

Green Spillover: Deriving Pro-environmental Behavior on job and Off-job through Environmental Specific Servant Leadership

Muhammad Mumtaz Khan* Syed Saad Ahmed** Essa Khan***

Abstract

The study was conducted to explore the role of environmental specific servant leadership to promote on-job and off-job pro-environmental behavior. Additionally, the study attempted to unfurl the mediating role of environmental passion linking environmental specific servant leadership to on job and off-job pro-environmental behavior. The study finally obtained data from 296 respondents who were employed in the service sector of Pakistan. The data analysis was carried out using PLS-smart and SPSS. Specifically, multiple regression and hierarchical regression were used to test the proposed structural model. The study found that environmental specific leadership is related to employees' environmental passion, on-job, and off-job pro-environmental behavior. Furthermore, environmental passion was found to mediate the relationship between environmental specific servant leadership and on-job and off-job pro-environmental behavior of the employees. This is the first study that examined the relationship between environmental specific servant leadership on on-job and off-job pro-environmental behavior jointly. Additionally, it is the first study that established the mediating role of environmental passion between environmental specific servant leadership with both the pro-environmental behaviors.

Keywords: Environment specific servant leadership, Environmental passion, Pro-environmental behavior, Pro-environmental work behavior.

JEL Classification: O13, O44

*Bahria University, Business Studies Department, Karachi Pakistan. Email: mumtazkhan.bukc@bahria.edu.pk

**Beihang University, School of economics and management, Beijing China. Email: saadahmed@buaa.edu.cn

***Bahria University, Business Studies Department, Karachi Pakistan. Email: essakhan.bukc@bahria.edu.pk

1. Introduction

The ever-rising global warming makes its effects felt in multiple ways. The number of storms has increased along with the rise in their ferocity. Wildfires have begun to reach the outskirts of the cities. In such a dire situation, the role of humans as agents to affect the environment has come to the fore (Claus et al., 2018). Realizing the vitality of human as a cause and solution of environmental issues (Blok et al., 2015), the young generation, led by Greta Thunberg, has become more vocal in its assertion demanding the current world leaders to mend their ways to protect the environment that belongs to the future generations (Jandrić et al., 2020). Moreover, with the rise in global activism, customers prefer to interact with those organizations that have environmentally friendly practices (Moser, 2016). Conversely, customers quickly shun firms with environmentally dubious practices. As a result, organizations know that being pro-environmental is not an option anymore, it has become imperative.

Organizations have realized that any attempt towards being pro-environmental can only succeed when all the employees work for it (Daily & Huang, 2001; Ture & Ganesh, 2014). With this idea in mind, organizations have begun to spur their employees to indulge in pro-environmental work behavior. There are two streams of studies to delineate the effect of organizational practices on employees' pro-environmental work behavior. One stream of studies has looked at the effects of overall organizational policy. This stream includes the role of environmental CSR (Islam, Ali, & Asad, 2019), HRM (Zibarras & Coan, 2015), and green HRM (Ansari et al., 2021; Saeed et al., 2019) to promote pro-environmental work behavior among the employees. The other stream of studies focused on the role of leadership in promoting pro-environmental work behavior among employees. The studies used transformational leadership (Li et al., 2020; Peng et al., 2020), ethical leadership (Khan et al., 2019), spiritual leadership (Afsar et al., 2016), responsible leadership (Afsar et al., 2020), and servant leadership (Bibi, 2020; Ying et al., 2020) as the type of leadership to instigate pro-environmental work behavior.

In line with the second stream of studies, the current study intends to explore the role and process of environment-specific servant leadership (ESSL) in affecting pro-environment behavior. However, instead of limiting to on job pro-environment work behavior, the current study intends to see how ESSL brings change to the employee on the job and off the job pro-environmental behavior. The need for such a study is warranted for two reasons. First, employees spend most of their time off-job where they make comparatively more decisions that affect the environment. So to protect the environment, their off job behavior is at least as important as their on job behavior. Second is the ability of servant leadership to transform the employees into other-oriented and community servants (Greenleaf, 2002). As the servant leader provides the required impetus to employees to be pro-community (Northouse, 2015), so any behavior developed on the job is expected to be displayed off the job. The current

study uses the theoretical lens of social cognitive theory. According to social cognitive theory, employees can learn from role models (Bandura, 1986). ESSL, a specific form of servant leadership, shows employees and community-oriented behavior. The employee orientation of ESSL succeeds in establishing a positive relationship between the leader and the follower. This established relation gives the leader a source of influence over the employees. When employees, won over by the positive relationship, observe their leaders' intent to protect the environment, they are inclined to adopt the same pro-environmental behavior while on the job or off the job.

The current study is being undertaken with the following objectives. First, the study intends to unravel the relationship between ESSL and pro-environment behavior. Second, the study proposes to understanding the linking mechanism in the relationship between ESSL and pro-environment work behavior. The study intends to use environmental passion as a mediator between ESSL and pro-environmental behavior. Environmental passion, intense feelings, and emotions to indulge in pro-environment behavior, is being proposed as a link between ESSL and pro-environment behavior because of the following two reasons. First, the servant leader's prodding towards a particular behavior can arouse strong emotions because employees, being led through service, regards the servant leader as a model for them. When such leaders push them towards a behavior, they take it seriously. Second, the servant leader raises community concern among the employees and they begin to value the wellbeing of the community. In the context of increasing concern about the environment, one of the ways to show one's interest in the wellbeing of the community is to have a passion for the environment.

2. Literature Review

2.1 *Environment Specific Servant Leadership*

Servant leadership is a huge change in the idea of leadership. Servant leadership turns the idea of leadership upside down; instead of catering to the needs of the leader, servant leader focuses on the needs of followers (Greenleaf, 2002). Servant leader focuses on the growth and development of employees (Spears, 1998). For this, servant leader extends resources (Page & Wong, 2000), gives confidence, and provides employees with the needed support (Van Dierendonck & Nuijten, 2011). This serving nature of servant leadership is the very element that enables the servant leader to influence the followers (Farling et al., 1999). Despite the leader's influence, the servant leader still encourages the employees to work for their own goals and in the process helps the organization meet its goals. Servant leadership has been thoroughly defined by Eva and colleagues in terms of purpose, process, and results. According to them, servant leadership is another oriented leadership that is manifested through one-on-one prioritizing of follower needs and interests and reorienting employees'

concern from self to others within the organization and the larger community (Eva et al., 2019).

The rising concern for the environment has brought the issue to the main focus. Researches focusing on organizations have also accommodated itself to make room for enhanced focus on the environment. The concept of green HRM practices is one such move. As leadership is an integral part of any change endeavor in the organization, therefore, the idea of leadership has been molded to increase its focus on environmental issues. Though the initial step was taken by Kathleen and Altman with their groundbreaking work on environmental leadership (Dechant & Altman, 1994), recently researchers have begun to come up with environmental specific leadership. Transformational leadership, because of its perception of being a change instigator, was the first to be used for environment-specific connotations (Kura, 2016; Robertson, 2018; Robertson & Barling, 2017). Robertson and Barling (2017) suggested the use of servant leadership for environmental specific goals. Soon article began to follow the suggestions and studies began to emerge that used environmental-specific servant leadership to be used as a change agent with environmental goals (Afsar et al., 2018; Tuan, 2020).

Environmental specific servant leadership (ESSL) is the focused form of servant leadership that aims to encourage employees to follow green behavior (Luu, 2019). ESSL provides the employees with resources and support to indulge in pro-environmental behavior (Tuan, 2020). Though the concept has been recently introduced, ESSL is found to positively affect green creativity (Tuan, 2020) and pro-environment work behavior (Afsar et al., 2018).

2.2 *Environmental Passion*

Continuously following an aim is possible when an individual is passionate about it. When people are passionate about an activity, they will demonstrate it by; i) experiencing positive emotions, ii) recognizing its intrinsic force towards work, and iii) being meaningfully connected to their work (Vallerand et al., 2003). Contextualizing passion in the environment requires the same three characteristics. So, environmental passion is defined as a psychological state in which people have positive emotions to indulge in pro-environmental behavior, regard the improvement in the environment as a main driving force of their motivation and consider the environmental improvement to be a source of meaningfulness for them. Besides the exactly collating definition, environmental passion has also been defined as the state of positive emotions that culminates in an individual's indulgence in pro-environmental behavior (Afsar et al., 2016; Li et al., 2020). Passion for the environment works like fuel for people to follow pro-environmental behavior. Environmental passion is characterized by positive emotions that ensures the individual's inclination towards an activity while the finally emerging positive meaning provides the lasting bond between the person and the

environmental activity. People passionate about environmental causes not only indulge in spontaneous pro-environmental behavior, but they have also sustained pro-environmental behavior and count themselves as an environmentalist (Afsar et al., 2016). Some studies have related environmental passion to pro-environment behavior and pro-environment work behavior (Afsar et al., 2016; De Bernardi & Pedrini, 2020; Z. Li et al., 2020; Robertson & Barling, 2013).

2.3 *Pro-environment Behavior*

The gravity of environmental concern has even affected the proliferation of terms describing environment-specific behavior. Green consumption behavior, environmental conscious behavior, environmentally responsible behavior (Lee et al., 2014). Pro-environmental behavior is more encompassing in comparison to its other counterparts therefore the current study sticks with it. Pro-environmental behavior is defined as behavior that has a positive effect on the availability of material, or energy, and changes the structure and dynamics of the ecosystem (Stern, 2000). Another definition given by Lange and Dewitte has described pro-environmental behavior as the commission of acts beneficial to the natural environment and the omission of the acts harmful to the environment (Lange & Dewitte, 2019). The pro-environment behaviors can be summed up into three behaviors; waste reduction, reuse, and recycling (Li et al., 2019).

2.4 *Pro-environmental work behavior*

On job behavior of the employees may differ from their common life behavior. For instance, a sales clerk wearing an ever-present smile may not appear so friendly when not on the job. The same may be true for pro-environmental work behavior. The difference will be large when an employee indulges in pro-environmental behavior as it is an officially prescribed behavior. Unlike the off job pro-environmental behavior that is mostly voluntary behavior, on job pro-environmental behavior has voluntary and prescribed components. So, pro-environmental work behavior can be defined as all kinds of voluntary or prescribed behavior undertaken to protect the natural environment (Boiral et al., 2015). Employees' pro-environmental behavior is critical for the success of any of the organization's green initiatives. Pro-environmental work behavior has been found to reduce pollution (de Groot & Steg, 2009), improves eco-innovation and corporate greening. In short, employees are the ones who affect the environmental performance of the firm.

2.5 *ESSL and Environmental Passion*

As discussed earlier, environmental passion is liking and internalized concern for the environment. The current study bases its reasoning to relate ESSL with environmental passion based on social cognitive theory. Servant leadership is a genre of leadership that

makes the followers imitate their leader voluntarily (Hunter et al., 2013). The ultimate goal of servant leadership is the development of the community (Northouse, 2015) and it achieves this goal by transforming followers into servant leaders (Eva et al., 2019). In the context of the environment, the followers also learn from their leaders to return to the community by preserving the environment (Luu, 2019). Observing the genuine environmental concern of their ESSL, employees begin to take interest in the environment. Furthermore, employees looking at the keenness of their leaders to return to the community by conserving the environment, internalize the environmental concern voluntarily. ESSL succeeds in building a liking for the environment and voluntarily internalizing environmental concerns in employees. Thus, it can be said that employees draw their environmental passion from their leaders ESSL. Empirically, Robertson and Barling (2013) found environmental specific transformational leadership to be related to environmental passion. As servant leadership is regarded as a transformational leadership except for its difference in the source of influence which in the case of servant leadership comes from service (Russell & Gregory Stone, 2002). Therefore, ESSL can be attributed to create the environmental passion among employees. Similarly, spiritual leadership, a type of relational leadership similar to servant leadership, was found to affect environmental passion (Afsar et al., 2016). In light of the discussed theoretical underpinning and empirical evidence, the following hypothesis.

H1: ESSL is related to environmental passion.

2.6 ESSL and Pro-environmental work behavior

Servant leadership is the embodiment of community focus (Spears, 1998). From thinking to processes, servant leadership is bent upon employee and community development. Especially, ESSL focuses on the firm's role in preserving the environment (Tuan, 2020). As servant leadership's ultimate goal is the betterment of the community therefore it is keenly interested in the environment. Servant leader works for the improvement of the environment in a personal capacity and encourages the employees to do so (Tuan, 2020). Employees, observing the keenness of their leader, also begin to emulate them (Hunter et al., 2013). The followers' response is in line with the social cognitive theory. When employees observe their leaders showing a positive inclination towards the environment and participate in environmentally friendly activities, they begin to imitate them. As ESSL keeps the cause of the environment very dear to it and participates in environmentally friendly activities, the employees indulge in pro-environment work behavior. Moreover, the serving attitude of servant leadership encourages the employees to positively return the favors extended by servant leadership (Sendjaya & Pekerti, 2010). One of the ways to return the favor is to follow the ideas and practices of the favoring party. Following this line of reasoning, we can say that employees can indulge in pro-environmental work behavior. Although scant, there is rising empirical evidence suggesting a relation between ESSL or servant leadership and voluntary green behavior (Ying et al., 2020), pro-environmental work behavior (Bibi, 2020). In light

of the theoretical underpinning and existing empirical evidence, the following hypothesis is formed.

H2: ESSL is related to pro-environmental work behavior.

2.7 *ESSL and Pro-environmental behavior*

Most leaders change on job behavior of the employees, yet the spillover from job to off job is possible. The behavior spillover is more likely when it is internally motivated, when the spillover behavior and the main behavior are similar and when the spillover behaviors can be performed with ease (Hicklenton et al., 2019; Truelove et al., 2014). In the current study, we assume that ESSL can affect the off job pro-environmental behavior of the employees. The following discussion, in light of the suggestions made by Truelove and colleagues, attempts to explain that servant leadership can influence off the job pro-environmental behavior. First of all, the serving and selfless servant leadership succeed in winning the employees (Sendjaya & Pekerti, 2010). They regard their servant leader to be a true model for them. They are highly motivated to follow in their footsteps even off the job to serve the community (Liden et al., 2008). Second, pro-environmental work behavior and off-job pro-environmental behavior are the same. Finally, as we suggest that employees on job pro-environmental work behavior is a learned behavior from a positive role model, and it is similar to general off job pro-environmental behavior, employees can indulge in off-job pro-environmental behavior. Moreover, the reasoning relating ESSL to pro-environmental behavior is also based on social learning theory (Bandura, 1986). When employees see their role model practicing a lifestyle for community-centered motive, they are resultantly motivated to follow it when not on job.

H3: ESSL is related to off the job pro-environmental behavior.

2.8 *The Mediating Role of Environmental Passion*

Environmental passion is an environmental-related motivation state. When employees are passionate about an activity they dedicate themselves to the activity and persistently follow it (Vallerand et al., 2007). The Source of such dedication, passion, needs to be fully grasped as it has the potential to improve the performance of the individuals as an employee or an individual (Ho et al., 2011; Pradhan et al., 2017) Now, first, we discuss when people are passionate about something. Having positive emotions for activity in form of liking and regarding an activity to be important are the two sources ensuring passion (Vallerand, 2012). This pleasantly regarded importance to an activity when emanates from autonomous or voluntary internalization, the resulting passion is harmonious. When internationalization is complete, the activity becomes a part of one's self-concept and it is hard to detach the person from the activity (Vallerand, 2012). Though it is well established that passion is related to performance, the relation between ESSL and environmental passion needs to be clarified.

Studies indicate that internalization required for passion may come from social factors apart from personal factors (Egan et al., 2017). Leadership, one of the social factors, has been studied for its empowering role to affect passion (Gao & Jiang, 2019; Hao et al., 2018). But, the current study takes a holistic view of ESSL to affect the environmental passion of the employees. Servant leadership, along with empowering the employees (Russell et al., 2002), also works for the growth and development of the employees (Spears, 1998). The serving nature of servant leadership engenders the desire to serve among the followers (Graham, 1991). Once the followers are transformed into other-oriented individuals, they are ready to work for the community (Laub, 1999), the ultimate goal of servant leadership. ESSL, apart from its general other orientation, convinces the employees to work for environmental betterment (Tuan, 2020). In short, extending service to the employees, servant leadership wins the voluntary subordination of the employees; they are showing sincere effort to serve others engender the same thinking among the employees. As ESSL practices environmental friendly practices and convince others to do so (Tuan, 2020). The won over employees pliantly follow the footsteps of their leader on the job and off the job.

Though environmental passion has not been used as a mediator between ESSL and pro-environmental on the job and off job behavior, some studies have used environmental passion to be a mediator between transformational leadership and pro-environmental work behavior (Li et al., 2020; Robertson & Barling, 2013). As servant leadership is also transformational leadership except for its mode of influence that is service therefore the same mediating role for environmental passion can be assigned between the relationship of servant leadership and pro-environmental behavior.

- H4:* Environmental passion mediates the relation between ESSL and pro-environmental work behavior.
- H5:* Environmental passion mediates the relation between ESSL and pro-environmental behavior.

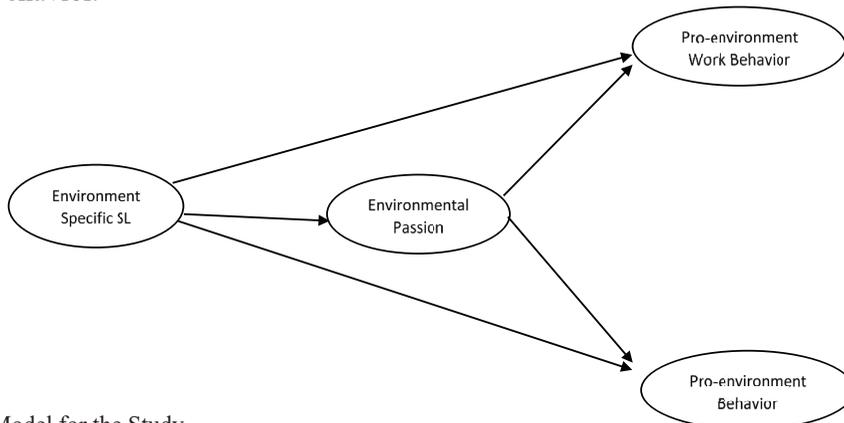


Figure 1: Model for the Study

3. Methodology

3.1 *Sampling and Data Collection*

Initially, 325 respondents were approached. Out of which 304 agreed to participate. Once the respondents had filled the questionnaire, the initial screening found 8 questionnaires to be either incompletely filled or unengaged as the respondent checked one value across the questionnaire. Finally, 296 usable questionnaires were available for further analysis. The sampling method employed was convenience sampling. Table 1 contains the profile of respondents that show 58.4% is male and the remaining is female. Additionally, Table 1 shows that 3.4 respondents were intermediate (12 years of schooling), 34.5% of the respondents are bachelor (16 years of schooling). Almost half of the respondents had a master's degree and the remaining respondents had a doctorate. The average age and experience of the respondents were 31 years and 7.5 years respectively as given in Table 1.

Table 1
Respondents Profile

Variable	Values	n (296)
Gender	Male	58.4%
	Female	41.6%
Qualification	Inter (12 Years of Schooling)	3.4%
	Bachelor	34.5%
	Master	48.3%
	PhD	13.9%
	Mean (SD)	
Age		30.932 (8.306)
Experience		7.540 (7.248)

3.2 *Measures*

3.2.1 *ESSL*

ESSL was measured through a servant leadership scale developed by Liden and colleagues (Liden et al., 2008). The scale was contextualized in terms of the environment. The

scale has also been used by Tuan in his study (Tuan, 2020). One of the representative items used in the study is: 'My manager emphasizes the importance of contributing to environmental improvement.' The items of the scale were measured through seven points Likert scale.

3.2.2 Environmental Passion

Environmental passion was measured through 10 item scales adopted from Robertson and Barling (2013). The scale used had 7 points ranging from strongly disagree to strongly agree. One of the representative items of the scale is: 'I am passionate about the environment.'

3.2.3 Pro-environment Work Behavior

On job pro-environmental work behavior was measured through Robertson and Barling's seven items scale. This construct was also measured on 7 points scale. The option ranged from 'Never' to 'Always'. A representative item of the scale is: '*I turn off lights when not in use in the office.*'

3.2.4 Pro-environment Behavior

Off job pro-environmental behavior was measured through the scale adapted from Huang (2016) that was developed by Barr and Gild (2006). The scale items were measured on 7 points Likert scale. The scale options ranged from 'Never' to 'Always'. One of the representative items of the scale is: '*I use reusable shopping bags.*'

4. Findings

4.1 Measurement Model

To ascertain the reliability of the construct used in the study, Cronbach's alpha (α) and composite reliability were computed. All the constructs had values that were more than 0.7 which is the minimum allowable limit for α and CR (Hair et al., 2019). The minimum scores for α and CR are 0.901 and 0.919 respectively as given in Table 2. Thus, the constructs used in the study are found to be reliable. Furthermore, the constructs were evaluated for their convergent validity. Item wise convergent validity was ascertained through item loadings. Though some item had loading less than 0.7 as shown in Table 2, they were yet retained as values of average variance extracted (AVE), measures of construct wise convergent validity, were more than the minimum threshold of 0.5 (Hair et al., 2014). Only one item of pro-environmental work behavior was dropped as its inclusion affected the associated AVE drastically below the minimum threshold of 0.5. Finally, the discriminant validity was evaluated through hetero-trait and mono-trait (HTMT) ratios. All the pairs of the construct had the HTMT ra

tio below 0.85 as given in Table 3, the stricter upper limit to declare the constructs different (Henseler et al., 2015).

Table 2
Items Loadings and Reliability and Validity

Item Loading for Constructs							
Items	ESSL	EP	PEB	PEWB	Alpha	CR	AVE
SL1	0.897				0.977	0.98	0.8
SL10	0.906						
SL11	0.867						
SL12	0.899						
SL2	0.906						
SL3	0.898						
SL4	0.901						
SL5	0.923						
SL6	0.785						
SL7	0.916						
SL8	0.885						
SL9	0.942						
EP1		0.893			0.958	0.965	0.736
EP10		0.879					
EP2		0.929					
EP3		0.893					
EP4		0.897					
EP5		0.883					
EP6		0.905					
EP7		0.85					
EP8		0.595					
EP9		0.805					

PEB1	0.661	0.901	0.919	0.533
PEB10	0.679			
PEB11	0.841			
PEB2	0.662			
PEB3	0.742			
PEB5	0.697			
PEB6	0.764			
PEB7	0.81			
PEB8	0.677			
PEB9	0.744			
PWB1	0.684	0.917	0.935	0.673
PWB2	0.838			
PWB3	0.896			
PWB4	0.894			
PWB5	0.704			
PWB6	0.843			
PWB7	0.856			

Table 3

Discriminant Validity through HTMT ratios

	HTMT Ratios		
	EP	ESSL	PEB
ESSL	0.736		
PEB	0.752	0.613	
PEWB	0.731	0.74	0.863

4.2 *Structural Model*

Before testing the proposed model, descriptive statistics were computed for the constructs. All the constructs used in the study were either strongly or moderately related. The minimum coefficient of correlation of 0.586 was between ESSL and pro-environmental

behavior as given in Table 4. As all the constructs are either moderately or strongly related, the final model can be tested.

Table 4
Descriptive Statistics

	M	S	Correlation		
			(1)	(2)	(3)
ESSL (1)	4.644	1.653	1		
Environmental Passion (2)	5.438	1.271	.710**	1	
Pro-environmental Behavior (3)	4.796	1.168	.586**	.707**	1
Pro-environmental Work Behavior (4)	4.956	1.392	.716**	.685**	.789**

** Significant at 0.01 significance level

The current study had five hypotheses. The first three were meant to test the direct relations while the last two were to test indirect relations. The first hypothesis related ESSL to environmental passion. The relation was found to be statistically supported as ($\beta = 0.710$, $p = 0.000$). The second direct relation proposed in the study was the relationship between ESSL and off job pro-environmental work behavior. The results as shown in table xx support the claim ($\beta = 0.169$, $p = 0.006$). The last direct hypothesis proposed a relation between ESSL and on job environmental behavior. The results, as given in Table xx, support the hypothesis as ($\beta = 0.463$, $p = 0.000$).

The proposed model used environmental passion as a mediating link between ESSL and the two target variables namely; on-job pro-environmental work behavior and off-job pro-environmental work behavior. Hypothesis 4 purported environmental passion to be a mediator between ESSL and on job pro-environmental work behavior. The findings supported the hypothesized claim as ($\beta = 0.253$, $p = 0.000$). The last hypothesis in the study proposed environmental passion to mediate the relationship between ESSL and pro-environmental behavior. The results as shown in Table 5 supported the claim ($\beta = 0.417$, $p = 0.000$).

Table 5
Structural Model

Relation	Path Coefficient	SE	t-test	P-value
ESSL → EP	0.710	0.028	25.308	0.000
ESSL → PEB	0.169	0.061	2.776	0.006
ESSL → PEWB	0.463	0.057	8.147	0.000
ESSL → EP → PEB	0.417	0.054	7.67	0.000
ESSL → EP → PEWB	0.253	0.05	5.041	0.000

Additional Analysis

The additional analysis was carried out to ascertain the role of demographic variables as control variables. The analysis was done for three different models. Environmental passion, pro-environmental behavior, and pro-environmental work behavior were the dependent variables in model-1, model-2, and model-3 respectively shown in Table 6. In the first step gender, qualification, age, and experience were used as predictors. For all the models, the included demographic as control variables were found to be non-significant contributors. In step 2, ESSL was added to the list of predictors. For model-1, where environmental passion is the target variable, ESSL improved the model explanatory power significantly ($\Delta r^2 = 0.491$, $\Delta F = 292.335$, $p = 0.000$). For model-2 with pro-environmental behavior as a dependent variable, the inclusion of ESSL as a predictor improved the explanatory power of the model significantly ($\Delta r^2 = 0.335$, $\Delta F = 153.087$, $p = 0.000$). Subsequently, when environmental passion was added as a predictor along with the previously added constructs, the explanatory power further increased by 16.1% that was a significant change ($\Delta r^2 = 0.161$, $\Delta F = 98.938$, $p = 0.000$). Moreover, in model-3 with pro-environmental work behavior as a dependent variable, ESSL was found to significantly increase the explanatory power ($\Delta r^2 = 0.504$, $\Delta F = 301.671$, $p = 0.000$). Finally, the addition of environmental passion also improved the explanatory power of model-3 significantly ($\Delta r^2 = 0.061$, $\Delta F = 41.292$, $p = 0.000$).

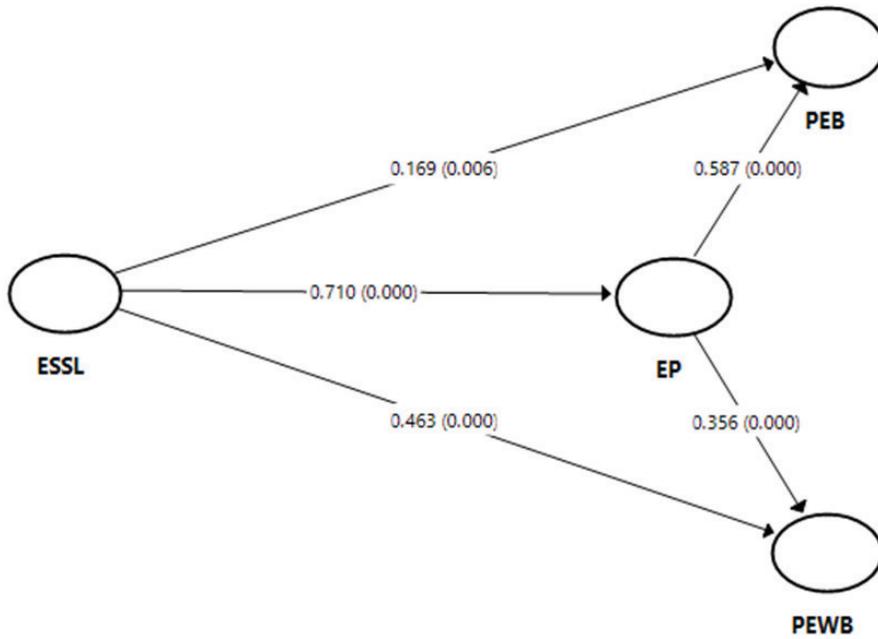


Figure 2: Model with Coefficients and significance

ESSL: Environmental Specific Servant Leadership

EP: Environmental Passion

PEB: Pro-environmental behavior

PEWB: Pro-environmental work behavior

Table 6
Hierarchical Regression

		Model1	Model2	Model3
	Independent	Environmental	Pro- environmental	Pro- environmental
Step	Variables	Passion	Behavior	Work Behavior
Step 1	Gender	-.104	-.038	-.085
	Qualification	.122	.192	.082
	Age	-.099	-.117	-.080
	Experience	.088	-.023	.065
	r²	.021	.031	0.012
	Δr²	.021	.031	0.012
	ΔF	1.577	2.34	0.877
Step 2	Gender	-.045	.011	-.025
	Qualification	.093	.169	.053
	Age	.004	-.032	.024
	Experience	-.015	-.108	-.039
	ESSL	0.710**	0.582**	0.713**
	r²	.513	.366	.516
	Δr²	.491	.335	.504
ΔF	292.335**	153.087**	301.671**	
Step 3	Gender		.037	-.010
	Qualification		.115	.020
	Age		-.034	.023
	Experience		-.099	-.033
	ESSL		0.176**	0.465**
	Environmental Passion		0.575**	0.352**
	r²		.527	.576
	Δr²		.161	.061
	ΔF		98.938**	41.292**

** Significant at 0.01 significance level

5. Discussion

The role of humans as a consumer and producer is the main source of environmental degradation (Hartter et al., 2018; Rajapaksa et al., 2018). The resulting climate changes have instigated global concern. Additionally, the irreversibility of environmental degradation compels us to promote pro-environmental behavior (Markle, 2019). However, being pro-environmental just at the job cannot be an effective strategy. This pro-environmental behavior can be more effective if it is practiced in totality. Being pro-environmental on the job, but not off the job does not portend well for the cause of the environment. So, unlike the past studies that sought to explore organizational practices leading to pro-environmental work behavior, the current study aimed to find organizational practices that can lead to pro-environmental behavior both on the job and off the job. Specifically, the study was undertaken to unfurl the role of ESSL on overall pro-environmental behavior. The following session attempts to relate the findings of the current study to the previously established findings.

In the present study, the role of ESSL to promote on-job and off-job pro-environmental behavior and the underlying linking mechanism. The current study used environmental passion as a mediating link between ESSL and the two target variables namely; pro-environmental behavior and pro-environmental work behavior. The first hypothesis purporting a relationship between ESSL and environmental passion was found to be substantiated. The finding is in line with the findings of the earlier study conducted by Afsar et al, (2016) that found spiritual leadership to be related to environmental passion, another genre of relation-based leadership similar to ESSL. The second hypothesis proposed a relationship between ESSL and pro-environmental work behavior (on-job pro-environmental behavior). The findings of the current study found the relationship to be supported. This finding confirms the earlier findings in which ESSL was found to be related to employees' voluntary green behavior (Ying et al., 2020). Moreover, a similar finding was established in another study in which servant leadership was found to affect employees' pro-environmental work behavior (Bibi, 2020). The third hypothesis, relating ESSL and pro-environmental behavior, was also supported. Currently, no study has related ESSL to pro-environmental behavior. The relation between ESSL and on-job and off-job pro-environmental behavior supports the concern of environmental scholars who were of the view that addressing the leadership processes underpinning of pro-environmental behavior may prove to be more useful for increasing pro-environmental behavior (Afsar et al., 2016). The significant relation between ESSL and on-job and off-job pro-environmental behavior ostensibly demonstrates that ESSL is one of those leadership processes that affect employees' on-job and off-job pro-environmental behavior. The last two hypotheses proposed the mediating role of environmental passion relating ESSL to pro-environmental behavior and pro-environmental work behavior. Though the results corroborate the earlier finding made by Robertson and Barling (2013) and Li et al.(2020), in which they found environmental passion to be a mediating link between

environmental specific transformational leadership and pro-environmental work behavior, there is no study establishing a mediating role of environmental passion linking ESSL to either pro-environmental work behavior or pro-environmental behavior. As employees' pro-environmental behavior is not being currently rewarded by the organization and off-job behavior is not even considered in the policy formulation, the leadership genres meant to promote pro-environmental behavior among employees through transaction leadership, using positional power, or transformational leadership, using idealized influence, may either fail or have a partial success as there is evidence of relation between transformational leadership and on-job pro-environmental behavior (Li et al., 2020; Peng et al., 2020). The end of overall pro-environmental behavior can be achieved by instilling the cause of pro-environmental behavior among employees. To this end, ESSL is found to be a useful leadership approach as it instills environmental passion among the employees, in turn, the employees depict pro-environmental behavior both on the job and off the job.

5.1 Theoretical Contributions

Responding to the accepted centrality of environmental concern, a rising number of studies are being devoted to pro-environmental behavior (Lange & Dewitte, 2019; Lee et al., 2014; Li et al., 2019; Truelove et al., 2014) and pro-environmental work behavior (Afsar et al., 2016; Bissing-Olson et al., 2013; Kollmuss & Agyeman, 2002), there has been only one study to this date that has considered organizational prodding to affect off job pro-environmental behavior of the employees along with the on-job pro-environmental behavior (Hicklenton et al., 2019) which studied the role of work climate on pro-environmental behavior inside and outside the workplace. However, no study has explored the role of leadership in instigating such an over-arching change. The current study comes in to fill this gap. The environment-specific form of servant leadership, ESSL was found to be a leadership style that can bring about such a desired change. The current study contributes to the existing knowledge in three different ways. First, employees are contagiously affected by the environmental concern demonstrated by their leader through ESSL. The genuine environmentally friendly concern of the leader affects the environmental passion of the followers. Second, the study has established a relation between ESSL and on-job and off-job pro-environmental behavior of the employees. The study adds to existing empirical evidence supporting social-cognitive theory (Bandura, 1986). Employees learn from the environmentally friendly concern of their leader. As ESSL has community building approach therefore the learning of employee transcends the organizational boundaries and the employees learning from their leaders indulge in pro-environmental behavior while off-job. Finally, the study establishes that environmental passion mediates the link between ESSL and pro-environmental behavior both on-job and off-job. Though there have been studies relating environmental specific transformation leadership to indirectly effect on job pro-environmental behavior, the organizational focus of transformational leadership could not spur the employees to demonstrate the same behavior. The current study that used ESSL to urge the employees to show their pro-environmental

behavior even when they are off job. The study found that servant leadership caused environmental passion motivates the employees to be pro-environmental both at job and off job.

5.2 *Managerial Implications*

The current study has two practical implications. At the societal level, individuals can resort to ESSL to promote pro-environmental behavior among their followers. Parents at home, teachers at educational institutes, and managers on the job can benefit from the findings of the study. As their environmental concern is taken seriously by the followers and they follow it because they are passionate about it. Their passion makes them demonstrate pro-environmental behavior, not in the proximity of their leader but also when they are at distance. At the organizational level, the firms can benefit from the findings of the study immensely as the use of ESSL is found to be associated with on-job and off-job pro-environmental behavior. Organizations are advised to train their managers in the art of ESSL so they can promote pro-environmental behavior among its employee both when the employees are at the job and when they are off-job.

5.3 *Limitation and Future Research*

The current study, like any other study, has its limitations. Two procedural choices; the use of employees as a single source and one-time data collection may raise a concern about common method bias (Podsakoff et al., 2003). Apart from these procedural shortcomings, the findings reveal that the explanatory power of the model for off-job pro-environmental behavior is comparatively less than the explanatory power of on-job pro-environmental behavior. To unfurl the reason for this revealed difference, future researchers are advised to use environmental self-efficacy and environmental concern of employees as moderators. Additionally, future researchers can better explain the relation between ESSL and one job and off-job pro-environmental behaviors if they collect data at two different times and from both managers and employees.

6. **Conclusion**

The idea of a green world is only achievable when employees adopt a holistic attitude towards the environment. Being pro-environmental at the job but not so off-job may have an impact, but the impact will be more pronounced if the pro-environmental behavior is adopted both on the job and off the job. To promote such a holistic attitude, ESSL is found to be an appropriate strategy in the hands of leaders. The leader's practice of pro-environmental concern directed towards the overall community along with the leader's convincing of the employees for the same cause can win the employees to have environmental passion. Once the employees are won over, they would readily indulge in pro-environmental behavior while they are on the job or not.

References

- Afsar, B., Badir, Y., & Kiani, U. S. (2016). Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. *Journal of Environmental Psychology, 45*, 79-88.
- Afsar, B., Cheema, S., & Javed, F. (2018). Activating employee's pro-environmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership. *Corporate Social Responsibility and Environmental Management, 25*(5), 904-911.
- Afsar, B., Maqsoom, A., Shahjehan, A., Afridi, S. A., Nawaz, A., & Fazliani, H. (2020). Responsible leadership and employee's proenvironmental behavior: The role of organizational commitment, green shared vision, and internal environmental locus of control. *Corporate Social Responsibility and Environmental Management, 27*(1), 297-312.
- Ansari, N. Y., Farrukh, M., & Raza, A. (2021). Green human resource management and employees pro-environmental behaviours: Examining the underlying mechanism. *Corporate Social Responsibility and Environmental Management, 28*(1), 229-238.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ, US: Prentice-Hall, Inc.
- Barr, S., & Gilg, A. (2006). Sustainable lifestyles: *Framing environmental action in and around the home. Geoforum, 37*(6), 906-920.
- Bibi, A. (2020). Servant leadership and nurse's pro-environmental behavior: the role of autonomous and external motivations. *Dinasti International Journal of Management Science, 1*(6), 785-801.
- Bissing-Olson, M. J., Iyer, A., Fielding, K. S., & Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *Journal of Organizational Behavior, 34*(2), 156-175.
- Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2015). Encouraging sustainability in the workplace: A survey on the pro-environmental behaviour of university employees. *Journal of cleaner production, 106*, 55-67.

- Boiral, O., Paillé, P., & Raineri, N. (2015). The Nature of Employees' Pro-Environmental Behaviors. In J. L. Robertson & J. Barling (Eds.), *The Psychology of Green Organizations* (pp. 12–32). Oxford University Press.
- Claus, C. A., Chan, K. M. A., & Satterfield, T. (2010). The roles of people in conservation. In N. S. Sodhi & P. R. Ehrlich (Eds.), *Conservation Biology for All* (pp. 262–283). Oxford University Press.
- Daily, B. F., & Huang, S. (2001). Achieving sustainability through attention to human resource factors in environmental management. *International Journal of Operations & Production Management*, 21(12), 1539–1552.
- De Bernardi, C., & Pedrini, M. (2020). Entrepreneurial behaviour: Getting eco-drunk by feeling environmental passion. *Journal of Cleaner Production*, 256, 120367.
- De Groot, J. I., & Steg, L. (2009). Mean or green? Values, morality and environmental significant behavior. *Conservation Letters*, 2(2), 61-66.
- Dechant, K., & Altman, B. (1994). Environmental leadership: from compliance to competitive advantage. *Academy of Management Perspectives*, 8(3), 7-20.
- Egan, R., Turner, M., & Blackman, D. (2017). Leadership and employee work passion: propositions for future empirical investigations. *Human Resource Development Review*, 16(4), 394-424.
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant Leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111–132.
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121.
- Farling, M. L., Stone, A. G., & Winston, B. E. (1999). Servant Leadership: Setting the Stage for Empirical Research. *Journal of Leadership Studies*, 6(1–2), 49–72.
- Gao, A., & Jiang, J. (2019). Perceived Empowering Leadership, Harmonious Passion, and Employee Voice: *The Moderating Role of Job Autonomy*. *Frontiers in Psychology*, 10, 1484.

- Graham, J. W. (1991). Servant-leadership in organizations: Inspirational and moral. *The Leadership Quarterly*, 2(2), 105–119.
- Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. Paulist Press.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Hao, P., He, W., & Long, L.-R. (2018). Why and When Empowering Leadership Has Different Effects on Employee Work Performance: The Pivotal Roles of Passion for Work and Role Breadth Self-Efficacy. *Journal of Leadership & Organizational Studies*, 25(1), 85–100.
- Hartter, J., Hamilton, L. C., Boag, A. E., Stevens, F. R., Ducey, M. J., Christoffersen, N. D., Oester, P. T., & Palace, M. W. (2018). *Does it matter if people think climate change is human caused? Climate Services*, 10, 53–62.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Hicklenton, C., Hine, D. W., & Loi, N. M. (2019). Can work climate foster pro-environmental behavior inside and outside of the workplace?. *PloS one*, 14(10), e0223774.
- Ho, V. T., Wong, S. S., & Lee, C. H. (2011). A tale of passion: Linking job passion and cognitive engagement to employee work performance. *Journal of Management Studies*, 48(1), 26-47.
- Huang, H. (2016). Media use, environmental beliefs, self-efficacy, and pro-environmental behavior. *Journal of Business Research*, 69(6), 2206-2212.
- Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M., & Weinberger, E. (2013). Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *The Leadership Quarterly*, 24(2), 316-331.
- Islam, T., Ali, G., & Asad, H. (2019). Environmental CSR and pro-environmental behaviors to reduce environmental dilapidation: The moderating role of empathy. *Management Research Review*, 42(3), 332–351.

- Jandrić, P., Jaldemark, J., Hurley, Z., Bartram, B., Matthews, A., Jopling, M., ... & Tesar, M. (2020). Philosophy of education in a new key: Who remembers Greta Thunberg? Education and environment after the coronavirus. *Educational Philosophy and Theory*, 1-21.
- Khan, M. A. S., Jianguo, D., Ali, M., Saleem, S., & Usman, M. (2019). Interrelations Between Ethical Leadership, Green Psychological Climate, and Organizational Environmental Citizenship Behavior: A Moderated Mediation Model. *Frontiers in Psychology*, 10, 1977.
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260.
- Kura, K. M. (2016). Linking Environmentally Specific Transformational Leadership and Environmental Concern to Green Behaviour at Work. *Global Business Review*, 17(3_suppl), 1S-14S.
- Lange, F., & Dewitte, S. (2019). Measuring pro-environmental behavior: Review and recommendations. *Journal of Environmental Psychology*, 63, 92-100.
- Laub, J. A. (1999). Assessing the servant organization. *Florida Atlantic University*.
- Lee, Y. K., Kim, S., Kim, M. S., & Choi, J. G. (2014). Antecedents and interrelationships of three types of pro-environmental behavior. *Journal of Business Research*, 67(10), 2097-2105.
- Li, D., Zhao, L., Ma, S., Shao, S., & Zhang, L. (2019). What influences an individual's pro-environmental behavior? A literature review. *Resources, Conservation and Recycling*, 146, 28-34.
- Li, Z., Xue, J., Li, R., Chen, H., & Wang, T. (2020). Environmentally Specific Transformational Leadership and Employee's Pro-environmental Behavior: *The Mediating Roles of Environmental Passion and Autonomous Motivation*. *Frontiers in Psychology*, 11.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19(2), 161–177.

- Luu, T. T. (2019). Building employees' organizational citizenship behavior for the environment: The role of environmentally-specific servant leadership and a moderated mediation mechanism. *International Journal of Contemporary Hospitality Management*, 31(1), 406–426.
- Markle, G. (2019). Understanding pro-environmental behavior in the US: *Insights from grid-group cultural theory and cognitive sociology*. *Sustainability*, 11(2), 532.
- Moser, A. K. (2016). Consumers' purchasing decisions regarding environmentally friendly products: An empirical analysis of German consumers. *Journal of Retailing and Consumer Services*, 31, 389-397.
- Northouse, P. G. (2015). *Leadership: Theory and practice (Seventh Edition)*. SAGE Publications, Inc.
- Page, D., & Wong, T. P. (2000). *A conceptual framework for measuring servant leadership*. Trinity Western University.
- Peng, J., Chen, X., Zou, Y., & Nie, Q. (2020). Environmentally specific transformational leadership and team pro-environmental behaviors: The roles of pro-environmental goal clarity, pro-environmental harmonious passion, and power distance. *Human Relations*, 0018726720942306.
- 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.
- Rajapaksa, D., Islam, M., & Managi, S. (2018). Pro-Environmental Behavior: The Role of Public Perception in Infrastructure and the Social Factors for Sustainable Development. *Sustainability*, 10(4), 937.
- Robertson, J. L. (2018). The Nature, Measurement and Nomological Network of Environmentally Specific Transformational Leadership. *Journal of Business Ethics*, 151(4), 961–975.
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors: Green leadership and employees' behaviors. *Journal of Organizational Behavior*, 34(2), 176–194.
- Robertson, J. L., & Barling, J. (2017). Contrasting the nature and effects of environmentally specific and general transformational leadership. *Leadership & Organization Development Journal*, 38(1), 22–41.

- Russell, R. F., & Gregory Stone, A. (2002). A review of servant leadership attributes: Developing a practical model. *Leadership & Organization Development Journal*, 23(3), 145–157.
- Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424–438.
- Sendjaya, S., & Pekerti, A. (2010). Servant leadership as antecedent of trust in organizations. *Leadership & Organization Development Journal*, 31(7), 643–663.
- Spears, L. C. (1998). Introduction: Tracing the Growing Impact of Servant Leadership. In *Insight on Leadership: Service, Stewardship, Spirit, and Servant-Leadership* (pp. 1–12). Wiley & Sons.
- Stern, P. C. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, 56(3), 407–424.
- Truelove, H. B., Carrico, A. R., Weber, E. U., Raimi, K. T., & Vandenberg, M. P. (2014). Positive and negative spillover of pro-environmental behavior: An integrative review and theoretical framework. *Global Environmental Change*, 29, 127–138.
- Tuan, L. T. (2020). Environmentally-specific servant leadership and green creativity among tourism employees: Dual mediation paths. *Journal of Sustainable Tourism*, 28(1), 86–109.
- Ture, R. S., & Ganesh, M. P. (2014). Understanding Pro-environmental Behaviours at Workplace: Proposal of a Model. *Asia-Pacific Journal of Management Research and Innovation*, 10(2), 137–145.
- Vallerand, R. J. (2012). The role of passion in sustainable psychological well-being. *Psychology of Well-Being: Theory, Research and Practice*, 2(1), 1
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756–767.
- Vallerand, R. J., Salvy, S.-J., Mageau, G. A., Elliot, A. J., Denis, P. L., Grouzet, F. M. E., & Blanchard, C. (2007). On the Role of Passion in Performance. *Journal of Personality*, 75(3), 505–534.

- Van Dierendonck, D., & Nuijten, I. (2011). The servant leadership survey: Development and validation of a multidimensional measure. *Journal of Business and Psychology*, 26(3), 249–267.
- Ying, M., Faraz, N. A., Ahmed, F., & Raza, A. (2020). How Does Servant Leadership Foster Employees' Voluntary Green Behavior? A Sequential Mediation Model. *International Journal of Environmental Research and Public Health*, 17(5), 1792.
- Zibarras, L. D., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior: a UK survey. *The International Journal of Human Resource Management*, 26(16), 2121-2142.