

**Greening of Organizations; a theoretical framework linking Employees Perception about
Green Work Climate on Employees Green Behavior**

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TABLE OF CONTENTS

Contents	
ACKNOWLEDGMENT	viii
ABSTRACT.....	ix
CHAPTER 1.....	1
INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Gap analysis.....	3
1.3 Problem statement	4
1.4 Research Question	5
1.5 Research Objectives.....	6
1.6 Definitions of Study Variables	7
1.7 Significance of the Study	9
CHAPTER 2.....	12
LITERATURE REVIEW	12
2.1 Green Work Climate Perception	12
2.2 Environmental Attitude.....	13
2.3 Green Employees Behavior	15
2.3.1 Green Behavior of Employees at the Workplace	16
2.4 Conscientiousness.....	22
2.5 Green Work Climate Perception and Employees Green Behavior	23
2.6 Environmental attitude as a mediator	25
2.7 Conscientiousness as a moderator	26
2.8 Theoretical Research Model	27
2.9 Research Hypothesis.....	28
CHAPTER 3.....	29
RESEARCH METHODOLOGY	29
3.1 Research Design	29
3.2 Population and Sample size.....	29
3.3 Sampling technique.....	30
3.4 Instrumentation.....	30
3.4.1 Green Work Climate Perception	31
3.4.2 Environmental Attitude.....	31

3.4.3 Green Employees Behavior	31
3.4.4 Conscientiousness	31
3.5 Control Variables.....	31
3.6 Data analysis tools.....	32
3.7 Sample Characteristics.....	33
3.8 Analytical Techniques and Tools.....	36
CHAPTER 4.....	37
RESULTS	37
4.1 Descriptive Statistics.....	37
4.2. Confirmatory factor analysis and competing models.....	40
4.3 Correlation analysis.....	41
4.4. Structural Model Results	44
4.5. Mod Graph	45
CHAPTER 5.....	49
DISCUSSION, CONCLUSION, LIMITATIONS AND RECOMMENDATIONS	49
5.1 DISCUSSION.....	49
5.1.1 Discussion On Research Question No 1:	49
5.1.2 Discussion On Research Question No 2 and 3:	51
5.1.3 Discussion On Research Question No 4:	53
5.2 IMPLICATIONS AND RECOMMENDATIONS	54
5.2.1 Theoretical implications.....	54
5.2.2 Practical implications.....	55
5.3 Limitations.....	56
5.4 Conclusion	57
REFERENCES.....	59
QUESTIONNAIRE.....	73

LIST OF TABLES AND FIGURES

Table 3.1	Instrumentation Sources, Items & Reliabilities.....	33
Table 3.2	Gender.....	34
Table 3.3	Age.....	35
Table 3.4	Qualification.....	35
Table 3.5	Experience.....	36
Table 4.1	Descriptive Statistics.....	37
Table 4.2	Structural equation model fit results examining different alternative models	39
Table 4.3	Means, Standard Deviations, Correlation Analysis.....	42
Table 4.4	Standardized Direct path coefficients of the hypothesized model.....	43
Figure 4.1	Mod Graph.....	45
Figure 4.2	Measurement Model.....	46
Figure 4.3	Hypothesized Structural Model and Structural Equation Model (SEM) Results.....	47
Table 4.5	Hypothesis Results Summary.....	48

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ABSTRACT

Purpose of this study was to examine the Impact of green work climate perception on employees green behavior. The study also finds the mediating role of environmental attitude and moderating role of conscientiousness. Data were collected using a questionnaire from 232 employee's working in various organizations which encourage green behaviors.

Results indicate green work climate perception has positive and significant relationship with employees green behavior of employees. The mediating role of environmental attitude between the relationship green work climate perception and employees green behavior of employees was also supported by results. While the moderating role of conscientiousness on the relation of green work climate perception and environmental attitude was also established.

Key words: *Green work climate perception, Environmental attitude, Employees green behavior, Conscientiousness.*

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Today's organizations are bound to be environment friendly because of pressure by regulatory authorities and society (Scott, 1995). The population of the world is increasing very quickly and they are consuming natural resources more than their production by the planet. Researchers and environmental scientists are observing environmental changes very keenly like temperature of the ocean, melting of glaciers and rising of water in the sea (Ballantyne, Alden, Miller, Tans, & White, 2012). It's a matter of concern for all of us and we must share our responsibility to find more sustainable methods for natural resources and to avoid damaging the natural environment.

Traditionally only economic thinking was considered the main factor for such environmental changes but studies like Barnett (2001) and Bonan (2008) provide a change in focus in this thought by including behavioral, technological and scientific thinking to have a sustainable environment. Organizations are also responsible both to stakeholder and society at the same time (Fairfield, Harmon, & Behson, 2011). Organizations are involved in technological interventions but generally fail to ensure sustainable environmental outcomes (Gouldson & Sullivan, 2007). Russel and McIntosh (2011) propose that instead installing technology employees of the organization should be trained and motivate to behave in environment friendly manners which are a more prominent approach for sustainable and healthy environment. Human resource of organization is main factor in deciding the success and failure of environmental management system (Zibarras & Coan, 2015). On the same lines, Davis, Leach, and Clegg, (2011) suggests that although technology is contributing to environmental

performance but it relies on the human resource of the organizations, thus success of such environment friendly system is dependent on employee's behaviors.

Perception of employees about green work climate shapes their environmental attitude which is considered the main motivational factor for employees to engage in green behaviors. Green environmental attitude can be developed by introducing environment friendly policies, communicating these policies and then implementing these policies into practices and those who are participating should be encouraged and rewarded (Schneider, Ehrhart, & Macey, 2013). Individual's perceptions and environmental attitude guide their actions. Previous research has shown a significant impact of climate perception on individual feelings and emotion which results in their future behavior (Kuenzi&Schminke, 2009).

When the employees observe their colleagues are involved in environment friendly practices and it has becomes the norms the observers of such norms are also found in such pro-environmental practices. Ones and Dilchert (2012) presents a job performance-based model of EGB with five categories: (1) working sustainably, (2) consuming resources, (3) motivating others, (4) taking initiative, and (5) avoiding uncertainty. Bamberg and Möser (2007) describes employee green behavior is the employee voluntary engagement in environment friendly practices, motivated by his personal values and norms. Employee green behavior is a kind of citizenship behavior because it's normally not the part of employee actual organizational role and it's also dependent on the voluntary involvement (Lamm, Tosti-Kharas, & Williams, 2013). Andersson, Jackson, and Russell, (2013) employee green behavior is major element of organizational environmental sustainability.

This study assumes that personality can be an important moderator to strengthen the relationship between green work climate perceptions and environmental attitude.

Conscientiousness is one of the important trait of big five personality describe as those individuals who are well organized, confident and put a lot of efforts to perform their role in the organization (Derue, Nahrgand, Wellman, & Humphrey, 2011). Conscientiousness individuals are more concerned with the performance because they give more importance to personal achievements (Baker, Van Der Zee, Lewig, & Dollard, 2006). They are motivated towards the achievement of established goals (Barrick, Mount, & Strauss, 1993) and they perform more than their required role (Jahangir, Akber, & Haq, 2004). As conscientiousness is found a significant predictor of organizational citizenship behavior and as discussed that employee green behavior is also characterized as citizenship behavior, so environmental aptitude towards green behavior will be enhanced through conscientiousness.

1.2 Gap analysis

The present study is addressing several theoretical and contextual gaps in the literature of green work climate perception, environmental attitude towards green work perception and green work behavior of employees.

Environmental sustainability is the area of concern for all humans. Organizations are also playing their role in promoting environmental sustainability by introducing different technological interventions. But for successful implementation of these interventions the role of employees can't be ignored. For this purpose different researchers have worked to explore various contextual and dispositional factors which promote employees green behavior but little is known about the underlying attitudinal mechanism which promotes employee green behavior. Present study is response to Norton, Zacher, Parker, and Ashkanasy, (2017) call for more studies for bridging the gap between organizational policies and strategies and employee engagement in green behavior. Present study is proposing employee attitude a significant

mediator between perception of employees about green work climate and their actual engagement in green behaviors.

The present study is also proposing conscientiousness as significant moderators to enhance the environmental attitude towards green behavior by interacting with perceptions of green work environment. As personality of individual is a significant indicator of guiding individual attitudes and behaviors.

So this study is attempting to fill all the above discussed gaps by exploring the impact of Green Work Climate Perception on employees Green behavior through environmental attitude and the proposed relationship between Green Work Climate Perception and environmental attitude of employees is proposed to be moderated by Conscientiousness in the context of Pakistan.

1.3 Problem statement

Previous literature on extra role behavior like green behavior of employees revolves around the dispositional factors like employee personality, but very small numbers of studies are found to explore the effect of contextual factors on green behavior. Though some of the contextual factors like green leadership have been checked on green behavior of employees but the impact of green work climate perception on green behavior have not been particularly checked. Along with this the underlying mechanisms like employees environmental attitude in the relationship of contextual factor and green behavior have not been explored yet. Furthermore, the moderating effect of dispositional factors like employee conscientiousness on the relationship of green work climate perception and environmental attitude of the employees are

rarely tested in developing country like Pakistan. Empirical studies on green behavior are also missing in Pakistani context.

1.4 Research Question

The objective of the present study is to find answers of the following research questions:

Question 1: What is the relationship between green work climate perception and environmental attitude?

Question 2: What is the relationship between green work climate perception and green employee's behavior?

Question 3: Does environmental attitude mediated the relationship between green work climate perception and green Employees Behavior?

Question 4: Does conscientiousness plays a role of moderator on the relationship of green work climate perception and environmental attitude?

1.5 Research Objectives

The overall objective of this study is to test the model to find out the link between green work climate perception, environmental attitude and green employees behavior. In addition conscientiousness is proposed a significant moderator to enhance the relation of green work climate perceptions and environmental aptitude. The relationship between the green work climate perception, environmental attitude, conscientiousness and employees green behavior is shown in the research model of the study.

Following are the specific objectives of this study:

- To explore effect of green work climate perception on environmental attitude.
- To explore impact of green work climate perception on green behavior of employee's.
- To find out the mediating relationship of environmental attitude between green work climate perception and green employee's behavior.
- To find out the moderating relationship of conscientiousness between green work climate perception and environmental attitude.

1.6 Definitions of Study Variables

1.6.1 Green Work Climate Perception

Ones and Dilchert (2005) articulated that green work climate is the perception of employees about green organizational policies, procedures and practices which are similar to organizational missions, objectives and strategies. Psychologists keep a bull eye on climate because it has a great impact on practices and procedures (Schneider, Ehrhart, and Macey 2011).

1.6.2 Green Employees Behavior

Pro-environmental behavior, include two types of behavior, (Borman&Motowidlo, 1993; Williams & Anderson, 1991) task performance that is in-role employees behavior, and employees voluntary behaviors which are their initiatives at workplace (Frese& Fay, 2001; Frese, Kring, Soose, &Zempel, 1996). Both types of employee's behavior refer towards green environmental behavior at workplace.

Employees who perform their tasks in eco-friendly ways are showing organizational required behavior (Williams & Anderson, 1991) they perform these tasks through protecting the environment and safeguarding organizational assets. Proactive pro-environmental behavior, refers to which extend employees engage in environmental friendly behavior that are not the part of their job description. These personal initiatives includes participating in informal discussions and giving positive suggestion and alternatives, help in identifying problems, give creative solutions and assist in improving process (Frese&Fay, 2001; Frese et al., 1996).

1.6.3 Environmental Attitude

Attitude was defined by Eagly and Chaiken (1993) as an emotional tendency of an individual when he evaluates something positively or negatively. . Whereas extending this definition of attitude environmental attitude is defined a person's general opinion about green

environment and problems (Yang, Shi, & Kuang, 2016). Environmental attitudes as defined by Schultz et al., (2007) it is the person's beliefs, affect and behavioral intention that he/she holds towards issues related to environmental activities.

1.6.4 Conscientiousness

Conscientiousness is one of the important trait of big five personality describe as those individuals who are well organized, confident and put a lot of efforts to perform their role in the organization (Derue, Nahrgand, Wellman, & Humphrey, 2011). Conscientiousness individuals are more concerned with the performance because they give more importance to personal achievements (Baker, Van Der Zee, Lewig, & Dollard, 2006). They are motivated towards the achievement of established goals (Barrick, Mount, & Strauss, 1993) and they perform more than their required role (Jahangir, Akber, & Haq, 2004).

1.7 Significance of the Study

An employee positive perception about their organizations is key component to active commitment in their work role. So for developing such perception about organization engagement in environmental sustainability activities organizations need to communicate such policies and practices of environmental sustainability beyond their formal policies. Ajzen (1991) argued that personal factors plays important role in promoting different behaviors at work. While, Fisher (2008) that individual factors in promoting work behaviors work differently with contextual or organizational behaviors. So contextual factors and individual conscientiousness is shapes the perceptions of employees which further develops employees environmental attitude towards green behaviors at work, as green behaviors of employees is based on employees discretions and discretions of employees can't be triggered by extrinsic factors.

The present study seeks to find ways which will helps organizations to promote green behavior of employees through their sates and trait factors of personality. Such green behaviors of employees are friendly to organizational environment, which decrease the negative behaviors of employees like wasting organizational resources and time. Because those employees who are willing to promote green behaviors avoid unnecessary usage of organizational resources, like they avoid over usage of air conditions, save energy of organizations, and reduce hazards factors of work environment, active engagement in green environment protecting campaigns, and promote green environment like plantations, and reduction in pollution.

The above discussed all activities are covered under the umbrella of green behaviors. So the present study is exploring and identifying new avenues for research and practitioners to invest their resources in green behavior promoting activities. The present study is extending the

approach to green behaviors through personal and contextual variables which develop environmental attitude of employees and such attitude further elicit green behaviors at work which is need of each and every organization in modern world. Because the organization generates their revenues from environment and without the consent of employee's organizational can't promote green behavior both inside and outside organization. As it stated earlier that employee green behavior is a kind of discretionary behavior which enhances employee's task performance but its sole purpose is significant contribution to organization and society as a whole. The present study is highlighting some of the main indicators of green behaviors at work which is need of all including employees, organizations and society as well.

1.8 Supporting theory

Several theoretical perspectives have been presented by different researchers which are used worldwide to underpin the studies of green work climate perception, environmental attitude and green employees behavior like theory of planned behavior, but theory of normative conduct can cover all the variables of the present study.

Our model is based on the theory of normative conduct (TNC), which attributes behavior to social norms (Cialdini, Reno, & Kallgren, 1990). While using this we differentiate between green work climate perception which are related to injunctive norms, and climate perception of co-workers which are related to descriptive norms. Social norms within organizations are shaped via employee's perception of work climate, which are formal organizational policies and guidelines that is common among co-workers (Schneider, Ehrhart, & Macey, 2013). According to this theory green work climate perception is consistently associated with employee's attitude and behavior (Kuenzi & Schminke, 2009). If an employee perceives her organization to have a positive orientation towards environmental sustainability, then the injunctive norms would be that the company approves of behavior that benefits the environment. If an employee perceives her co-worker to be environmentally friendly at work, then the descriptive norm would be that employees of that organization behave positively towards that environment. And in organization conscientiousness employees are more involved in injunctive and descriptive norms because these individuals are more concerned with their performance because they give more importance to personal achievements (Baker, Van Der Zee, Lewig, & Dollard, 2006). They are motivated towards the achievement of established goals (Barrick, Mount, & Strauss, 1993) so they are more likely to involve in activities which are included in organizational policies and guidelines and in those activities where participants are encouraged and rewarded.

CHAPTER 2

LITERATURE REVIEW

2.1 Green Work Climate Perception

Organizations are introducing sustainability policies to promote environmentally friendly behaviors. Employees' green perception about work climate that how they perceive their organization and their coworkers involve in green activities, may form emotional mechanisms that link such policies with behavior. Norton, Zacher and Ashkanasy (2012) said that it is important to investigate work climate to understand and facilitate EGB. Kuenzi&Schminke, (2009) states that work climate is link with employee's attitude and behavior. Research model of this study is based on theory of normative conduct in which behaviors are attributed to social norms (Cialdini, Reno &Kallgren, 1990). Theory of normative conduct (TNC) includes injunctive norms which are accepted and descriptive norms which are usually experimental. Social norms within any organization are shaped by the perception of employees about their work climate, which includes employee's perception about formal organizational policies, procedures to convert policies into strategies, task which are appreciated and being supported and the behavior of co-worker (Schneider, Ehrhart& Macey, 2013).

James et al., (2008) said that employees' perception about work climate shows how they interpret information from workplace, Ashkanasy, 2007; Schneider &Reichers, (1983) and espoused norms, values and behavioral. These researchers anticipate that green work climate captures employee's perceptions about organizational attributes and behavioral norms within a company that relates to environmental sustainability. According to theory of normative concern,

green work climate perceptions of organization are related to injunctive norms and green work climate perception of co-worker are related to descriptive norms. If an employee perceives that her organization have a positive orientation towards environmental sustainability, then the injunctive norms would be that company support that behavior that are favorable for the environment. Cialdini et al., 1990 states that these injunctive norms become the part of company's official statements like vision and mission statement, and also shown in the company's policies and actions Lo, Peters, &Kok, (2012).

Source of learning for new employees in any organization are the existing employees and the environment of the organization. So, if the employees perceive her co-worker to be environmentally friendly at work, then the descriptive norms would be that employees of that organization usually behave positively towards the environment.

2.2 Environmental Attitude

Attitudes as defined by famous researchers Fishbein and Ajzen (1975) are psychological tendencies of an individual when he evaluates something positively or negatively. Whereas extending this definition of attitude environmental attitude is defined a person's general opinion about green environment and problems (Yang, Shi, &Kuang, 2016). Chen, D et al, (2015) states that if a person has pro-environment attitude, then price of any product becomes secondary for purchasing it. Environmental attitudes as defined by Schultz et al., (2007) it is the person's beliefs, affect and behavioral intention that he/she holds towards issues related to environmental activities.

Organization have different environmental attitude at the institutional level, team level, leader level and employees level.

- At the institutional level environmental attitude is effected by external pressure, rules and regulations, formal standards and practices, customer expectations their demands and accepted culture in the market.
- At the organizational level attitude includes company's environmental strategies, policies norms and activities. And employees who are engage in such activities have to be rewarded.
- At the leader level, the leaders who have environmental attitude they provide more support to their subordinate, encourage them for these behaviors. So, their followers also have positive attitude towards environment.
- At the team level, if the existing member have positive attitude and behavior towards environment and group norms are also positive then the new member who enter in the group also have positive attitude towards these practices.
- At the employees level, when employees are environmental concern they have positive attitude toward environment then it means they are intrinsically motivated to engage in such activities and their personality is to engage in environmental activities.

Perception of employees about Green work climate shapes their environmental attitude which is considered the main motivational factor for employees to engage in Green behaviors. Green environmental attitude can be developed by introducing environment friendly policies, communicating these policies and then implementing these policies into practices and those who are participating should be encouraged and rewarded (Schneider, Ehrhart, & Macey, 2013). Individual's perceptions and environmental attitude guide their actions.

2.3 Green Employees Behavior

Starik & Marcus, 2000 found that in 21st century for the survival of the organizations an important factor is environmental sustainability, and the factors that contribute towards employees green behavior is the specific workplace pro-environmental behavior. An important factor that contributes towards environmental sustainability is EGB (Ones and Dilchert 2012).

Traditionally only economic thinking was considered the main factor for such environmental changes but Barnett (2001) and Bonan (2008) work shift the focus to by including behavioral changes along with technological and scientific thinking for shift this paradigm for more sustainable environments. Organizations are in the position to make necessary changes which can environment significantly and they are under the pressure of norms, regulatory bodies and social pressure (Scott, 1995) and organization are also responsible to pay attention to the needs of their stakeholder and society is one of the important and main stakeholder of all organization as they get their profit the society (Fairfield, Harmon, & Behson, 2011). Organizations are found somehow involved in technological interventions which are also positive but it can't ensure sustainable environmental outcomes (Gouldson & Sullivan, 2007).

Russel and McIntosh (2011) propose that instead installing technology employees of the organization should be trained and motivate to behave in environment friendly manners which are a more prominent approach for sustainable and healthy environment. Human resource of organization is main factor in deciding the success and failure of environmental management system (Zibarras & Coan, 2015). Davis, Leach, and Clegg, (2011) found that technology is contributing to environmental performance but it relies on the human resource of the organizations. So the success of such environment friendly system is dependent on employee's behaviors.

2.3.1 Green Behavior of Employees at the Workplace

Green behavior of employees at the workplace conceptualized it as voluntary behavior (see (Ramus & Steger, 2000, Paillé&Boiral, 2013). This model includes both required and proactive behavior, but it is not possible for the employees to show both type of behavior in the workplace, therefore while belonging to different groups they behave differently.

Task related behaviors plays an important role in achieving companies core values (Borman&Motowidlo, 1993; Organ, 1997; Rotundo&Sackett, 2002), and voluntary behavior contributes towards social and psychological environment that indirectly support task behaviors it involves employees personal initiatives towards environment that are more than organizational expectations. Bissing-Olson, Iyer, Fielding and Zacher (2013), found that task related EGB is extra role behavior performed within the context of assigned work task, including employees consumption behavior of water, energy and other organizational resources.

EGB includes two type of behavior:

- Task related EGB
- Voluntary (proactive) EGB

Task related EGB

Bissing-Olson et al., 2013, stated that employees required green behaviors are those behaviors that are perform by employees at the workplace and that are part of their formal job duties, and employees are obligated to perform them. This includes formal organizational policies, formal procedures and SOP's to perform task and procedures to create products. These task related EGB are the employees required behaviors that they have to show at the workplace, that are included in formal job duties and directly contributes towards core business values

(Borman&Motowidlo, 1993). One way of improving organizational performance Schmit, Fegley, Esen, Schramm, and Tomassetti (2012) is to include green behaviors as formal.

Voluntary EGB

Some employees perform more than their required duties in the organization, with respect to the environment that are voluntary EGB. We define voluntary EGB as behaviors including employees own initiatives that are not part of their formal job duties and their performance is more than organization expectations. This includes introducing new environmental programs and policies, raising awareness for green behavior, encouraging other employees in the organization and work for the interest of the organization.

Voluntary EGB are the non-task behaviors that are closely related to OCB (Schmit, Fegley, Esen, Schramm, and Tomassetti 2012) which includes behaviors that are beneficial for the society and organization don't pay for such behavior or activities.

Outcomes of EGB

Green behavior creates a no of positive outcomes that it create a competitive advantage for organization, help in saving cost of company, to make the leader more effective, positive social norms are practice at the team level in the organization and it also satisfy intrinsically to the employees. There are other financial and non-financial benefits of EGB. Financial benefits of EGB is saving cost of organization and non-financial benefit is that it motivates employees to engage in green behavior that is the reason for cost saving. Giving financial benefits to employees from their leader/Boss is not enough for them to indulge their self in green activities but it is also necessary that employees are motivated towards these actions and they are voluntary participate in these green activities that also increase their satisfaction Michael et al. (2010).

Institutional level Factors

At the institutional level, organizations face great pressure from various sources to involve their self in green activities (e.g., Masurel, 2007). The impact of such pressures that organizations have positive attitudes towards green environment. These green attitudes are shown from the organizational policies and activities. Organizations also provide resources and incentives to employees who engage in green behavior, and organizational-level behavior. Accenture, 2013 states that these environmental, cultural and other pressures that are faced by senior executives and then important decisions are taken by higher organizational level and communicate to organizational employees. To convert decisions taken by organization in employees behavior potentially through the behavior of senior executives.

Organizations are different in term of their policies, activities and selecting green strategies and also in the interpretation of environmental sustainability (Norton, et al., 2015).

Organizational level Factors

Organizational factor seeks greater research attention because organization attitude towards environment are important for both type of green behaviors. There is a positive relationship between organization attitudes towards the environment and organizational required green behaviors, as well as taking initiative for environmental behaviors i.e. voluntary green behaviors (Montabon 2012).

Attitudes towards business-related issues have a significant impact on both types of green behavior of employees. EGB are important for staff is to improve work conditions for them provide them better workplace environment (Marshall et al., 2005, Masurel, 2007) and also saving cost. Environmental policies are also important for these green behaviors. Organizational and team norms have a greater impact on EGB policies both required and

voluntary (Norton et al. 2014). Required and voluntary EGB are also consequence by incentives, resources, and organizational-level behavior (Cordano& Frieze, 2000, Cantor et al., 2012, Graves et al., 2013). Voluntary employees green behavior and their personal initiatives is a major source for reduction in energy consumption.

In general it is said that if organizations have green attitude towards environment then their employees have also green attitude. Research shows that Employees green behavior has a great effect on organizational environmental performance. Important antecedents for EGB is that organizations must have positive attitude towards environment and also necessary that organization culture are according to that attitude and shown from organization policies and practices. These green attitudes of organization give employees internalize motivation to follow company policies and meet company expectations for receiving incentives and appreciation.

Leader level Factors

For the success of any organization leader is consider an important person that creates a bridge between the organization and employees. Ramus & Steger, 2000 propose that leader is a essential person in any organization who help employees to perform their towards achieving their own goals, as well as organizational goals towards environment. Robertson &Barling, (2013) said that leader's behavior set an example for their employees and followers to follow. Different leadership styles have a different impact on required and voluntary EGB. Transactional leaders motivate employees to perform required green behaviors, and fulfill requirements which are expected from that job(Bass 1985, 1999), while transformational leaders motivate employees for voluntary behaviors and motivate employees for extra role behaviors and go beyond the expectations.

Leaders whose behavior is to maintain innovation, rewards, gratitude and that have some goals for future and who are responsible for their actions they are more willingness to promote voluntary green behaviors. When leader is focused on environmental sustainability then at that time their behavior is to communicate and that is a great support for employees. Attitude of leaders towards green environment has a greater impact on subordinate required green behavior, and the degree to which leaders engage themselves in green behavior is important for their subordinate voluntary green behaviors. Robertson and Barling (2013) it is observed that leader's behaviors about the environment has a direct and positive effect on subordinate green behaviors.

Team level Factors

For encouraging EGB, actions and behaviors of team member their beliefs and norms are important in an organization. If the organization have a environment that colleagues are supportive than it found to have a positive effect on other employees and also on the behavior of new employees that they are satisfied from their jobs, their commitment is high and they have intention to help existing and new employees(Paillé et al., 2015).

For employees green behaviors, beliefs and behaviors of team are very important. Carrico and Riemer(2011) report that when team members have confidence on each other than they are more able to achieve their green goals effectively and efficiently, while some researcher said that environmental norms also plays an important role. In an organization there is interdependence between team members for environmental attitudes and values. These environmental values and norms are shared in groups throughout the time for which group exists and these norms and values become identification for group members. Siero, Boon, Kok,

&Siero, 1989. Kim et al., (2014) stated that it is social norms in any organization that group climate have a positive effect on group members attitudes and behaviors.

Shared values and norms are described as social pressure for group members that influence individuals to engage in EGB (Kim et al. 2014). Researchers found that employee's engagement in green behaviors is as a result of their behavior regarding green environment, level of discussing green environmental issues in groups and knowledge sharing in group regarding that issues. Lingard, Gilbert, & Graham, (2001)report that, for required EGB it is necessary that group set goals for themselves with the involvement of all essential group members and do proper planning for achieving that goals, and for voluntary EGB it is necessary that group have belief on ability of others group members for performing their duties and for achieving desired outcomes (Carrico and Reimer 2011).

Employee level Factors

In any organization green behaviors comes from employees level because ultimately these are the person in any organization who work for organizational policies and strategies. In theory of planned behavior, Ajzen 1991 said that employee's attitude towards the environment their beliefs, values and norms are important influence on employee's behavior. Employee's voluntary green behavior is finding through personality factors and behavioral intentions, and employees required green behavior is more dependent on perception of organizations and activities in organizations. But if employees don't have environmental attitude then how they accept positive environmental attitudes at work. Research on behavioral control, Greaves, Zibarras and Stride (2013) reports that perception of behavioral controls has a positive effect on both types of employees green behaviors. Marans and Lee (1993) said that employee's who show green behavior at home, they voluntary involve in green behaviors at workplace

Personal norms have also been study with regard to EGB. It is found that organizational norms have a positive effect on required EGB (Flannery and May2000) and there is a positive relationship between personal norms and voluntary EGB (Scherbaum, Popovich, and Finlinson 2008). It is also found that employee's motivation have a positive effect on EGB. Graves and colleagues (2013) reported that external motivation which includes rewards and payments encourages EGB.

Employees with more autonomy at workplace over their tasks have more positive effect on energy-saving behaviors (Siero et al, 1989).Employee's attitude towards work and their commitment toward organization and colleagues were both leads towards green environment (Lamm, Tosti-Kharas& Williams, 2013).

Outcome of EGB is that employees have positive intention to engage in future green behaviors. As a result of internal motivation employees have more intention to engage in future environmental goals (Osbaldiston and Sheldon 2003).

2.4 Conscientiousness

Conscientiousness is a personality trait linked to competence, dutifulness self-discipline are conscientious people are high on achievement striving and deliberation (Terrier, Kim & Fernandez, 2016) People high on conscientiousness tend to think before acting, can delay gratification and high on following norms (Gerber et al., 2011)

An important precursor of long lasting pro environmental behavior is high level of environmental concern (Santa, 2007).Previous research on personality show that personality traits are antecedents of major assortment of behaviors (McCrae & Costa, 2008). Conscientious individuals being high on trustworthiness are self-disciplined and responsible and consequently are higher on proactive behaviors (Terrier, Kim & Fernandez, 2016). Conscientious people are

more careful, responsible and trustworthy (Roccas et al., 2002). Conscientious people are also known as having compulsive neatness, annoying, fastidiousness, or workaholic behavior (Costa & McCrae, 1992).

Previous research shows that environmental behaviors are predicted by conscientiousness and openness and conscientiousness is more associated to environmentalism as being characterized by a personality more organized, diligent and perfect (Brick, & Lewis 2016). Possessing an environmental disposition influences the individual's intention to engage and perform in environmental friendly behavior (Minton & Rose, 1997)

People with certain personality traits are more likely to interact with certain environmental factors while purchasing products (Shaw et al., 2006). Conscientiousness affects behavior and conscientious people are more likely to behave in environmental friendly ways (Katalin, 2008). Merely having concern for environment does not force an individual to engage in environmental friendly behavior (IBM, 2009, P6). Environmental attitudes are one of the major predictor for employees green behavior (Brick & Lewis, 2014). In the same study by Brick & Lewis, (2014) was found that conscientiousness predicted environmentalism and higher conscientiousness people have more environmental attitude towards green behavior. Conscientiousness people are high in diligence, perfectionism, care and have good sense, and these people also have environmental friendly behavior.

2.5 Green Work Climate Perception and Employees Green Behavior

Lewin (1951) states that behavior is a function of an individual's own characteristics and her or his environment. Thus intentions have a great influence on employee's behavior, beyond this perception of the employees about organization and its environment also very important Bamberger, 2008; Galvin, 2014. Dalal, Bhavne, & Fiset, 2014; Johns, 2006; Kane,

1993; Meyer, Dalal, & Hermida, 2010 said that contextual factors which are beyond the control of the worker can create differences in the strength and direction of performance. The degree to which employees have control over their behavior is a significant cause of whether or not their intentions will eventually lead to subsequent acts (Sheeran 2002).

Performance of employees varies in the organization in term of their environmental behavior, and the behaviors of employees depend on the situation they find themselves in (Kaiser, Wölfing, and Fuhrer 1999). Littleford and colleagues (2014) states that employees who perform green behaviors at home do not necessarily involve in green behaviors at work. It may possible that green behaviors spillover from one context to another Muster & Schrader (2011). In this research, we focus on the role of perceived organizational climate, which Schneider, Ehrhart, and Macey (2011) argue that the role of perceived organizational climate is a critical variable in the field of industrial and organizational psychology. Norton and colleagues (2015) contend more specifically that employee perceptions of organizational climate constitute a crucial intersection of personal and contextual factors. Examples of research at this intersection include studies of safety behavior (Neal & Griffin, 2006), citizenship performance (Shin, 2012), and customer service (Schneider, White, & Paul, 1998).

Norton, Zacher, and Ashkanasy (2012) propose concomitantly that an organizational climate applied to environmental sustainability could therefore be used to capture employee perceptions of a company's environmental policies, practices, and procedures. So we found that employee perceptions of green organizational climate have a direct effect on employees green behavior. Therefore, we hypothesize that participants who perceive more positive green organizational climates will engage in more green behavior.

H 1: *Employees' green climate perceptions are positively related to their daily EGB.*

2.6 Environmental attitude as a mediator

Green purchasing behaviors are influenced by people's positive attitude towards environmental protection (Tanner & Kast, 2003). Importance of environmental issues should not be neglected and needs to be emphasized to motivate consumers' environmental behavior (Bei & Simpson, 1995). In studies of finding the impact of attitudes on behavior it was explored by Schlegelmilch, Greg & Diamantopoulos (1996) that the most constant predictor of pro environmental behavior is individual's attitudes toward it.

Environmental attitude means that individuals are not aware of environmental issues but also have responsibility, knowledge, takes initiative to improve the environment (Yang, Shi, & Kuang, 2016).

In a study conducted by Yang, Shi, & Kuang, (2016) it is stated that previous research depicts that environmental attitude is one of the key factor that predicts environmental behavior and focus of such behavior is largely dependent upon individual perception. They further clarified that environmental attitude, sense of responsibility, perceived behavioral control and behavioral intentions are major factors that influence environmental behaviors. Attitude, personal ability and situational factors were found as having more influence on environmental behaviors (Stern 2000). When people have higher environmental attitude accompanied with sense of responsibility and behavioral control they are more likely to involve in environmental behavior (Kaiser & Gutscher, 2003)

H2. Environmental attitude mediates the relationship between green work climate perception and green employee's behavior

2.7 Conscientiousness as a moderator

A study conducted by Brick & Lewis, (2014), shows that environmental concern is more expected by certain personality traits. Conscientiousness is defined as a personality trait characterized by thorough thinking , planned, organized, delayed gratification by the behavior of thinking before doing and prioritizing the tasks(John & Srivastava, 1999) People higher on conscientiousness are comparatively more concerned about environment (Hirsh, 2010). Previous studies on conscientiousness have explored a link between conscientiousness and environmental concern (Milfont& Sibley, 2012), conscientious people are more organized and reliable.

People have different attitude towards environment and certain people with varying lifestyle lead more towards environment friendly lives (Katalin, 2008) and some of these behaviors are pro environmental behaviors that show more concern for health and environment. Katalin (2008) states that these type of pro environmental behaviors depends on person's personality that conscientiousness people are more characterized by through thinking, careful ,responsible, organized and active for fulfillment of goals.

Pro environmental attitudes are usually exhibited by people who have positive perception about the environment (Wuertz, 2015; Chen, et.al 2015) And Pro Environmental Attitudes are a person's positive beliefs and values about environment (Wuertz, 2015; Chen, et.al 2015).

Wuertz, (2015) in his study argued that merely having the knowledge of environment is not sufficient for motivating people to change the maladaptive environmental attitude but one should understand the role of personality traits too that are related with pro environmental attitudes. Different personality traits have different attitude about the environment (Brick & Lewis, 2016).

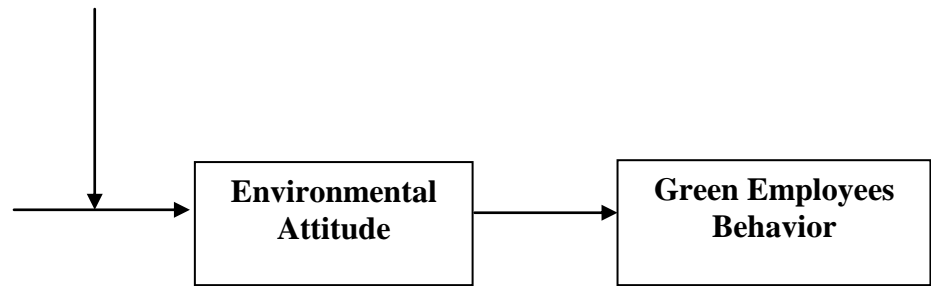
In a study by it is found that conscientiousness is more consistently found to be related to performance of consistent recycling behavior (White, Katherine, Hyde& Melissa, 2012). People high on conscientiousness are more likely to purchase ecological friendly products (Fraj& Martinez, 2006).Higher conscientiousness is expected to cause certain kinds of environmental behaviors (Brick & Lewis, 2016).

Higher conscientiousness in a collectivistic culture may lead to higher understanding of interpersonal harmony and may expect environmental behavior when societal values prevalent there may display positive attitudes for such behaviors (Brick & Lewis, 2016). Theory of planned behavior also confirms this literature that an individual's tendency to involve in any action does not solely depend upon his/ her attitude but it is influenced by resources which the person is possessing. An individual's personality which can be high or low on certain dimension on Big 5 are a kind of his special resources and his personality trait can influence the relationship that is existing between climate perception and environmental attitude. Conscientiousness is taken as a moderator in this study and as illustrated above that people higher on this trait are more responsible, thoughtful and considerate in their actions so it is hypothesized that the relationship between green work climate perception and environmental attitude is strengthen when a person would be higher in conscientiousness.

H3. Conscientiousness moderates the relationship between green work climate perception and environmental attitude, Such that if Conscientiousness is high then the relationship between green work climate perception and environmental attitude would be strengthened.

2.8 Theoretical Research Model

Conscientiousness



2.9 Research Hypothesis

H1: Employees' green climate perceptions are positively related to their daily EGB

H2. Environmental attitude mediates the relationship between green work climate perception and green employee's behavior

H3. Conscientiousness moderates the relationship between green work climate perception and environmental attitude, such that if Conscientiousness is high then the relationship between green work climate perception and environmental attitude would be strengthened.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

The objective of the study is to find the impact of Green work climate perception on green employee's behavior. It also examines one possible mechanism i.e. Environmental attitude through which Green work climate perception cause green employees behavior, and also examine one possible moderator conscientiousness which moderates the relationship of Green work climate perception and environmental attitude. Data collected for this research study is collected on a single point in time and analysis is conduct on the basis of that selected data The questionnaires were distributed and filled by employees who are working in different organizations involved in green behaviors including PTCL, Mobilink, Indus Motors, OGDCL, Nestle Pakistan Ltd etc, and respondents fill the questionnaire at the spot.

3.2 Population and Sample size

Population for the present study includes the Pakistani employees working in PTCL, Mobilink, Indus Motors and OGDCL. The data were collected between April 2017 to June 2017. Questionnaires were distributed in all selected organizations. The cover letter clearly shows that the study is being conducted for educational research purposes. Participants are assured that there data has been keep confidential so that the respondents feel free to fill in the questionnaire without hesitation. Data has been collected for measuring these four variables of concern i.e. Green work climate perception, Environmental attitude, Green employees behavior and Conscientiousness, in English were distributed and explained according to their education level for the better understanding among 350 employees. 249 filled questionnaires were

received back with a response ratio of 71%. After receiving that questionnaires screened them to check the accuracy and 26 of these questionnaires were found to be incomplete or incorrectly filled, so these responses were not used in data analysis. This screening left the researcher with a valid set of 223 responses.

3.3 Sampling technique

It is almost impossible to collect data from each and every employee of selected organization, that's why sampling is done of whole population to make the study feasible and collect data that have the characteristics of whole population. For the ease of the researcher, the sampling technique used in this study is convenient sampling. In convenience sampling, for the purpose of data collection the selected members are nominated on the basis of ease of access and comfort of researcher. Non-probability sampling is a broad category and convenience sampling comes under this.

Researches conduct in social sciences used convenience sampling because it allows researcher to collect data on the basis of ease of access. This technique is also used by the researcher when they have limited time for data collection, have lack of resources and also have short time for completion of the study. So, it is believed that members of organization from whom data were collected are considered as representatives of whole population working in selected green organizations.

3.4 Instrumentation

Questionnaire includes four variables namely: green work climate perception, environmental attitude, green employee's behavior and consciousness are self-reported. Data collected for all items using 5 point Likert scale.

3.4.1 Green Work Climate Perception

We used 8-item scale to measure green work climate perception by Norton et al. (2012). Participants and coworkers reporting their perception about work climate. Participants reported their perceptions about organizational policies, their procedures and practices (i.e., work climate) relating to green environment and that is demonstrated by employing organizational employees. The responses will be made through 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Reliability of scale found reliable with Alpha .74

3.4.2 Environmental Attitude

We used 8-item scale to measure environmental attitude by Bamberg's (2003). The responses will be obtained through 5 point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). The reliability of scale reported in results .79

3.4.3 Green Employees Behavior

We use two item 3-items scales adapted from Bissing-Olson et al. (2013) to measure self report task-related and proactive employee green behavior, the rating scale ranged from 1 (never) to 5 (always). Cronbach alpha reported .85

3.4.4 Conscientiousness

For conscientiousness we use 9 items scale adopted from Oliver P. John (1991). Range of scale from 1 (Strongly disagree) to 5 (Strongly Agree). Items with R in the questionnaire are the reverse coded. Alpha value .92 reported reliable.

3.5 Control Variables

Respondents' demographic characteristics include age, gender, qualification and experience. Since prior studies suggested that these variables might affect employees green

behavior at workplace. One way ANOVA (green work climate perception, environmental attitude across gender, age, qualification, and work experience of the respondents) was performed to control for variations in dependent variable(s), if any, however, none of the demographic variables revealed significant differences in dependent variables, hence were not controlled in further analysis.

3.6 Data analysis tools

To analyze the data collected through questionnaire, IBM SPSS (Statistical Package for the Social Sciences) and AMOS was used. Through SPSS we perform descriptive statistics, and correlation of variables. Correlation analysis was performed to find the general relations of variables their importance and trends. Through AMOS we perform confirmatory factor analysis (CFA), regressions analysis, mediation analysis and moderation analysis. The confirmatory factor analysis was performed to check model fitness, while regression analysis were performed to find out the change in dependent variable due to change in independent variable and mediator. Mediator was also regressed through independent variable. In order to check the impact of control variable ANOVA was performed in SPSS.

Table 3.1 Instrumentation sources, Items & Reliabilities

Variable	Source	No. of Items	Reliability
Green work Climate perception (IV)	Norton et al. (2012).	8	.74
Environmental Attitude (Med)	Bamberg's (2003)	8	.79
Green Employees Behaviour (DV)	Bissing-Olson et al. (2013)	6	.85
Conscientiousness (Mod)	Oliver P. John (1991)	9	.92

3.7 Sample Characteristics

Among the 223 questioners filled by different respondents the number of male and females were 132 and 91 with their individual percentages of 59.2 and 40.8 percents respectively. As its documented in different studies that Pakistani working society is male dominant, the present results are also portraying the same results that male are more in numbers than female respondents.

Out of 223 respondents most were young with accumulated percentage of 75.8 in the age between 18 to 33 years, like 51 respondents have age between 18 and 25 years while 118 respondents have age ranging between 26 to 33 years. While the respondent having age between 34 to 41 years were 35 and respondents having age above 42 years were less in number there number were 19 in the data collected for the present study.

As far as educational level of respondents of the present study is concerned, 126 were bachelors by adding a dominant percentage of 56.5, 81 have master degree with 36.3 percent of

the present study data. Only 16 respondents have MS/Mpjl degree by adding 7.2 percent to the data of the present study.

As age table have reflected that most of the respondents were young, So respondent having experience of 1 to 5 years were 120(53.8%), 6-10 year experience respondents were 52(23.3%), 11-16 year experience respondents were 33(14.8) while the respondent having experience more than 16 years were only 18.

Table 3.2 Gender

	Frequency	Percent	Cumulative Percent
Male	132	59.2	59.2
Female	91	40.8	100.0

Table 3.3 Age

	Frequency	Percent	Cumulative Percent
18-25	51	22.9	22.9
26-33	118	52.9	75.8
34-41	35	15.7	91.5
42-49	12	5.4	96.9
50-above	7	3.1	100.0

Table 3.4 Qualification

	Frequency	Percent	Cumulative Percent
Bachelor	126	56.6	56.6
Mater	81	36.3	92.8
MS/Mphil	16	7.2	100.0

Table 3.5 Experience

	Frequency	Percent	Cumulative Percent
1-5	120	53.8	53.8
6-10	52	23.3	77.1
11-16	33	14.8	91.1
17-22	8	3.6	95.5
23-28	3	1.3	96.9
29 above	7	3.1	100.0

3.8 Analytical Techniques and Tools

Tests such as Reliability test, ANOVA, Descriptive test; Correlation analysis Confirmatory factor analysis (CFA) and regression analysis were performed by using software SPSS and AMOS. SPSS is often used to perform different descriptive tests because it's considered one of the best software to perform such type of test. Correlation, Reliability and ANOVA were also performed through SPSS software. Confirmatory factor analysis was carried out through AMOS in order to check the fitness of 4 factor model its results are portrayed in next chapter. The regression analysis of independent and dependent variables was carried out through AMOS, because AMOS is good software for generating estimates. Mediation and moderation analysis were also performed through AMOS.

CHAPTER 4

RESULTS

4.1 Descriptive Statistics

We create this table to show large sum of data in a precise and summarized form. Descriptive statistics tells us details of variables for which data has been collected the sample size of data, their minimum and maximum value also the mean value and standard deviation of data. The details of data that has been collected for this research is shown in the table below.

Table 4.1: Descriptive Statistics

Variable	Sample Size	Minimum	Maximum	Mean	Std. Deviation
Gender	223	1	2	-	-
Age	223	1	5	2.13	.932
Qualification	223	1	3	1.50	.628
Experience	223	1	6	1.84	1.19
GWCP	223	1	5	3.73	0.76
EA	223	1	5	3.50	0.91
EGB	223	1	5	3.25	0.79
Conscientiousness	223	1	5	3.31	0.75

The below mentioned tables provide complete description of all the variables including demographics of the present study. The complete list of minimum values and maximum values

of all the variables is listed down. Along with this the mean values of the variables under studied are recorded. The standard deviation from the mean for all variables is reported as well. In the very 1st column of the table, variables names are mentioned followed by the columns of minimum values, maximum values, mean values and standard deviation from the mean values of all variables are listed accordingly. Gender is measured by nominal scale having minimum value 1 for male and maximum value 2 for female. As described in the methodology section that the variables under study were measured through likert scale anchoring around five responses from strongly disagree to strongly agree. The mean and standard deviation of the independent variable i.e. Green work climate perceptions were 3.73 and 0.76 respectively. The mean value dependent variable i.e. Employee green behavior was 3.25 and the standard deviation from its mean value was 0.79. the mediating variable i.e environmental attitude have mean value of 3.50 and standard deviation is reported 0.90. the men value for moderating variable i.e. Conscientiousness was 3.31 and standard deviation from its mean was 0.75 in the present study. All these values are comprehensively reported in the descriptive statistic table.

TABLE 4.2

Structural Equation Model Fit results examining different alternative measurement models as in comparison to the hypothesized measurement model

Model	χ^2	Df	χ^2 / Df	$\Delta \chi^{2a}$	ΔDf	CFI	TLI	NFI	RMSEA
Hypothesized Measurement Model (4 Factor Model)	728.100	427	1.705	-	-	.947	.942	.881	.056
Alternate Model 1: Combined "GWCP", "Conscientiousness" and "EA and EGB" (3 Factor Model)	1274.280	430	2.963	546.18	3	.850	.838	.791	.094
Alternate Model 2: Combined "Conscientiousness", "EGB" and then "GWCP and EA " (3 Factor Model)	1882.242	430	4.377	1154.142	3	.743	.722	.692	.123
Alternate Model 3: Combined "GWCP and Conscientiousness" and then combined "EA and EGB " (2 Factor Model)	1953.342	432	4.522	1225.242	5	.730	.710	.680	.126
Alternate Model 4: Combined " GWCP and EA " and then combined "EGB and Conscientiousness" (2 Factor Model)	2567.383	432	5.943	1839.283	5	.621	.593	.580	.149
Alternate Model 5: "All items Combined " (1 Factor Model)	2957.456	433	6.830	2229.356	6	.552	.519	.516	.162

Note: n=223; Values are differences of each of the alternative measurement models with the hypothesized model. ***p<.001

4.2. Confirmatory factor analysis and competing models

Confirmatory Factor Analyses (CFA) of all four variables including Green work climate perception, Environmental attitude, Green employees behavior and Conscientiousness was performed to check the model fitness of Hypothesized 4 factor model before testing directing and mediating relation. Table 4.2 representing that the 4 factor model was fit with ($\chi^2 = 728.1$, $df = 427$, $\chi^2/Df = 1.705$, $p < .000$; CFI = .947, TLI = .942, NFI = .881, RMSEA = .056).

Alternately, 3 factor model by combining "GWCP", "Conscientiousness" and "EA and EGB" was less fit ($\chi^2 = 1274.280$, $df = 430$, $\chi^2/Df = 2.963$, $p < .000$; CFI = .850, TLI = .838, NFI = .791, RMSEA = .094) with respect to 4 factor model. Change in chi-square was 546.18. Change in degree of freedom was recorded 3.

In Table 4.2 shows another 3 factor alternate model, combining "Conscientiousness, EGB, GWCP" and "EA" comparison with four factor model also found less fit with values ($\chi^2 = 1882.2$, $df = 430$, $\chi^2/Df = 4.377$, $p < .000$; CFI = .743, TLI = .722, NFI = .692, RMSEA = .123) and the change in chi-square and degree of freedom were 1154.14 and 3 respectively.

3rd model represents 2 factor model by combining first two variables "GWCP and Conscientiousness" and then combined "EA and EGB" comparison with four factor model also found less fit with values ($\chi^2 = 1953.342$, $df = 432$, $\chi^2/Df = 4.522$, $p < .000$; CFI = .730, TLI = .710, NFI = .680, RMSEA = .126). The change in chi-square value and degree of freedom were 1225.242 and 5.

Another 2 factor model by combining two variables "GWCP and EA" and "EGB and Conscientiousness" comparison with four factor model also found less fit with values ($\chi^2 = 2567.383$, $df = 432$, $\chi^2/Df = 5.943$, $p < .000$; CFI = .621, TLI = .593, NFI = .580, RMSEA = .149). The change in chi-square value and degree of freedom were 1839.283 and 5.

Combining all items on single variable to create 1 factor model and then comparing the values with four factor model. Comparison with four factor model results shows the worse fit ($\chi^2 = 2957.456$, $df = 433$, $\chi^2/Df = 6.830$, $p < .000$; CFI = .559, IFI = .519, TLI = .516, RMSEA = .162).

4.3 Correlation analysis

We perform correlation analysis specially to find out the relation between more than one variable and also to find the direction of variables, and their movement in same or different direction. Correlation analysis is different from regression analysis because it does not consider underlying linkages for the research variables. Negative values shows that the increase in value of any variable is indifferent with any other variable. Coefficient was used for correlation analysis and purpose is to assess correlation among relations. To measure reliance among variables correlation coefficient is the most common method. Correlation values range from -1.00 to +1.00. Where positive values give an idea about a positive correlation, while -1.00 values represent negative correlation among the variables. However, the values between -1.0 to -0.5 or 1.0 to 0.5 have strongly/Highly correlated, the value range -0.5 to -0.3 or 0.3 to 0.5 is moderate correlation and the value range -0.3 to -0.1 or 0.1 to 0.3 is ranked weak/low correlation, but when the correlation value of is 0 this means that there is no correlation among these study variables.

Table 4.3: Means, Standard Deviations, Correlations

	Variables	Mean	S.D	1	2	3	4
1.	Green Work Climate Perception	3.73	.765	-			
2.	Environmental Attitude	3.50	.919	.443**	-		
3.	Employees Green Behavior	3.23	.728	.245**	.553**	-	
4.	Conscientiousness	3.34	.755	.416**	.521**	.301**	-

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Table 4.3 shows the correlation between the variables of this study. Green work climate perception is positively, significantly and moderately correlated with environmental attitude, ($r=.443$, $p=.000$), and Green work climate perception is positively and significantly correlated with employees green behavior ($r=.245$, $p=.000$), while Green work climate perception is positively, significantly and moderately correlated with conscientiousness ($r=.416$, $p=.000$). The correlation between environmental attitude and employees green behavior is positive and significant ($r=.553$, $p=.000$), While correlation between environmental attitude and conscientiousness is also positive and significant ($r=.521$, $p=.000$). Employees green behavior is positively and significantly correlated with conscientiousness ($r=.301$, $p=.000$).

TABLE 4.4

Mediation analysis results based on standardized regression weights from SEM

a. Standardized Direct path coefficients of the hypothesized model

Direct Paths	Estimate	SE	CR	P
GWCP → EGB	.245	.062	3.760	.001
GWCP → EA	.443	.055	7.369	.001
EA → EGB	.553	.044	9.878	.001
Conscientiousness → EA	.320	.065	5.117	.001
GWCP* Conscientiousness → EA	.149	.070	2.250	.024

b. Standardized indirect path coefficients of the hypothesized model

Indirect Paths	Bootstrapping		BC 95% CI	
	Indirect Effect	P	Lower Limit	Upper Limit
GWCP → EA → EGB	.245	.001	.164	.340

Note: n=223; Bootstrap sample size=2000, BC 95% CI= Bootstrap confidence Intervals

* $p < .05$

** $p < .01$

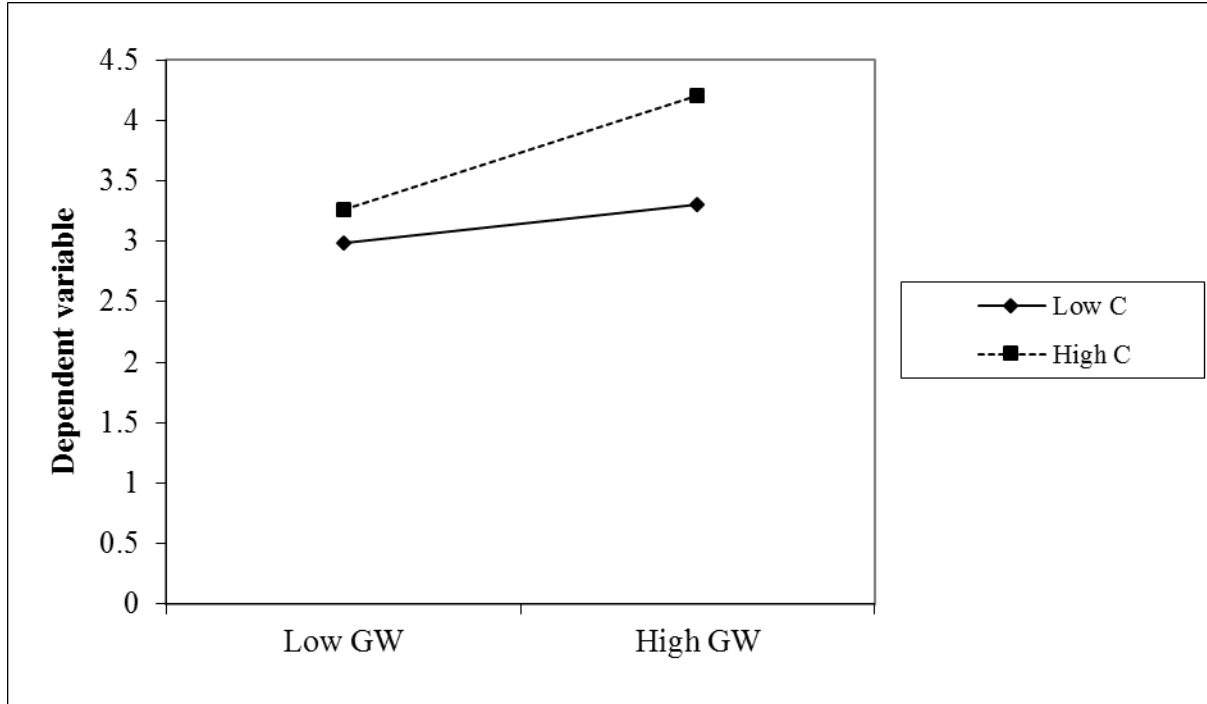
*** $p < .001$

4.4. Structural Model Results

It is already established that the hypothesized 4 factor model is the best fit ($\chi^2 = 728.1$, $df = 427$, $\chi^2/Df = 1.70$, $p < .000$; CFI = .947, TLI = .947, NFI = .881, RMSEA = .056). To test the mediation, it was supposed to check mediation through different paths. First path was tested from direct path that was from independent variable GWCP to dependent variable Environmental attitude. Results of mediation found reliable ($\beta = .245$, $p < .001$). In second path from independent variable GWCP to mediator EA, first hypothesis was tested and the value of beta ($\beta = .443$, $p < .000$) found reliable. In third path from mediator EA to dependent variable EGB, the results were found reliable as per beta value ($\beta = .553$, $p < .001$). In 4th path, from moderator Conscientiousness to dependent variable EA results found reliable and the value of beta ($\beta = .320$, $p < .001$) was .324. In last path, interaction term created through multiplying independent variable GWCP means and moderator Conscientiousness means and standardized the values. Mediation tested through interaction term to dependent variable EA and the result ($\beta = .149$, $p < .024$) shows the reliability.

Structure Equation Model (SEM) technique used for testing hypothesized relationship through AMOS.

Figure 4.1



Dependent Variable: Environmental attitude

GW: Green work climate perception

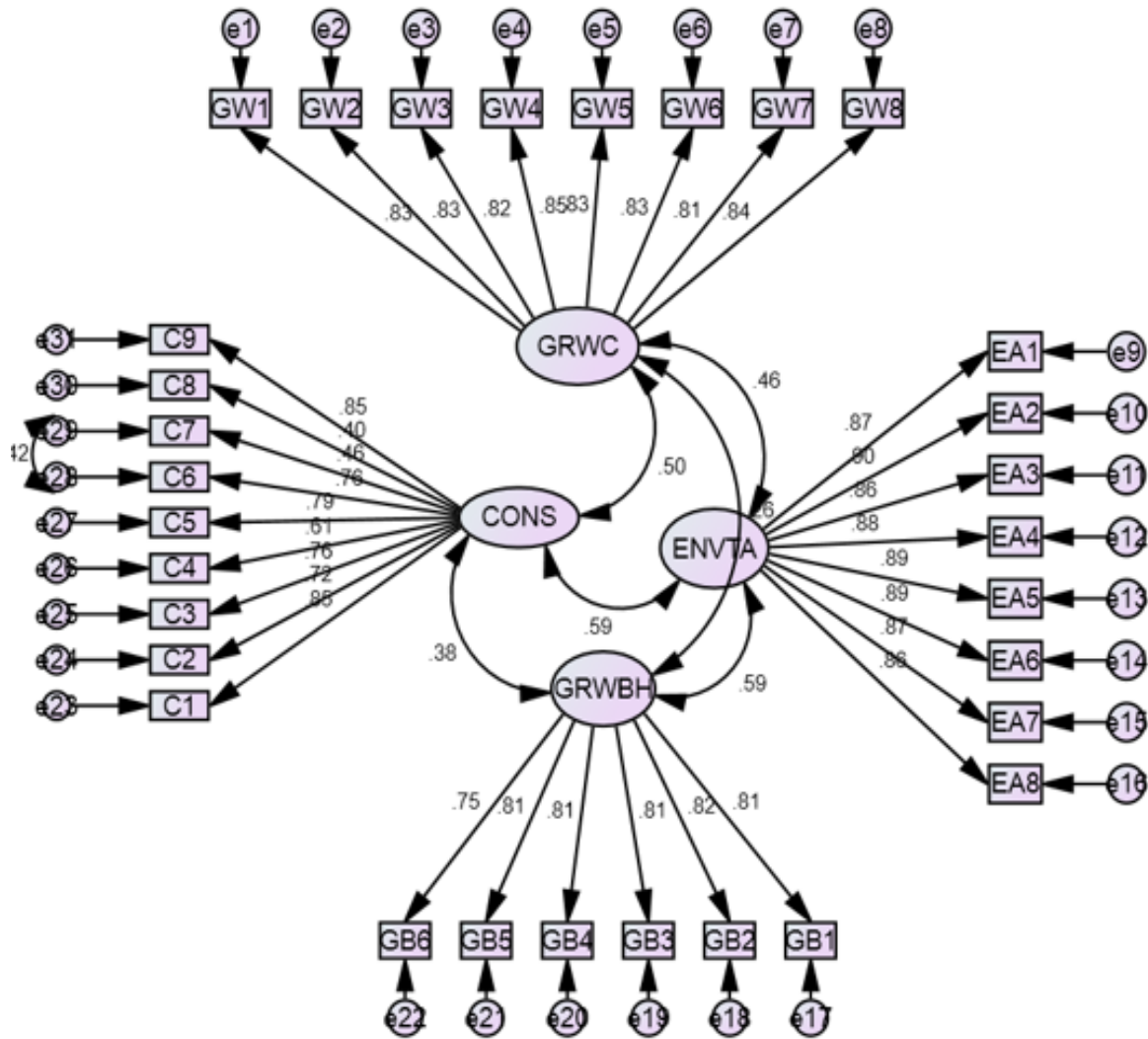
C: Conscientiousness

4.5. Mod Graph

To check the moderator effect between Green work climate perception and Environmental attitude the mode graph was calculated. The positive relation was proposed between the Green work climate perception and Environmental attitude would be stronger in the presence of Conscientiousness. The graph reflects the same results, if the Conscientiousness is low then the slope of graph is not steep. In other case, when the Conscientiousness is high, the relation between Green work climate perception and Environmental attitude becomes stronger and the slope line steeper than the moderator value

FIGURE 4.2

Measurement Model

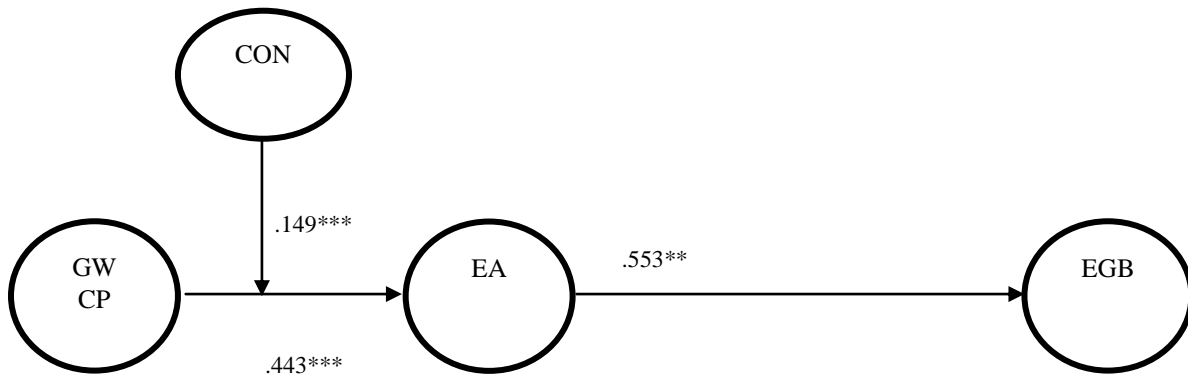


GRWC = green work climate perception measure item; ENVTA = environmental attitude item

GRWBH= employee green behavior item; CONS = conscientiousness item.

FIGURE 4.3

Hypothesized Structural Model and Structural Equation Model (SEM) Results



N=223; Full structural model showing direct and mediating effects. Mediation relations running from Green work climate perception to Employees green behavior through Environmental attitude. An asterisk on values of Standardized regression weight is a sign of significance of path. R^2 values show the percentage variance for each path.

Table 4.5: Hypothesis Results Summary

H1: *Employees' green climate perceptions positively and significantly related to their daily EGB. (Accepted).*

H2: *Environmental attitude mediates the relationship between green work climate perception and green employee's behavior. (Accepted).*

H3: *Conscientiousness moderates the relationship between green work climate perception and environmental attitude; such that if Conscientiousness is high then the relationship between green work climate perception and environmental attitude would be strengthen. (Accepted).*

CHAPTER 5

DISCUSSION, CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 DISCUSSION

This chapter aims to elaborate the current study's outcomes, which is reported in earlier chapter. These will also effort to validate and narrate the outcomes with further studies and emphasize the important findings of existing study that is dissimilar from studies accompanied earlier. This part also purposes to reply all research queries and to deliberate hypothesis established against it.

5.1.1 Discussion On Research Question No 1:

First question of current study is trying to reply was stated in number 1 chapter:

Question 1: What is the relationship between green work climate perception and green employee's behavior?

In instruction to discovery answer to 1st question, a hypothesis remained established and tested, is;

H1: Employees' green climate perceptions positively and significantly related to their daily EGB.

First hypothesis of the study is well supported by results of the data collected. As it was hypothesized that Employees' green climate perceptions will positively related to Employees green behavior, that employees who have more positive perception about green behavior are more tend to involve in green behaviors.

For a long time it has been recognized by environmental psychologists, Bamberg & Möser, 2007; Littleford et al., (2014) that contextual factors has a great impact on green

behaviors of employees, important factors that affect employee's attitudes and behaviors are climate and culture of an organization and their behavior towards them and organizational culture are made up of their values, beliefs, behavioral pattern, and also assumptions and symbols of an organization. On the other hand organizational climate is defined by (Ashkanasy, 2007; Schneider & Reichers, 1983) as employees shared values and perception, also their understanding of organizational policies, and formal steps and SOP's for conversion of these policies into guidelines. Employees also must have clear idea about those activities for which organization give reward to their employees that give motivation to employees for achieving their targets.

So, climate of an organization comes from their employees which are the aggregate of these individuals' perceptions, organizational guidelines, policies and procedures. The perception of individual employees and their steps towards organizational policies are known as psychological climate (James et al., 2008). Rousseau, (1985) said that psychological climate is the best predictor of employees behavior because both psychological climate and employees behavior are individual-level constructs. It is necessary for employees to understand and recognize their work environment wholly before performing their formal roles this helps them to perform their tasks smoothly and effectively.

Modern researches on green organizations and psychological climate have the attributes of safety climates, services, justice, values and beliefs (James et al., 2008), and these attributes contribute towards better understanding of employees behavior and their behavioral outcomes.

In this research paper, we study employee's perception about green climate which is defined as employee's interpretation of organizational policies, procedures and formal guidelines about environmental sustainability (Norton, Zacher, & Ashkanasy, 2012; 2015).

Results of this study about green work climate are consistent with past research which shows a positive relationship between green work climate and employees green behavior (Norton et al., 2014). We suppose that employees who have positive perception about organizational climate they show green behaviors, because employees show that behaviors which they consider appropriate to organization policies. When employees have this feeling of contributing something towards organizational practices and policies this motivates them to show green behaviors at workplace, because they know they are rewarded for their contribution. So, this mean if employees perceive that their organization have eco-friendly environment and have positive perception about organizational climate then this leads towards employees green behavior.

5.1.2 Discussion On Research Question No 2 and 3:

The question number 2 and 3 were about the mediating role of Environmental attitude, which was postulated in the 1st chapter of the present study were answered by the results in 4th chapter, the questions were;

Question 2: What is the relationship between green work climate perception and environmental attitude?

Question 3: Does environmental attitude mediated the relationship between green work climate perception and green Employees Behavior?

For finding solution to the 2nd and 3rd question, the following hypothesis was generated and discussed;

H2.Environmental attitude mediates the relationship between green work climate perception and green employee's behavior.

Environmental attitudes as defined by Schultz et al., (2007) it is the person's beliefs, affect and behavioral intention that he/she holds towards issues related to environmental activities, and as we know that perceptions helps in developing individuals and attitudes have a great influence on persons behaviors if employees have positive perception and attitude towards environment then it have a positive influence on employees green behavior as represent from Theory of Planned Behavior (Ajzen, 1991), that attitudes influence individuals behaviors. According to this theory it is clear that people who have environmental concern they perform their tasks in a way to protect it.

Research suggests that environmental attitude is a better predictor of green behavior of employees at the workplace. Cordano and Frieze (2000) stated that managers who have pro-environmental attitude were positive intentions towards environment and their behavior is to engage in these positive activities. Managers consider environmental as important factor that influence them to engage in green environmental activities also it enhance their intentions to implement environmental programs in an organization. According to these researches, we found that environmental attitudes will positively predict both voluntary and task related green behaviors.

Employees who have positive attitude towards environment, they have more positive environmental behavior and their behavior is not affected by events happen on that particular day. While employees who are less concerned about environment they involve themselves in green activities when they are feeling positive. Laroche et al., (2001) states that environmental attitudes are strongly associated with individuals perceptions about green work climate and their perception and attitude have a great effect on employee's behavior. So, employees with

positive attitudes have consistent green behavior and they consistently act in environmentally friendly ways.

5.1.3 Discussion On Research Question No 4:

The 4th question of the study aroused in the 1st chapter, the present study was aiming to answer was;

Question 4: Does conscientiousness plays a role of moderator on the relationship of green work climate perception and environmental attitude?

For finding answer to the aforementioned question the following hypothesis was generated and tested;

H3. Conscientiousness moderates the relationship between green work climate perception and environmental attitude; such that if Conscientiousness is high then the relationship between green work climate perception and environmental attitude would be strengthened.

When data was analyzed to examine the moderating role of conscientiousness, it is found that conscientiousness moderates the relationship of green work climate perception and environmental attitude.

Conscientiousness is a personality trait linked to competence, dutifulness self-discipline are conscientious people are high on achievement striving and deliberation (Terrier, Kim & Fernandez, 2016). Conscientious individuals being high on trustworthiness are self-disciplined and responsible and consequently are higher on proactive behaviors. People high on conscientiousness tend to think before acting, can delay gratification and high on social norms (Hogan et al., 1997)

In organizations, personality traits are consider an important factors that have a great influence on employees feelings, intentions and perception that eventually influence their

attitude and behaviors (Barrick et al., 2013). Conscientiousness is a determinant of individual morality, and these individuals are more likely to follow social values and norms (Becker, T. E. 1998). These conscientious individuals constantly monitor their behavior to make sure that it is according to acceptable social norms and behavioral pattern and this moral reflection is a continuous and conscious process, which is done by individuals who are high in conscientiousness. This mean employees personality traits have a great effect on their attitudes and also applicable to both in-role and extra-role work behavior.

Conscientiousness individuals are good in controlling their behaviors. At workplace these individuals complete their everyday tasks and trying to meet expectations of organization regarding these required green behaviors. They also participate in extra activities which are part of their formal job requirements to increase the profit of the organization. Environmental sustainability comes due to green employee's behavior and they are mostly employee's voluntary behaviors, and these individuals engage their self in green activities because they consider them as fundamental activities of organization. Conscientiousness individuals in an organization have positive perception about green activities which reflect from their attitudes and their voluntary steps for green environment. So presence of these conscientiousness employees in an organization strengthened the relationship of green work climate perception and environmental attitude because higher conscientiousness employees are more responsible, attentive and thoughtful in their actions.

5.2 IMPLICATIONS AND RECOMMENDATIONS

5.2.1 Theoretical implications

The present study has several theoretical implications, discussed below:

First studies on green work climate and green behavior are need of time due to lethal environmental changes. Researchers are encouraged to conduct more studies on green work climate that is helpful in promoting green behavior.

Different contextual and dispositional factors of green work climate needed to be explored, and its impact on different organizational outcomes in form of green behavior, voice behavior against unfriendly environmental practices. So, organizational researchers are encouraged to identify those factors, which are promoting positive organizational outcomes.

The present study have added only one dispositional factor ‘Conscientiousness’ as moderator between green work climate and environmental attitude, different dispositional factors like other factor of big five, psychological capital and others dispositional traits and states needs to be studied on the aforementioned relationship.

Present study have studied environmental attitude as explanatory mechanism between green work climate and green behavior, different other factors like calling, organizational identification etc. should also be tested in order to obtain a better and comprehensive framework for green behaviors of employees at workplace.

Furthermore, contextual factors like organizational culture, leadership role and administrative role are ignored in the present study, future studies are encouraged to study the impact of context on the particular relationship.

5.2.2 Practical implications

Lewin 1951 proposed that behavior is the outcome that comes when a person is interacting with his or her environment. To generate a positive attitude of employees to engage with environmental behavior it is necessary to make EGBs as part of their job and also make it easy and enjoyable for employees that they have intention to engage with environmental

behavior. Most importantly, organizations need to communicate policies, procedures and practices in such a way that employees take interest and have positive attitude towards them (James et al., 2008). Organizations may not only make policies and communicate it to employees but also provide resources and give incentives to those who are involved in such activities (Cantor, Morrow, & Montabon, 2012). Environmental awareness campaigns have done by companies, which enable employees to identify the importance of environmental sustainability. Instead, when designing awareness campaigns and other interventions, practitioners might benefit from targeting EGBs that are easy and enjoyable.

5.3 Limitations

While conducting the study it is tried to eliminate and overcome flaws but still is has some limitations which must be considered in future research. The first limitation is that all our behavioral measures were self reported, in self reported measures participants exaggerates their feedback and try to show the behavior which is more socially desirable (Podsakoff& Organ, 1986) and whose social acceptance is usually high. Recently found in a Meta analysis, that participants are moderately accurate when they rate their own green behavior (Kormos and Gifford 2014).

Small sample size is another limitation of the study and the reason behind this limitation is short time for data collection. Data was collected from the organizations functioning Islamabad city of Pakistan. It might not represent the whole culture of Pakistan, whereas employees working in different cities exhibit different behavior due to environment and geographical changes.

The third limitation is that, data collected for current study through convenience sampling technique. Most of our participants were young and from middle level management. However,

research (Wiernik, Ones, & Dilchert, 2013) suggests that green behavior is more common among more senior workers. Thus, the perception of employees towards green organizational climate with regard to EGB may be more relevant to younger workers.

Due to convenient sampling and data collected from the few organizations, the results of the present study cannot be generalized for the organization not engage in such green activities.

5.4 Conclusion

The main purpose of the study is to find the relationship between green work climate perception and employees green behavior. It also studied the mediating role of environmental attitude between green work climate perception and green employee's behavior. It further examines the moderating role of conscientiousness between green work climate perception and environmental attitude. The study was conducted on employees working in organizations who are engage in green activities. When data was analyzed to examine the relationships we found that there is a positive relationship between green work climate perception and green employee's behavior. Moreover, it is argued that environmental attitude mediates the relationship between green work climate perception and green employee's behavior. When data was analyzed to examine the moderating role of conscientiousness, it is found that conscientiousness moderates the relationship of green work climate perception and environmental attitude. The result of analysis seems consistent with the literature. That employees who perceive their organizations to be more environmentally friendly they have more positive environmental behavior. And attitude of the employees develop on the basis of intention, perception and subjective norms, that when employees have positive perception about green work climate it help in developing a positive environmental attitude that help in showing green behavior at the workplace. Here the conscientiousness is a significant moderator to

enhance the environmental attitude towards green behavior by interacting with perceptions of green work environment, because people with this personality type tend to be more careful, responsible and they are more likely to interact with environment.

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QUESTIONNAIRE

Dear Respondent,

I am students of MS Management Sciences at Capital University of Science and Technology Islamabad. I am conducting a research on impact of **Greening of Organizations; a theoretical framework linking Employees Perception about Green Work Climate on Employees Green Behavior**. You can help me by completing the attached questionnaire, you will find it quite interesting. I appreciate your participation in my study and I assure that *your responses will be held confidential* and will only be used for education purposes.

Sincerely,

Iqra Anwar

Demographics

Gender	Male	Female		
Age	18-27 Years	28-37 Years	38-47 Years	48-57 years
Qualification	Bachelors	Masters	MS/MPhil	PHD
Experience	1-5 Years	5-10 Years	10-15 Years	More than 15 Years

Please tick the relevant choices: 1= **Strongly disagree**, 2= **Disagree**, 3= **Neutral**, 4= **Agree**, 5= **Strongly Agree**

	Green Work Climate Perception					
1	Our company is worried about its environmental impact.	1	2	3	4	5
2	Our company is interested in supporting environmental causes.	1	2	3	4	5
3	Our company believes it is important to protect the environment.	1	2	3	4	5
4	Our company is concerned with becoming more environmentally friendly.	1	2	3	4	5
5	In our company, employees pay attention to environmental issues.	1	2	3	4	5

6	In our company, employees are concerned about acting in environmentally friendly ways.	1	2	3	4	5
7	In our company, employees try to minimize harm to the environment.	1	2	3	4	5
8	In our company, employees care about the environment.	1	2	3	4	5

Environmental Attitude						
1	It is still the case that the major part of the population does not act in an environmentally conscious way.	1	2	3	4	5
2	There are limits to economic growth which our industrialized world has crossed or will reach very soon.	1	2	3	4	5
3	Environmental-protection measures should be carried out even if this reduces the number of jobs in the economy.	1	2	3	4	5
4	Thinking about the environmental conditions our children and grandchildren have to live under, worries me.	1	2	3	4	5
5	When I read newspaper articles about environmental problems or view such TV-reports, I am indignant and angry.	1	2	3	4	5
6	If we continue as before, we are approaching an environmental catastrophe.	1	2	3	4	5
7	It is still true that politicians do far too little for environmental protection.	1	2	3	4	5
8	For the benefit of the environment we should be prepared to restrict our momentary style of living.	1	2	3	4	5

Conscientiousness						
1	I see myself as someone who does a thorough job.	1	2	3	4	5
2	I see myself as someone who can be somewhat careless. (R)	1	2	3	4	5
3	I see myself as someone who is a reliable worker.	1	2	3	4	5
4	I see myself as someone who tends to be disorganized. (R)	1	2	3	4	5
5	I see myself as someone who tends to be lazy. (R)	1	2	3	4	5
6	I see myself as someone who perseveres until the task is finished.	1	2	3	4	5
7	I see myself as someone who does things efficiently.	1	2	3	4	5
8	I see myself as someone who makes plans and follow through with them.	1	2	3	4	5
9	I see myself as someone who is easily distracted. (R)	1	2	3	4	5

In the following questions please respond on the basis of “to what extent do you think the following statement is characteristic?” On a scale of 1-5 where; **1**=never, **2**=a little bit, **3**=neutral, **4**=characteristic, **5**= always.

Green Employees Behavior						
1	Today, I adequately completed assigned duties in environmentally-friendly ways.(T)	1	2	3	4	5
2	Today, I fulfilled responsibilities specified in my job description in environmentally-friendly ways.(T)	1	2	3	4	5
3	Today, I performed tasks that are expected of me in environmentally-friendly ways.(T)	1	2	3	4	5
4	Today, I took a chance to get actively involved in environmental protection at work.(P)	1	2	3	4	5
5	Today, I took initiative to act in environmentally-friendly ways at work.(P)	1	2	3	4	5
6	Today, I did more for the environment at work than I was expected to.(P)	1	2	3	4	5