4	0.761			
Item 5	0.481			
Item 6	0.749			
Green team resilience		.748	.500	.749
Item 1	0.607			
Item 2	0.523			
Item 3	0.596			
Item 4	0.627			
Item 5	0.553			
Item 6	0.418			
Item 7	0.502			
Green work engagement		.873	.501	.873
Item 1	0.732			
Item 2	0.600			
Item 3	0.640			
Item 4	0.653			
Item 5	0.679			
Item 6	0.616			
Item 7	0.601			
Item 8	0.696			
Item 9	0.702			

All loadings for the study were significant. α denotes the Cronbach alpha. Abbreviations: AVE, average variance extracted; CR, composite reliability. ***Insignificant.

validity (Fornell & Larcker, 1981). Also, the test for the CR shows that each score was above the threshold of 0.50 (Hair et al., 2010).

To test for the correlations of the observed variables, Table 3 shows the mean, the standard deviation, and the correlations of the

variables. As shown, GTL positively correlates with GTR and GWE ($r = 0.689, p < .01$), ($r = 0.554, p < .01$). GTR is positively related to GTL ($r = 0.246, p < .01$). On the other hand, GWE is positively related to GTL ($r = 0.298, p < .01$) and GTR ($r = 0.754, p < .01$).

TABLE 3 Mean, standard deviation, and correlation of the variables

Correlation	M	SD	1	2	3	4	5	6
Education	2.66	0.899	1					
Position	1.50	0.679	.444**	1				
Age	2.28	0.105	.419**	.816**	1			
Green transformational leadership	2.89	0.872	.571**	.689**	.554**	1		
Green team resilience	4.13	0.421	.355**	.173**	.168**	.246**	1	
Green work engagement	4.23	0.489	.389**	.243**	.234**	.298**	.754**	1

Abbreviations: M, mean; SD, standard deviation.

** $p = 0.01$.

* $p = 0.1$.

4.3 | Tests for hypothesis

The hypothesis result shown in Table 4 that the path coefficient from GTL to GTR is significantly positive ($\beta = .073, p < .01$). Therefore, H1 that states that GTL is positively related to GTR is supported. The findings also support H2; GTL is positively related to green team engagement ($\beta = .106, p < .01$). Finally, the proposed hypothesis that GWE is positively related to GTR (H3) is accepted ($\beta = .635, p < .01$).

The mediating effects of GWEs demonstrated in Table 5 shows that GWE mediates the relationship between GTL and GTR. To further test the indirect effect of GWE, the current study uses PROCESS Model 4 with a bootstrapped confidence of 5,000 sample size, bias-corrected percentile and accelerated confidence interval. As seen in Table 5, GWE fully mediates the effects of GTL on GTR (indirect effect = 0.075, lower level confidence interval [LLCI] = 0.037 and upper level confidence interval [ULCI] = 0.118). Therefore, the proposed relationship that GWE will mediate between GTL and GTR is supporting H4.

5 | DISCUSSION

The research is robust and brought forward some implications and also stands as the first research to examine the relationship and the positive effect of GTL on GWE and GTR. The study empirically supports the findings that employee perception on green transformational leaders in guiding and transforming of GTR and the ability to resist organizational negative practices is evident.

Broaden-and-build theory of positive emotions suggests that individuals that have supportive leaders are identified with positive energy that leads to uniformity of behavior and attitudes (Fredrickson, 2001). Unlike individuals that act alone, evidence shows that individuals that act as a team tend to display regular positive behavior (Stewart, 2010). Consistent with the theory, positive emotions build intellectual and psychological resources to social relation (Vacharkulksemsuk & Fredrickson, 2013), making coworkers to join in the positive energy.

TABLE 4 SEM test result

Hypothesis testing	Std est	SE	CR	p value	Result
H1: Green transformational leadership → GTR	0.073	0.020	3.619	0.00	Supported
H2: Green transformational leadership → GWE	0.106	0.026	4.05	0.00	Supported
H3: Green work engagement → GTR	0.635	0.075	8.47	0.00	Supported

Abbreviations: Std est, standardized estimate; SE, standard error; CR, critical ratio; GTR, green team resilience; GWE, green work engagement.

TABLE 5 Bias-corrected bootstrapped result

Hypothesized relationship	Indirect effect	SE	LLCI	ULCI
Green transformational leadership → Green team resilience → Green work engagement	0.075	0.228	0.037	0.118

Abbreviations: Bias-corrected bootstrapping analysis was conducted with 5,000 resampled size at 95% confidence interval. The indirect effect was calculated using the unstandardized coefficient. LLCI, lower level confidence interval; SE, standard error; ULCI, upper level confidence interval.

Furthermore, the theory establishes the idea that team members respond in a similar way and show the same team resilient level (Alola & Alola, 2018). In achieving the research objectives, the study developed and tested the model by bridging the gap from extant literature (Mittal & Dhar, 2016). Because broaden-and-build theory is based on the findings that GTL has a positive relationship with GTR, therefore H1 was supported.

Also, GTL has a positive relationship with GWE, supporting H2. The study utilized the GTL (Li et al., 2020; Singh et al., 2020) and GWE to examine the prediction on GTR. GTL has a positive effect on GWE (Mittal & Dhar, 2016; Li et al., 2020). Relating the study with the JD-R theory proposed, Demerouti and Bakker (2006) explain the relation of these variables and the reasons for work engagement. Transformational leaders provide the opportunity for employee learning and growth (Bakker & Demerouti, 2008), thereby making employees to be engaged both in the activities of the organization and in the environment.

Additionally, the relationship between GWE and GTR shows a positive relationship, supporting H3. The combinations of both broaden-and-build theory and conservation of resource theory were used in establishing the relationship. Employees that are stressed with job demands are softening by the benevolent leaders' support aiding the coping ability and making employees more committed and engaged in their work. This establishes the fact that GWE has a positive association with GTR. Finally, the mediating effect of GWE on green transactional leadership and GTR shows full mediation, supporting H4.

5.1 | Theoretical implication

The theory of broaden-and-build theory (Fredrickson, 2001), JD-R theory (Demerouti & Bakker, 2006), and conservation of resource theory (Hobfoll, 1989) were used to ganger the model for the study. The application of JD-R model has been applied to several studies in the hotel industry (Grover, Teo, Pick, Roche, & Newton, 2018; Radic, Arjona-Fuentes, Ariza-Montes, Han, & Law, 2020; Xanthopoulou,

Bakker, Demerouti, & Schaufeli, 2007). This study contributes in various ways to the previous study on GTL. Prior research has investigated only the role of transformational leadership on green creativity (Mittal & Dhar, 2016), green performance (Chen, Chang, & Lin, 2014) and green intrinsic and extrinsic motivation (Li et al., 2020). Therefore, this study advances the knowledge stream of GTL by investigating the relationship between GWE and GTR. Alola, Avci, and Ozturen (2018), in their study, maintained that the sustainability of any organization is dependent on the contribution of employees. Thus, the contribution of green transformational leaders in their concern to care about the environment and drive the employees towards achieving environmental and sustainability goals should be applauded.

Second, this research enriches the literature by predicting employee's green outcome through the GTL. The positive effect of green transformational leaders has already been investigated by researchers (Bin Saeed et al., 2019), finding a robust and significant effect on employees outcome. This study proposes that GWE and GTR (Alliger et al., 2015) as the underlying principles by which green transformational leaders transmit their effect on GTR motivate the employee's teamwork towards the environment. The growing implications of leader's contributions in stimulating employee's positive attitude towards the organization have been recognized by distinguished researchers (Bass et al., 2016; Schmitt et al., 2016) stressing that GTL is vital to the organization and the employees.

Additionally, GTR is a significant resource capital among employees in the hotel industry (Alola & Alola, 2018). Notwithstanding, there is no empirical result linking GTL to this construct. This study contributes to current knowledge that hotel employees with green transformational leaders exhibit GWE and GTR in their action.

5.2 | Practical implications

The discoveries of this study propose several vital suggestions for hotel managers. First, green transformational leaders are leaders that inspire positive changes, energizes, passionate about the followers, and contributes in bringing the followers together (team) for the success of the group. Also, previous studies found that transformational leadership has a positive effect on group (Buil, Martínez, & Matute, 2019; Garcia-Guiu et al., 2016), which is in line with our study.

Second, most hotel guests are narrowing the choice of the hotel to use to hotels that are practicing green environment (Doppelt, 2017). The successful implementation of GTL practices would make employees committed to attitudes that are streamlining towards environmental sustainability. Because green transformational leaders motivate and encourage the employees through training, the implications and consequences of climate change, which results from environmental pollution (Alola, 2019; Alola, Yalçiner, Alola, & Saint Akadiri, 2019), could be brought to the knowledge of the employees so that activities could be directed towards caring for the environment (Iraldo, Testa, Lanzini, & Battaglia, 2017). Also, having employee's minds tailored towards environmental

sustainability is beneficial to the organization. For example, using recyclable cups, reduction in the production of unnecessary waste and good usage of water contributes indirectly to organization's finance. Once hotels understand the importance of environmental sustainability, the conscious effort to the reduction of CO₂ emission keeps them ahead of their competitors (Gürlek & Tuna, 2018). For hotels to do this, enacting a clear and single policy pointing towards environmental sustainability is encouraged. Additionally, although green training comes with a huge cost incurred by the business (Liu, Liu, & Yang, 2020), over a long period, the cost incurred are made back over the product life cycle. Moreover, businesses that are environmentally conscious have the higher chance of employing and retaining highly effective and efficient employees. This is because most employees want to work in companies where things are done in the right way. According to a study carried out by Adecco human resource company, 52% of employees were willing to work in an environmentally conscious company and because of their career growth (Xie, Zhu, & Qi, 2020). Also, financial analysts and investors recognize the need to invest in a company with a policy of sustainable energy efficiency that reduces negative impact to the environment. Firms should also be aware that implementing GTL style alone might not be sufficient for green employee engagement in order to spur environmental sustainability. As our findings suggest, green training should also be incorporated to provide employees with better knowledge on green practices (Cop, Alola, & Alola, 2020; Xie & Zhu, 2020). Therefore, our study highlights the benefits for business to be environmentally friendly.

5.3 | Limitations and further research

The data of this study were obtained from the hotel industry in Turkey, through a cross-sectional design; therefore, generalization of these findings should be done with caution. A longitudinal design may offer an in-depth study and better explanation of the relationship between the variables. Also, further study could be conducted in other industries that are more likely to have a direct effect on the environment. Second, this study tests the effect of GTL on GTR. Resilience is one of the dimensions of psychological capital; further study can test the effect of GTL on the four dimensions of psychological capital.

Third, the application of the theories (Demerouti & Bakker, 2006; Fredrickson, 2001) and following the work of Singh et al. (2020) and Li et al. (2020), GTL comes with several outcomes, for instance, green social adjustment, green corporate responsibility, and green work involvement. This argument has not been investigated in hotel industry. Therefore, a recommendation of the effect of these variables on GTL is proposed.

ORCID

Victor Oluwafemi Olorunsola  <https://orcid.org/0000-0001-7326-7951>

Uju Violet Alola  <https://orcid.org/0000-0002-3926-6231>

REFERENCES

- Alliger, G. M., Cerasoli, C. P., Tannenbaum, S. I., & Vessey, W. B. (2015). Team resilience. *Organizational Dynamics*, 44(3), 176–184.
- Alola, A. A. (2019). The trilemma of trade, monetary and immigration policies in the United States: Accounting for environmental sustainability. *Science of the Total Environment*, 658, 260–267. <https://doi.org/10.1016/j.scitotenv.2018.12.212>
- Alola, A. A., Yalçiner, K., Alola, U. V., & Saint Akadiri, S. (2019). The role of renewable energy, immigration and real income in environmental sustainability target. Evidence from Europe largest states. *Science of the Total Environment*, 674, 307–315. <https://doi.org/10.1016/j.scitotenv.2019.04.163>
- Alola, U. V., & Alola, A. A. (2018). Can resilience help? Coping with job stressor. *Academic Journal of Economic Studies*, 4(1), 141–152.
- Alola, U. V., Avci, T., & Ozturen, A. (2018). Organization sustainability through human resource capital: The impacts of supervisor incivility and self-efficacy. *Sustainability*, 10(8), 2610.
- Amaral, A., Fernandes, G., & Varajão, J. (2015). Identifying useful actions to improve team resilience in information systems projects. *Procedia Computer Science*, 64, 1182–1189.
- Amor, A. M., Vázquez, J. P. A., & Faiña, J. A. (2020). Transformational leadership and work engagement: Exploring the mediating role of structural empowerment. *European Management Journal*, 38(1), 169–178.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411
- Arbuckle, J. L. (2011). *Amos 20 user's guide*. Chicago, IL: SPSS Inc.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13, 209–223. <https://doi.org/10.1108/13620430810870476>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work and Stress*, 22(3), 187–200.
- Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *The International Journal of Human Resource Management*, 24(14), 2760–2779.
- Bal, P. M., De Cooman, R., & Mol, S. T. (2013). Dynamics of psychological contracts with work engagement and turnover intention: The influence of organizational tenure. *European Journal of Work and Organizational Psychology*, 22(1), 107–122.
- Barling, J., Christie, A., & Hopton, C. (2010). Leadership. In S. Zedeck (Ed.), *Handbook of industrial and organizational psychology: Vol. 1. Building and developing the organization* (pp. 183–240). Washington, DC: American Psychological Association.
- Bass, B. I., Cigularov, K. P., Chen, P. Y., Henry, K. L., Tomazic, R. G., & Li, Y. (2016). The effects of student violence against school employees on employee burnout and work engagement: The roles of perceived school unsafety and transformational leadership. *International Journal of Stress Management*, 23(3), 318.
- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*. Simon and Schuster, Free Press.
- Bin Saeed, B., Afsar, B., Shahjeha, A., & Imad Shah, S. (2019). Does transformational leadership foster innovative work behavior? The roles of psychological empowerment, intrinsic motivation, and creative process engagement. *Economic Research-Ekonomska Istraživanja*, 32(1), 254–281.
- Brettel, M., Chomik, C., & Flatten, T. C. (2015). How organizational culture influences innovativeness, proactiveness, and risk-taking: Fostering entrepreneurial orientation in SMEs. *Journal of Small Business Management*, 53(4), 868–885.
- Buil, I., Martínez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality. *International Journal of Hospitality Management*, 77, 64–75.
- Carmeli, A., Friedman, Y., & Tishler, A. (2013). Cultivating a resilient top management team: The importance of relational connections and strategic decision comprehensiveness. *Safety Science*, 51(1), 148–159.
- Centobelli, P., Cerchione, R., & Ertz, M. (2020). Managing supply chain resilience to pursue business and environmental strategies. *Business Strategy and the Environment*, 29(3), 1215–1246.
- Ceschi, A., Demerouti, E., Sartori, R., & Weller, J. (2017). Decision-making processes in the workplace: How exhaustion, lack of resources and job demands impair them and affect performance. *Frontiers in Psychology*, 8, 313.
- Chen, Y., McCabe, B., & Hyatt, D. (2017). Impact of individual resilience and safety climate on safety performance and psychological stress of construction workers: A case study of the Ontario construction industry. *Journal of Safety Research*, 61, 167–176. <https://doi.org/10.1016/j.jsr.2017.02.014>
- 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., Chang, C. H., & Lin, Y. H. (2014). Green transformational leadership and green performance: The mediation effects of green mindfulness and green self-efficacy. *Sustainability*, 6(10), 6604–6621.
- Cop, S., Alola, U. V., & Alola, A. A. (2020). Perceived behavioral control as a mediator of hotels' green training, environmental commitment, and organizational citizenship behavior: A sustainable environmental practice. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2592>
- Dangelico, R. M. (2015). Improving firm environmental performance and reputation: The role of employee green teams. *Business Strategy and the Environment*, 24(8), 735–749.
- de la Torre-Ruiz, J. M., Aragón-Correa, J. A., & Martín-Tapia, I. (2015). Do individual preferences affect the environmental decision-making process in teams? The role of participation. *Business Strategy and the Environment*, 24(6), 451–465.
- Demerouti, E., & Bakker, A. B. (2006). Employee well-being and job performance: Where we stand and where we should go. *Occupational Health Psychology: European Perspectives on Research, Education and Practice*, 1, 83–111.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Doppelt, B. (2017). *Leading change toward sustainability: A change-management guide for business, government and civil society*. Routledge. ISBN: 1351278940, 9781351278942
- Eys, M., Bruner, M. W., & Martin, L. J. (2019). The dynamic group environment in sport and exercise. *Psychology of Sport and Exercise*, 42, 40–47.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226. <https://doi.org/10.1037//0003-066x.56.3.218>
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, 84(2), 365.
- García-Guio, C., Moya, M., Molero, F., & Moriano, J. A. (2016). Transformational leadership and group potency in small military units: The

- mediating role of group identification and cohesion. *Revista de Psicología del Trabajo Y de Las Organizaciones*, 32(3), 145–152.
- Grover, S. L., Teo, S. T., Pick, D., Roche, M., & Newton, C. J. (2018). Psychological capital as a personal resource in the JD-R model. *Personnel Review*, 47, 968–984. <https://doi.org/10.1108/PR-08-2016-0213>
- Gürlek, M., & Tuna, M. (2018). Reinforcing competitive advantage through green organizational culture and green innovation. *The Service Industries Journal*, 38(7-8), 467–491.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis. A global perspective* (7th ed.). Upper Saddle River, NJ: Person-Hall International.
- Halbesleben, J. R., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), 242–256.
- Harland, L., Harrison, W., Jones, J. R., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. *Journal of Leadership and Organizational Studies*, 11(2), 2–14.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037//0003-066x.44.3.513>
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421.
- Ibrahim, S. N. H., Suan, C. L., & Karatepe, O. M. (2019). The effects of supervisor support and self-efficacy on call center employees' work engagement and quitting intentions. *International Journal of Manpower*.
- Iraldo, F., Testa, F., Lanzini, P., & Battaglia, M. (2017). Greening competitiveness for hotels and restaurants. *Journal of Small Business and Enterprise Development*.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
- Karatepe, O. M., & Olugbade, O. A. (2009). The effects of job and personal resources on hotel employees' work engagement. *International Journal of Hospitality Management*, 28(4), 504–512.
- Karatepe, O. M., Rezapouraghdam, H., & Hassannia, R. (2020). Job insecurity, work engagement and their effects on hotel employees' non-green and nonattendance behaviors. *International Journal of Hospitality Management*, 87, 102472.
- Karatepe, O. M., & Vatankhah, S. (2014). The effects of high-performance work practices and job embeddedness on flight attendants' performance outcomes. *Journal of Air Transport Management*, 37, 27–35.
- Kaya, B., & Karatepe, O. M. (2020). Does servant leadership better explain work engagement, career satisfaction and adaptive performance than authentic leadership? *International Journal of Contemporary Hospitality Management*, 32, 2075–2095. <https://doi.org/10.1108/IJCHM-05-2019-0438>
- Kim, Y. J., Kim, W. G., Choi, H. M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, 76, 83–93.
- Kimberley, B., Bakker, A. B., Demerouti, E., & Heuvel, M. V. (2015). Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology*, 30(7), 754–770.
- Li, W., Bhutto, T. A., Xuhui, W., Maitlo, Q., Zafar, A. U., & Bhutto, N. A. (2020). Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production*, 255, 120229.
- Liu, J., Liu, Y., & Yang, L. (2020). Uncovering the influence mechanism between top management support and green procurement: The effect of green training. *Journal of Cleaner Production*, 251, 119674.
- Malik, P., & Garg, P. (2017). The relationship between learning culture, inquiry and dialogue, knowledge sharing structure and affective commitment to change. *Journal of Organizational Change Management*, 30, 610–631. <https://doi.org/10.1108/JOCM-09-2016-0176>
- Mallak, L. (1998). Putting organizational resilience to work. *Industrial Management-Chicago Then Atlanta*, 8–13.
- Meneghel, I., Martínez, I. M., & Salanova, M. (2016). Job-related antecedents of team resilience and improved team performance. *Personnel Review*, 45, 505–522. <https://doi.org/10.1108/PR-04-2014-0094>
- Menguc, B., Auh, S., Fisher, M., & Haddad, A. (2013). To be engaged or not to be engaged: The antecedents and consequences of service employee engagement. *Journal of Business Research*, 66(11), 2163–2170.
- Mittal, S., & Dhar, R. L. (2016). Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tourism Management*, 57, 118–127.
- Morgan, P. B., Fletcher, D., & Sarkar, M. (2013). Defining and characterizing team resilience in elite sport. *Psychology of Sport and Exercise*, 14(4), 549–559.
- Morgan, P. B., Fletcher, D., & Sarkar, M. (2017). Recent developments in team resilience research in elite sport. *Current Opinion in Psychology*, 16, 159–164. <https://doi.org/10.1016/j.copsyc.2017.05.013>
- Morgan, P. B., Fletcher, D., & Sarkar, M. (2019). Developing team resilience: A season-long study of psychosocial enablers and strategies in a high-level sports team. *Psychology of Sport and Exercise*, 45, 101543.
- Morrow, J., & Mowatt, S. (2020). The freedom within framework: A multi-level perspective on developing green capabilities through routines in service organisations. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2579>
- Palmer, C., Niemand, T., Stöckmann, C., Kraus, S., & Kailer, N. (2019). The interplay of entrepreneurial orientation and psychological traits in explaining firm performance. *Journal of Business Research*, 94, 183–194.
- Pangallo, A., Zibarras, L., & Patterson, F. (2016). Measuring resilience in palliative care workers using the situational judgement test methodology. *Medical Education*, 50(11), 1131–1142. <https://doi.org/10.1111/medu.13072>
- Pham, N. T., Tučková, Z., & Jabbour, C. J. C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72, 386–399.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22(2), 259–298.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Radic, A., Arjona-Fuentes, J. M., Ariza-Montes, A., Han, H., & Law, R. (2020). Job demands–job resources (JD–R) model, work engagement, and well-being of cruise ship employees. *International Journal of Hospitality Management*, 88, 102518.
- Ramus, C. A., & Steger, U. (2000). The roles of supervisory support behaviors and environmental policy in employee “ecoinitiatives” at leading-edge European companies. *Academy of Management Journal*, 43(4), 605–626.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600–619. <https://doi.org/10.1108/02683940610690169>
- Schaufeli, W., & Bakker, A. B. (2010). The conceptualization and measurement of work engagement.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716.

- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology*, 89(3), 588–610.
- Shatté, A., Perlman, A., Smith, B., & Lynch, W. D. (2017). The positive effect of resilience on stress and business outcomes in difficult work environments. *Journal of Occupational and Environmental Medicine*, 59(2), 135–140. <https://doi.org/10.1097/JOM.0000000000000914>
- Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150, 119762.
- Sommer, S. A., Howell, J. M., & Hadley, C. N. (2016). Keeping positive and building strength: The role of affect and team leadership in developing resilience during an organizational crisis. *Group & Organization Management*, 41(2), 172–202.
- Stephens, J. P., Heaphy, E. D., Carmeli, A., Spreitzer, G. M., & Dutton, J. E. (2013). Relationship quality and virtuousness: Emotional carrying capacity as a source of individual and team resilience. *The Journal of Applied Behavioral Science*, 49(1), 13–41.
- Stewart, G. L. (2010). The past twenty years: Teams research is alive and well at the *Journal of Management*. *Journal of Management*, 36, 801–805. <https://doi.org/10.1177/0149206310371512>
- Stoverink, A. C., Kirkman, B. L., Mistry, S., & Rosen, B. (2020). Bouncing back together: Toward a theoretical model of work team resilience. *Academy of Management Review*, 45(2), 395–422.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. *Positive organizational scholarship: Foundations of a new discipline*, 94, 110.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of social conflict. *The Social Psychology of Intergroup Relations*, 2, 33–47.
- Talat, A., & Riaz, Z. (2020). An integrated model of team resilience: exploring the roles of team sensemaking, team bricolage and task interdependence. *Personnel Review*, ahead-of-print. <https://doi.org/10.1108/PR-01-2018-0029>
- Tarkang, M. E., Alola, U. V., Nange, R. Y., & Oztüren, A. (2020) Investigating the factors that trigger airline industry purchase intention.
- Tims, M., Bakker, A. B., & Xanthopoulou, D. (2011). Do transformational leaders enhance their followers' daily work engagement? *The Leadership Quarterly*, 22(1), 121–131.
- Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology*, 85(6), 848–859. <https://doi.org/10.1037/0021-9010.85.6.848>
- Vacharkulksemsuk, T., & Fredrickson, B. L. (2013). Looking back and glimpsing forward: The broaden-and-build theory of positive emotions as applied to organizations. In A. B. Bakker (Ed.), *Advances in Positive Organizational Psychology*. Advances in Positive Organizational Psychology (Vol. 1, pp. 45–60). Bingley: Emerald Group Publishing Limited. [https://doi.org/10.1108/S2046-410X\(2013\)0000001005](https://doi.org/10.1108/S2046-410X(2013)0000001005)
- Van Holt, T., Statler, M., Atz, U., Whelan, T., van Loggerenberg, M., & Cebulla, J. (2020). The cultural consensus of sustainability-driven innovation: Strategies for success. *Business Strategy and the Environment*.
- Vandenbrande, W. W. (2019). Quality for a sustainable future. *Total Quality Management & Business Excellence*, 1–9. <https://doi.org/10.1080/14783363.2019.1588724>
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands–resources model. *International Journal of Stress Management*, 14(2), 121.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235–244.
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands. *Journal of Personnel Psychology*.
- Xie, X., & Zhu, Q. (2020). Exploring an innovative pivot: How green training can spur corporate sustainability performance. *Business Strategy and the Environment*, 29, 2432–2449. <https://doi.org/10.1002/bse.2512>
- Xie, X., Zhu, Q., & Qi, G. (2020). How can green training promote employee career growth? *Journal of Cleaner Production*, 259, 120818. <https://doi.org/10.1016/j.jclepro.2020.120818>
- Yalabik, Z. Y., Van Rossenberg, Y., Kinnie, N., & Swart, J. (2015). Engaged and committed? The relationship between work engagement and commitment in professional service firms. *The International Journal of Human Resource Management*, 26(12), 1602–1621.
- Yu, W., & Ramanathan, R. (2015). An empirical examination of stakeholder pressures, green operations practices and environmental performance. *International Journal of Production Research*, 53(21), 6390–6407.

How to cite this article: Çop S, Olorunsola VO, Alola UV. Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help? *Bus Strat Env*. 2021;30:671–682. <https://doi.org/10.1002/bse.2646>