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# EXAMINING THE PRO-ENVIRONMENTAL BEHAVIOR OF EMPLOYEES IN PRIVATE ORGANIZATIONS OF PAKISTAN

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#### **ABSTRACT**

Pro-environmental behavior (PEB) has received considerable attention in business and other social sciences disciplines. However, very few studies have focused upon the PEB in organizational settings and no study has examined the employees' PEBs in Pakistani organizations. Building upon the existing theories in other disciplines, this study examines how PEB is influenced by organizational characteristics, i.e. organizational environmental policy, organizational citizenship behavior and transformational leadership.

Data were collected by means of self-report surveys from employees of major private organizations with proportionate sampling of companies following environmental practices versus organizations not following environmental practices. Multiple regression analysis was employed to test the proposed model.

The findings indicate that organizational environmental policy positively influences the workplace PEBs. Organizational citizenship behavior also positively influences the PEB. Transformational leadership does not influence the workplace PEBs.

**Keywords:** Pro-environmenral behavior, Organizational Citizenship Behavior, Transformational Leadership

#### **INTRODUCTION**

In the twenty first century, environmental problems are becoming a great challenge for humanity (Dunlap & Marshall, 2007). Scarceness of natural sources, deforestation, loss of biodiversity, overpopulation, emission of greenhouse gasses and pollution come under the major problems of the world today (Oskamp, 2000). Human actions at individual and collective level have responsibility for the occurrence of hazardous changes in the environment and few of them are irreparable (Moran, 2010). Before the period of industrialization, humans have never changed their environment to a degree that it couldn't take its original state again. On the other hand after

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the beginning of industrialization; individuals have made irreversible changes in the environment (Bitousek, Mooney, Lubchenco, & Melillo, 1997). Emerging environmental problems are mainly because of human behavior. Woodland is diminishing due to increase in the demand of wood; biodiversity is decreasing because humans are more inclined to devastate the habitats; people are throwing away all types of waste in rivers and seas which is ultimately polluting them (Stern, 2000b; Winter & Koger, 2004).

Similarly in Pakistan, there are number of environmental problems which need to be considered at all levels to resolve them. People should play their part at individual and collective level to preserve the environment. Individuals and society should understand different environmental issues such as, water and air pollution, dust deposition, solid waste management, noise etc and their effect on the human life and natural resources (Ziadat, 2010).

If pro-environmental behaviors like conservation, recycling, reduction in waste are encouraged at workplace then they will not only facilitate in greening of organizations but will also affect environment positively and in addition will be helpful in the prevention of environmental degradation (Jennifer, Robertson, & Barling, 2013). Many organizations have started reducing consumption of energy through modernizing infrastructure (Davis & Challenger, 2009) but almost no attention has been paid to the importance of behavior of employees in resolving of environmental problems and to improve green reputation of organization.

According to the climate risk index 1994-2013, Pakistan is ranked at 10<sup>th</sup> position in most effected countries by consequences of climate (Kreft, 2014). WHO report states that air contamination level is increasing in major cities of Pakistan (Purohit Munrib, & Rafaja, 2013). Industrial activities like greenhouse gases emissions are a source of contamination of air, so it is necessary to reduce the increase in air pollutants to save the air quality of Pakistan (Ali & Athar, 2008).

Pakistan is considered on second number according to highest rate of deforestation. The fact is that 0.2 to 0.5 percent forests are vanished annually and this statistic is alarming for the country (PEPA, 2005); soil erosion and land sliding are caused in a result of deforestation. Pollutants like heavy metals and chemicals discharged by industrial sector are responsible for the contamination of valuable natural resources like land, rivers and fresh ground water (Rasool, 2013). Now-adays, individual behaviors like reducing, reusing, recycling, water preservation and usage of environmentally friendly products are considered important in protecting the environment (Rasool, 2013).

Environmental Sustainability is emerging as an important factor for the corporate existence in this era (Starick & Marcus 2000). Some researchers pronounce that employee pro-environmental behavior at work is essential for environmental sustainability of organization (Andersson., Jackson, & Russel, 2013). Employee green behavior (pro-environmental) can be defined as any individual behavior that is directed towards environmental sustainability at the workplace (Ones & Dilchert, 2012a).

In fact, both the developed and the developing countries have started discussing the issues of environmental concerns in academic, business and political debates. So, the first contribution of

this study is that it discusses about the need of research on environmental behaviors in Pakistan. This research has focused on human's behavior because solving of environmental harms is likely to depend on environment friendly behaviors more than on environmental consciousness (Pickett, Kangun and Grove, 1993).

Research on human aspects of environmental behavior has implanted its seeds in Pakistan but there is need of more qualitative and quantitative research, that what social and psychological factors influence environmental behaviors in Pakistan. Pakistan needs to address some research questions on environmental behaviors in near future. First of all, there is call for examining the type of relationship between different variables like social and psychological with green behaviors at individual level in Pakistan (Rasool, 2013). In Pakistan, awareness is very low regarding environmental impacts of daily actions. Similarly, environmental actions at the individual level are not as much appreciated. Less attention is paid towards environmental challenges that Pakistan is facing currently and the expected challenges that can arise in near future (Rasool, 2013). This perceptive can be useful in designing policies that promote environmental friendly behaviors and persuade environmental citizenship in Pakistan (Martinsson & Lundqvist, 2010). So, another significant contribution of this study is that it has done addition to the emerging literature on pro-environmental behavior. The study has examined the links between the literature on organizational factors related to environment and PEB in order to improve understanding that how these factors influence PEB and to verify a number of hypotheses. This study focuses on assessing employee perceptions of environmental policies, supervisory behaviors and Organizational Citizenship Behavior that encourages environmental competence building but this study didn't try to measure the employees' on hand environmental capabilities at the time of employment. This study is one of very few to examine the determinants of green behaviors in work settings in Pakistan. Mostly, such behaviors and their determinants have been examined in non-work settings by environmental psychologists (Bamberg & Möser, 2007).

The paper starts with the introduction to the topic, followed by the critical analysis of the previous studies conducted by scholars in the same domain. The literature analyzes the proenvironmental behavior, transformational leadership and organization citizenship behavior as a construct. It also sheds light on the pro-environmental behavior and environmental policies in relation with transformational leadership and organization citizenship behavior respectively. A research model has also been developed in the light of hypothesis generated by the literature study, followed by methodology, analysis and the discussion section.

#### LITERATURE REVIEW AND HYPOTHESIS

#### **Pro- Environmental Behavior**

Previous research in sociology and social psychology observed behaviors of public and consumers at individual levels. Behaviors were examined with the aspect of environmental improvement such as recycling (Hopper & Nielsen, 1991), low energy consumption at residential level (Black, Stern, & Elworth, 1985), "green" consumer buying behavior and comparison of environmental behavior across different cultures. Different studies show that environmental

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problems are mainly caused by human behavior and they can be resolved by bringing changes in human behavior (Oskamp, 1995, 2000a, 2000b).

Environmentally responsible behavior occurs when an individual or group decides to protect the environment by doing what is right for it (Cottrell, 2003) and these actions are referred as proenvironmental behavior, environmentally friendly behavior, stewardship behavior, and preservation behavior. Environmental psychologists have observed PEB (Pro-environmental behavior), they are also called conservation behaviors, environmentally friendly behaviors, environmentally significant behaviors and responsible environmental behaviors (Osbaldiston & Schott, 2012). Ramus and Steger (2000) defined workplace pro-environmental behaviors as "any action taken by employees that he or she thought would enhance the environmental performance of the company". Pro-environmental behavior at work includes a number of actions like recycling of paper, printing double-sided and to preserve resources such as water and electricity (Lee, De Young, & Marans, 1995; Siero, Bakker, Dekker, & ven den burg, 1996). Pro-environmental behavior of employees is considered as important type of employee behaviors because it helps organizations to preserve natural resources and the environment (Andersson & Bateman, 2000).

Environmental behaviors at workplace have been rarely investigated as compared to they are investigated outside the work setting. Although pro-environmental behavior at workplace is an unnoticed topic but empirical works have shown some findings indicating that employee involvement towards corporate greening or sustainability is associated with prevention of pollution, more proficient environmental management systems, improvements in environmental performance and green innovations (Andersson & Bateman, 2000; De Brujin & Hofman, 2000; Govindarajulu & Daily, 2004; Ramus & Killmer, 2007).

Employees may show pro-environmental behavior during performing assigned tasks in organizations; they may also initiate in introducing new environmental change or policies for the betterment of the organization (Ramus & Steger, 2000). Research on pro-environmental behavior at workplace (Paille' & Boiral, 2013; Ramus & Steger, 2000) and at home (Steg & Vleck, 2009) has described it as a deliberate behavior.

Individual efforts have a great influence on the success of organizational overall sustainability. Thus, even small efforts from employees to preserve organizational resources like double sided paper printing, have a great effect on organizational environmental resource use. There are very few people and environmental organizations that are worried and concerned on a serious note about environmental degradation in Pakistan (Shahid, 2015).

The motivation to behave pro-environmentally at home and at workplace differs from each other for example households have responsibility to pay costs of energy consumption while at workplace they are not liable to pay these costs (Carrico & Reimer, 2011). Recycling behavior also depends on different motivations like households may be required to recycle or maybe they are paid for the collection of recyclable things.

According to a UK survey, graduates consider an organization's environmental sustainability while making decisions about job applications (Chartered Institute of Personnel and

Development [CIPD], 2007). Some other studies have also found that job seekers are attracted to organizations with good green reputation e.g. (Aiman-Smith, Bauer, & Cable, 2001; Backhaus, Stone, & Heiner, 2002; Behrend, Baker, & Thompson, 2009).

Ajzen's theory of planned behavior has been used widely to examine pro-environmental behavior and it is about the positive relationship between attitude and behavior (Ajzen, 1991). According to Ajzen, attitudes are necessary but individuals should have knowledge of social norms to perform a certain behavior. The theory of planned behavior is one of the most important framework which explains environmental behavior in private (Bamberg & Moser, 2007a) and office settings (Unsworth, Dmitrieva, & Adriasola, 2013).

Some previous studies have used the TPB (Theory of Planned Behavior) to explore environmental behavior but mostly studies have been conducted at domestic level (Knussen & Yule, 2008; Trumbo & O'Keefe, 2001). So there is need to explore environmental behavior in work settings (especially in Pakistan).

Some studies show that psychologists can use social psychological theories such as the theory of planned behavior to investigate pro-environmental behavior (TPB; Ajzen, 1985, 1991). Theory of Planned Behavior states that the main precursor of individual's behavior is determined by three constructs, first construct shows the individual attitude toward the behavior. This is based upon their expectancies regarding the behavior that it will result in desirable outcomes. The second construct represents evaluation of subjective norm; it is related to the extent to which they believe that they are facing social pressure to perform a certain behavior. Final construct is perceived behavioral control (PBC) and it is related to the perception of individuals that how difficult it can be to perform a certain behavior (Ajzen, 1985, 1991).

Pro-environmental attitude is defined as a person's propensity to be concerned about the natural environment (Bamberg, 2003; Hawcroft & Milfont, 2010), and is positively related to daily pro-environmental behaviors at work. This prediction is consistent with the Theory of Planned Behavior (Ajzen, 1991), which proposes that attitudes influence behavior.

Theory of planned behavior has been supported by many empirical studies as a theoretical foundation to explore environmental behaviors and in addition it acts as a source to explore such behaviors at work. Some scholars state that to check the applicability of TPB, there is a need to conduct research in such settings (Davis & Challenger, 2009).

#### **Environmental Policies and PEB**

Public concern is growing about the consequences of environmental deprivation and environmental change because these are posing threats to economic profitability and growth; therefore companies around the world have started focusing on improved environmental sustainability (Aguilera, et al., 2007; Aguinis & Glavas, 2012).

Organizations are considered as the biggest contributors to climate change (Swim, et al., 2011), as a result now many of the organizations have started adopting formal and informal environmental management system (Trudeau & Canada West Foundation, 2007). Behavior of employees is responsible for the success of environmental programs, fostering employee's behavior within organizations is now critical. Many organizations are also involved in aligning

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environmental sustainability to their overall corporate strategy (Esty & Winston 2009). This involves implementation of Environmental Management System which includes planned approach to concentrate on environmental actions (Daily & Huang, 2001; Jabbour & Santos, 2008; Ramus, 2002; Ramus & Killmer, 2007; Rimanoczy & Pearson, 2010) but it doesn't mean that introducing EMS and associated policies will help in improving environmental sustainability and employee pro-environmental behavior (Rondinelli & Vastag, 2000).

Introducing the sustainability policies in the firms is the important step. These policies illustrate that firms require environmental ideas and actions (Ramus, 2002). Still in some firms who have affirmed commitment to environmental sustainability and with sustainability policies, managers still do not pay same attention and don't support the employees' environmental activities as they give attention to general management tasks (Ramus & Steger, 2000).

Some researchers (Brophy, 1996) have shown that environmental policy includes corporate vision and strategy; is an important antecedent to employee engagement in environmental activities (Barrett & Murphy, 1996; Hutchinson, 1996). In 1992, after the United Nations Conference on Environmental improvement in Rio de Janeiro (Brazil); many companies have published an environmental policy stating their intent to reduce environmental impact. Mostly companies have implemented environmental policies considering environmental impacts throughout the company. Most of the policies go beyond environmental impacts and broaden the company's sustainability goals (Ramus, 2002). Since 1992, many companies have been publishing annual reports regarding environmental performance for the review of stakeholders (Sustainability & United Nations Environmental Program, 1997).

Some authors like (Schmit, Fegley, Esen, Schramm, & Tomasetti, 2012) draw attention towards the improvement of environmental performance of companies by introducing green jobs. U.S. and European studies indicated that between 13% and 29% of Employee Green Behaviors are required by the companies (Ones & Dilchert, 2012a).

Going green at work is actually being economical. It is related to reducing consumption, re-using to avoid wastage and recycling old into new one. It doesn't cost the earth. British Council developed Environmental Framework Tool (EFT) in 2008 to support best practice in environmental management in its 110 overseas offices. A senior consultant Arfan Ahmad (Green Champion of Islamabad) says that environmentalism is his passion and working with EFT (Environmental Framework Tool) is a great opportunity to explore and implement it. He has taken up the recycling initiative which includes recycling things like paper, batteries, cardboard, glass & certain other sheets.

Organizational sustainability (pro-environmental behaviors) initiatives got attention in both scale and scope. So, sustainability activities should take place at all levels in organization, ranging from organizational policies to employees' actions (Starick & Rands, 1995). Organizational policies regarding environment are considered important in promoting pro-environmental behavior of employees. Hence, based on this the first hypothesis for this research work is as follows.

*H1:* Environmental Policies positively influence the pro-environmental behavior of employees

# Transformational Leadership (Environmental-Specific) and PEB

Environmental Leadership can be defined as the ability of a person or a group to provide the required guidance which leads towards the better future environmentally (Berry & Gordon, 1993). According to Gladwin, transformational leadership is required to initiate and lead the primary transformations of structure, political, cultural and technical systems to attain the environmental sustainability ultimately (I993: 53). Transformational leadership behaviors such as clear image about environmental basics and to show commitment with environmental concerns through clear actions are essential aspects of environmental leadership (Portugal & Yukl, 1994).

Transformational leadership is mostly studied of all leadership theories from last 20 years and involves in influencing various behaviors (Barling, Christie, & Hoption, 2010; Judge & Piccolo, 2004). Transformational leadership basically involves four behaviors like idealized influence, inspirational motivation, intellectual stimulation and individualized consideration and each of them can be used to influence environmental sustainability within the organization (Bass, 1998; Bass & Riggio, 2006).

In idealized influence, leaders encourage those actions that will benefit the natural environment. As a result, environmentally specific transformational leaders serve as role models for their subordinates who after certain time engage in these behaviors by themselves (Robertson & Barling, 2013). Leaders those who are high in inspirational motivation set an example for employees encouraging them to engage in behaviors that benefit the whole company and natural environment (Robertson & Barling, 2013). Intellectual stimulating leaders motivate their employees to think for themselves and make them try to solve the long held problems in innovative ways (Robertson & Barling, 2013). In individualized consideration, leaders develop close relationship with their employees so that they can transfer their environmental values in their employees and encourage them to engage in pro-environmental behaviors (Robertson & Barling, 2013)

Organizational leaders actually serve as role models because of their position and power (Brown, Trevino, & Harrison, 2005). When employees observe their leaders engaging in proenvironmental behaviors, they find out that such behaviors are valued and rewarded and they also try to follow similar behaviors. Leaders and coworkers play an important role in influencing employee behavior directly through personal interactions (Kidwell, Mossholder, & Bennett, 1997).

When an organization introduces environmental sustainability programs, leaders green behavior shows the importance of environmental protection (Russo & Harrison, 2005; Starick & Marcus 2000) and help in encouraging employees to take part in activities like eco-innovation and environmentally ethical decision making (Flannery & May, 2000; Ramus & Steger, 2000). Hence, based on this the second hypothesis of this research work is given as follows.

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**H2:** Transformational Leadership (Environmental-specific) positively influences the Proenvironmental behavior of employees

#### OCBE (Organizational Citizenship Behavior for Environment) and PEB

Approximately two decades ago, three behaviors were identified for the proper functioning of the organization and they are; 1) People must be encouraged to enter and remain within the organization 2) they must have some roles to perform in a dependable manner 3) extra-role behaviors must be performed (Katz, 1964).

However, Environmental Policies may not be adequate to resolve the environmental issues, since their effectiveness largely depends on informal voluntary initiatives (Ramus and Killmer 2007; Boiral 2009; Daily, Bishop and Govindarajulu, 2009). A number of authors have suggested (Boiral 2009; Daily et al. 2009), voluntary initiatives in this area can be considered as a form of organizational citizenship behavior (OCB) applied to environmental issues (OCBE).

Thus, OCBEs can be defined as individual discretionary behaviors that supplement formal Environmental Policies and contribute to the efficiency of environmental performance. The inclusion of Environmental Policies and OCBEs in the analysis of Pro-environmental behavior of employees provides a more global view of environmental actions by taking into account both formal and informal dimensions.

Citizenship behavior has two dimensions when the term cooperation is used and they are individual and group functioning (OCB) (Roethhsberger & Dickson, 1964). Citizenship behaviors are essential because they oil the social machinery of the organization. They provide the flexibility required to work through many unpredictable situations, they enable employees to work efficiently in the situation of interdependence on each other. Citizenship Behaviors may contribute more to others' performance than ones' own performance (Ann Smith, Dennis W. Organ, and Janet P. Near, 1983). In this study OCBE has been studied at group level. When OCBE is performed at group level then it positively affects the PEB at individual level.

Some studies suggest that pro-social behaviors are influenced by role models. Models help in adopting the appropriate behavior in certain situations {Psychological studies (e.g., as reviewed by Krebs, 1970, and Berkowitz, 1970)}. Task groups which are characterized by "reciprocal interdependence" are supposed to display more citizenship behavior than groups which like to perform independently. Reciprocal interdependence promotes sense of helping others, norms of cooperation and sensitivity to others' needs (Thompson, 1967). In fact, when your colleagues observe the joy you experience when you do something for the environment then they are more willing to try the recycling tips for themselves (all-recycling-facts.com).

The concept of Organizational Citizenship behavior for Environment OCBE has been emerged recently in the literature of environment and it seems to be a promising approach to study employees' pro-environmental behavior at workplace (Boiral & Paille', 2012; Daily, Bishop, & Govindarajulu, 2009). OCBE differs from sustainability behaviors by individuals which are performed in their daily lives; instead of it involves voluntary, pro-environmental behaviors which are performed by individuals in organizational context (Lamm, Tosti-Kharas, & Williams, 2013). These behaviors include tasks like proper techniques of electronic waste disposal, recycling papers or cans and conservation of energy (Davis, O'Callaghan, & Knox, 2008).

Organ defines OCB as individual behavior that is optional and not recognized by the reward system directly but advances the efficient working of the organization (Organ, 1988). According to the definition of OCB by Organ (1988), Daily defined OCBEs as optional acts by employees within the organization which are not formally rewarded but directed toward the environmental improvement (Daily, et al., 2009).

Environmental improvement plays an important role in organizational effectiveness so in this study rationale of traditional OCB is extended to OCBE (Organizational Citizenship Behavior for Environment). Employees who go beyond their assigned tasks to help their fellows in environmental efforts will help in attaining the environmental goals of the company. Thus helping behavior directed towards the environmental improvement would encourage the environmental performance as a whole (Daily, et al., 2009). OCBEs are regarded as similar to OCB and in conjunction with OCB; may fall under the major construct of extra-role behaviors but in fact they are very distinct from each other (Lamm, et al., 2013).

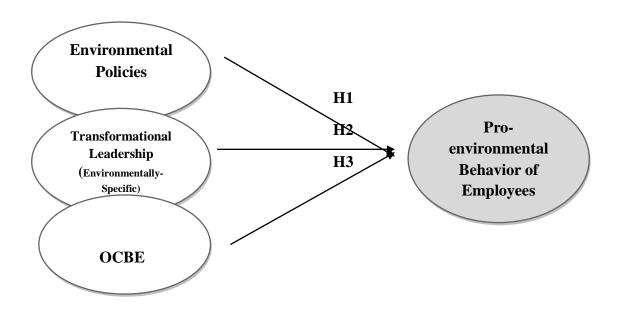
As compared to OCB, OCBE is broader in scope and it consists of further three categories which are Eco-initiatives, Eco-civic engagement and Eco-helping. Eco-initiative is related to environmental actions which are driven by employees in the workplace for example recycling, saving water, conserving energy and initiatives by employees. Eco-civic engagement is related to behaviors like participation of employees in events (environmental) planned by the company. Eco-helping involves employee initiatives in helping their fellows work to be more environmentally friendly (Boiral & Paille', 2012). One might say that OCB is purely related to organization while OCBE is the connection of one's mind-set about pro-environmental behavior in general and as well as one's mind-set about the organization (Lamm, et al., 2013).

Some organizations have designed formal policies which force employees to behave proenvironmentally but these behaviors wouldn't fall under the category of OCBE because they are not optional but if a person performs sustainable behaviors in the presence of policies but others ignore those policies then his behaviors might come under category of OCBE (Lamm, et al., 2013). So, these behaviors (OCBE) help in promoting pro-environmental behavior of employees ultimately. Hence, based on this, third hypothesis for this research work is given as follows;

*H3*: *OCBE* positively influences the pro-environmental behavior of employees

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#### Research Model



#### **METHODS**

## Sample

This study used stratified random sampling technique since it ensures representation of every group within the sample in population. Since the survey included balanced number of organizations from both groups (strata's) i.e. those who are committed to implementing environmental practices and those who are not, stratified random sampling was a viable sampling strategy to go for (See Table 1). The sample provided proper representation and coverage of population. Organizations included in this study belong to five sectors like Telecom sector (Mobilink, Telenor, Warid, Zong); Education sector (Lahore University of Management Sciences (LUMS), University of Central Punjab); Banking Sector (Standard Chartered, Habib Bank Limited); Food sector (Burger King, Fri Chicks) and Manufacturing (Packages and Fazlee Sons Pakistan). Both types of organizations were chosen according to certain criteria like organizations which are not involved in PEBs don't show commitment to environmental policies, not following "Environmental Management System" and leaders don't pay attention towards greening of work environment. Further, they don't assert on their official websites about following of green behavior and don't generate annual environmental reports.

Organizations which are involved in PEBs are Mobilink, Telenor, LUMS, Standard Chartered Bank, Burger King and Packages. They are considered green because of following criteria; they include principles of sustainability into their business decisions, show commitment to

environmental policies in their business operations and supply Environmentally Friendly Products and Services (See Table 1).

Table 1: Organizations Following Pro-environmental Behavior			
Organization	Pro-Environmental Programs		
Mobilink	"Environmental Management System", "Green Office Initiatives" (2013)		
Telenor	Environmental Management System (ISO 14001), "3R Philosophy" (Reduce, Reuse, Recycle)		
LUMS	Paper less environment, reduction in use of polythene Bags		
Standard Chartered Bank	"Green Energy"		
Burger King	"Our Commitment to the Environment"		
	Four key areas; Food, People, Environment and Corporate Governance		
Packages	"Integrated Management System (IMS) Policy"		
	Recycling Paper		
	Effluent and Waste Management		
	Water Management		
	Independent Energy House		

#### **Measures**

Each variable presented in research model has been measured by using a set of questions (See Table 2). To measure pro-environmental behavior of employees, the scale developed by Jennifer, Robertson & Barling (2013) was used. The perception of employees regarding influence of environmental policies on PEB was measured by using scale developed by Ramus and Steger (2000). Perceptions of PEB about the behaviors of their supervisors, which help in encouraging environmental competence building, were measured by using scales developed by Bass (1998) and Bass & Avolio (1997).

The measures of OCBE recently developed by Boiral & Paille' (2012) are used in this study to measure employees' perception of environmental competencies which ultimately lead to OCBE. Gender, Age, Education, Income, Position, Telecom, Education, Food and Packaging were used as control variables.

Multiple Regression Analysis was done to analyze that which variables are significant predictor of PEB, regression analysis has been done. Correlation Analysis have been carried out to measure the degree of association between PEB and independent variables. All normality tests were conducted to see if the data is normally distributed.

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#### RESULTS

## **Demographic Characteristics of Sample**

Of all respondents, the proportion of males (63.3%) was higher than that of females (36.7). In terms of age, 3 percent respondents are in their 40s, 30.3 percent in 30s, 58.6 % fall in 20s and 6% fall below the age group of 20s. In terms of education level, a majority of respondents (43.7%) has at least Masters degree or more; 35.9 percent completed Bachelor's degree, and 4.8 percent had intermediate level and lower. Also, a majority is employed in the private organizations as line workers (37.8%), whereas 27percent working as coordinators and 25.2 percent as supervisor or managers.

**Table 3. Demographic Characteristics of Respondents** 

Gender (Missing= 46)	Frequency	Percent
Female	99	36.7
Male	171	63.3
Educational Level (Missing= 42)		
Matric	2	.7
Intermediate/ O&A levels	11	4.1
Bachelors	97	35.9
Masters	118	43.7
MS/M.Phil	29	10.7
PhD	9	3.3
Monthly Income (Rupees)		
Under 15,000	7	2.6
15,000 - 20,000	18	6.7
21000 - 25000	33	12.2
26000 - 30000	57	21.1
31000 - 35000	34	12.6
36000 - 40000	30	11.1
41000 - 45000	28	10.4
46000 - 50000	18	6.7
51000 - 55000	7	2.6
56000 and above	38	14.1
Supervisory Position		
Line Worker	102	37.8
Coordinator	73	27
Supervisor/Manager	68	25.2
Director/Vice President	5	1.9
Contractor	8	3
Other	14	5.2
Age (years)		
Below 15	1	.4
15-20	15	5.6
21-25	62	23.0
26-30	96	35.6
31-35	56	20.7
36-40	26	9.6

41-45	5	1.9	
46-50	3	1.1	
51-60	2	.7	
61 and above	4	1.5	

The matrix correlation analysis showed that all independent variables had statistically positive significant relationships with dependent variable.

Table 4

Table 4: The Correlation Matrix: Items Relating to Workplace and Non-workplace PEB					
		PEB	EP	TL	OCBE
1	Pro-environmental Behavior (PEB)	1	.297***	.228***	.266**
2	Environmental Policy (EP)		1	.769**	.718**
3	Transformational Leadership (TL)			1	.773**
4	OCBE				1

# **Multiple Regression Analysis**

The ordinary least squares (OLS) multiple regression analyses were conducted to test the hypotheses. No serious threats for multicollinearity were detected as no correlation coefficient was found greater than 0.90 or higher. The value of the variance inflation factor (VIF) was further used to check if there are any serious multicollinearity problems.

The study also tested the assumptions of homoscedasticity, linearity, and normality. The plot of residuals against the predicted dependent variable indicated that there were no major violations of assumptions of homoscedasticity. Also, residual plots against independent variables, normal probability plot, and histogram passed the assumptions of linearity and normality.

Table 5 shows the regression results of the workplace PEB and predcitors of the model. The overall model supports a good fit because the F-test is statistically significant at less than .01. The value of R Square is .277 which means that model of this study which includes EP, TL and OCBE explains 27.7 percent of the variance in PEB.

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Table 5: Regression Results of Pro-environmental Behavior

Variables	Standardized	T value	Chronbach's Alpha
	Coefficients		
Pro-environmental Behavior			.689
Environmental Policy	.377***	4.101	.894
Transformational Leadership	111	-1.118	.889
OCBE	.224***	2.481	.891
Gender	003	043	
Age	099	-1.458	
Education	.094	1.321	
Income	.166***	2.260	
Telecom	028	364	
EduSec	.221***	2.663	
Packaging	196***	-3.001	
Food	114	-1.608	
n	270		
R-square	.277		

Environmental policy is found to be significantly influencing employees PEBs. OCBE was significant, hence third hypothesis "OCBE positively influences the pro-environmental behavior of employees" has been accepted. Transformational leadership relation with PEB came out insignificant. Control variables representing different sectors within which respondent organizations are working were also included to check the effect of each sector on PEB of employees. Results show that "Telecom Sector" with sig. value of .716 and "Food Sector" with sig. value of .109 don't show a significant relationship with PEB of employees while "Education Sector" and "Packaging Sector" show significant relationship with PEB of employees.

#### **Discussion**

This study has been conducted on pro-environmental behavior to examine that to what extent it is practiced in working environment. Data supported the proposed model in a great way and it shows that the office environment has a significant effect on pro-environmental behavior. The results show that employees require organizational support in terms of environmental policies to practice PEB in organizations. Findings indicate that if employees are provided with properly designed policies and if employees take initiative in providing guidelines to their fellows to foster environmental behavior then employees become more encouraged to perform pro-environmental behavior.

According to the perspective of policy, this study has contributed in providing certain recommendations. First of all, infrastructure is needed to be improved that provides supports in performing environmental behavior in Pakistan. It includes providing recycling facilities to employees, electronic devices which consume less energy and water saving technologies. Study's findings signify that providing these kinds of infrastructure is important for improving environmental behavior of employees in organizations.

There can be different policies regarding green behavior like organizations should prefer to purchase locally produced recycled products and materials. These products often cost less;

making paper from recycled materials consumes 40% less energy than making it from raw materials. Steel made of crumb takes 86% less energy and in the same way aluminum from scrap takes 95% less energy. Staff can be engaged and informed in company's environmental initiatives in different ways like by providing recycle bins and photocopiers, through staff training and orientation, by introducing environment and sustainability policies, by incorporating Environmental Management System (The Resource Smart Office, 2008). So, sustainability activities should take place at all levels in organization, ranging from organizational policies to employees' actions (Starick & Rands, 1995). Previous studies show that policies act as precursors to behaviors by communicating standards of conduct (Ramus & Steger, 2000).

This study also examined that how Pakistani leaders influence their followers through their PEBs. Leaders directly or indirectly influence their followers by sharing their values, motivate them to achieve certain targets, make their employees think in innovative ways, build relationship so that they can convince their employees to perform certain behaviors but Pakistani leaders lack in these traits according to this study's result. Leaders who perform PEB at workplace actually show that what leaders' family and friends do (subjective norms) can influence members behavior (Robertson & Barling, 2013). Literature shows that there is an immense need of good exemplary leadership that intends on changing the behavior of the employees (followers) focusing towards a more "green" culture in Pakistan (Robertson & Barling, 2013; Shahid, 2015).

OCBE significantly influences the PEB of employees that shows citizenship behavior plays important role in promoting PEB. Much energy is required to operate offices in the organizations; one can play his/her role to save energy by switching off lights, air conditioning and one's personal computers when they are not in use. Employees can also give reminders to do the same to those who are around them. They should keep sharing recycling tips with colleagues and encourage everyone to perform pro-environmental behavior at workplace. They should help other colleagues to make them understand about the importance of recycling and pro-environmental behavior. Employees who exhibit pro-environmental behaviors both in private and work lives, these are the people who start behaving pro-environmentally generally (Daily, et al., 2009).

Among demographics "Education" and "Income" showed a significant relationship with proenvironmental behavior while "Gender" and "Age" showed non-significant relationship with pro-environmental behavior. Environmental education plays an important role in infusing environmental awareness in people and it ultimately helps in attaining environmentally considerate population. Income is positively related with pro-environmental behavior because now trend is changing and people are more inclined to pay high for environmentally friendly products (Laroche, Bergeron, & Forleo, 2001).

One stream of studies shows a positive relationship between Organizational Policies and PEB while other stream shows there is not necessarily positive relationship between organizational policies and environmental behavior (Ramus & Steger, 2000; Whitmarsh, 2009). Hence, findings of this study contribute to the literature by highlighting the association between organizational policies (environmental policies) and environmental behavior.

Previously some researchers have studied policy as a dichotomous variable (Ramus & Steger, 2000), and policy items regressed as logistic analysis (Ramus 2002) but there is no study which

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has studied it as a continuous variable, however recognized as a proposition to be investigated (Ramus, 2002, Nortan, Zacher & Ashkanasay, 2014).

#### **Theoretical Contribution:**

This study contributes to the understanding of the factors which forms the basis of proenvironmental behavior in employees of an organization. There have been studies on environmental behavior outside the organizational setting but very little work has been done on the factors which constitute the pro-environmental behavior inside the organization. Empirical findings show that association of employees towards sustainable practices and green culture promotion is linked with pollution prevention, pro-environmental management systems, green innovation and improving environmental performance. (Andersson & Bateman, 2000; De Brujin & Hofman, 2000; Govindarajulu & Daily, 2004; Ramus & Killmer, 2007). The green initiatives should be linked to the productive activities of the organization so it could help in increasing the pro-environmental approach of the employees at workplace setting.

# **Practical Implications:**

In Pakistan there is a need of creating awareness about the topics like Reduce, Reuse, Recycle of waste, Green handling, Green benefits, Green areas, Benefits of growing and saving trees, Health, Hygiene and Environment, Water Crisis Management, Un-authorized Hunting and Environmental Management Systems (Naqvi, 2014). So, this research can be a source of creating awareness among people. Moreover, this study can be helpful for managers in developing strategies related to rational management of resources of organization and it will notify managers that how extra costs can be cut down to improve efficiency of the organization. Study of green behavior at workplace is also very important (Stern, 2000a), therefore it would help managers and employees in adapting those factors which play vital role in promotion of pro-environmental behavior. It can be helpful in designing strategies to promote pro-environmental behavior at the individual, societal and organizational level. Organizations must implement sustainability strategies which help in attaining economic and cultural benefits which are gained through environmental responsibility ultimately. Through following pro-environmental behavior and implementing sustainability strategies; organizations can incorporate long run profitability. Further they can have opportunities to attain competitive advantage, cost leadership by paying attention to environmental responsibility and to protect the ecosystem.

#### **Conclusion:**

This study has been conducted on pro-environmental behavior (Green Behavior) to examine that to what extent it is practiced in working environment. The results have indicated employees need encouragement from the organization to understand and adapt pro-environmental behavior. There must be clear policies from the employers about how they are protecting environment through sustainable strategies so employees could adhere to them. With the help of findings of this research, there will be an increase in the understanding of green behavior and how we can save our environment using pro-environmental behavior.

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#### **ANNEXURE**

# **Table 2: Survey Measures for Dependent Variables** <sup>a</sup>

#### Pro-Environmental Behavior (Jennifer L. Robertson, 2013)

How frequently do you perform following activities at your workplace

I print double sided whenever possible

I put recyclable material (e.g. cans, paper, bottles, and batteries) in the recycling bins

I bring reusable eating utensils to work (e.g. travel coffee mug, water bottle, reusable containers, reusable cutlery)

I turn lights off when not in use during office hours

I make suggestions about environmentally friendly practices to managers and/or environmental committees, in an effort to increase my organization's environmental performance.

I don't keep my computer running when I'm not using it

I use the elevator rather than the stairs at my workplace

I drive to work by myself instead of using office transportation

#### **Environmental Policies (Ramus and Steger, 2000)**

My company

Publishes an environmental policy

Has specific targets for environmental performance

Publishes an annual environmental report

Uses an environmental management system

Applies environmental considerations to purchasing decisions such as buy energy and water efficient appliances or buy printers with double sided printing capacity etc.

Provides employee environmental training such as recycling workshops

Makes employee responsible for company's environmental performance

Includes performance indicators related to environmental protection in employees' performance feedback

Has installed energy savers instead of fluorescent lights

Promotes the reduction of consumption of unsustainable products e.g. providing separate bins for disposing of plastic bags, tins and glass bottles

# Transformational Leadership (Environmental-Specific- Bass, 1998; Bass and Avolio, 1997)

My leader

Specifies importance of having a strong sense of purpose regarding environment & sustainability

Considers the moral and ethical consequences of decisions made to promote employees' proenvironmental behaviors

Talks optimistically about environmental concerns for the future

Expresses confidence that goals regarding green behavior will be achieved

Gets me to think about new and different ways of recycling and saving natural resources

Treats me as an individual rather than just as a member of group

Leads by setting example of green behavior like recycling, reuse of paper and disposing of waste in a proper manner

#### Organizational Citizenship Behavior For Environment (Boiral and Paille, 2012)

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To what extent you agree/disagree with following statements

I voluntarily carry out environmental actions and initiatives in my daily work activities because my close colleagues do that too

My colleagues often make suggestions to me about ways to protect the environment more effectively

My colleagues actively participate in environmental events organized either by my organization or outside the organization

We stay informed about our company's environmental initiatives

My colleagues undertake environmental actions that contribute positively to the image of my organization such as participate in "walk to promote environmental awareness" organized by my organization

My colleagues volunteer for projects or events that address environmental issues in my organization

My colleagues spontaneously give their time to help me take the environment into account in everything I do at work

My colleagues encourage me to adopt more environmentally conscious behaviors e.g. switching off AC or lights before leaving the room for meeting

We encourage each other to generate discussion and share ideas regarding environmental issues

a. All items for dependent and independent variables are measured on a five point scale 1= "strongly agree" to 5= "strongly disagree"