

T.C.
İSTANBUL KÜLTÜR UNIVERSITY
INSTITUTE OF GRADUATE STUDIES

**TRIGGERING CORPORATE SUSTAINABLE
PERFORMANCE IN CONSTRUCTION SECTOR THROUGH
GREEN TRAINING: MODERATING EFFECT OF BARRIER IN
CONSTRUCTION MANAGEMENT**

MASTER OF APPLIED SCIENCE THESIS

IMRAN WARIS

1900004865

Department: Industrial Engineering

Program: Engineering Management

Supervisor: Assist. Prof. İlayda ÜLKÜ

DECEMBER 2022

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M.Sc. Thesis
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Abstract

This study aims to explore the key determinants of green training and investigate its impact on sustainable performance moderated by construction barriers. Moreover, to fill the theoretical mechanism that is highlighted and fill the gaps for sustainable performance. The research employed SPSS/PROCESS and follows a cross-sectional research design. Data from 225 employees were collected using a convenience sampling technique from the construction sector. This study highlights the green training to transform green employee behavior that leads to corporate sustainable performance through green recruitment and hiring, giving rewards and appraisals based on the achievement of desired objectives. Last, a study shows in the construction sector of Pakistan that responsible leadership plays a significant role between green training and corporate sustainability performance. This study gives extensive knowledge in green training and corporate sustainability performance. In the future, longitudinal studies due to the study's significance will be more acceptable. This study highlights the gaps and provides insight to the managers, policymakers, and practitioners of sustainable environment and performance. The current study fulfills the need to explore green training in developing economies like Pakistan. These studies are critical in developing countries, where alarming situations have arisen about the environment and poorly implemented government regulations.

Keywords: *Green Training, Corporate Sustainable Performance, Barrier in Construction Management, Construction Sector*

Özet

Bu çalışma, yeşil eğitimin temel belirleyicilerini keşfetmeyi ve bunun inşaat engelleri tarafından yönetilen sürdürülebilir performans üzerindeki etkisini araştırmayı amaçlamaktadır. Ayrıca, vurgulanan teorik mekanizmayı ve sürdürülebilir performans için dikkat edilecek boşlukları doldurmaktadır. Araştırmada SPSS/PROCESS kullanılmış olup kesitsel bir araştırma tasarımı izlenmiştir. İnşaat sektöründeki 225 çalışandan alınan anket verisi çalışmada kullanılmıştır. Bu çalışma, istenen hedeflere ulaşılmasına dayalı olarak işe alma, ödüller ve değerlendirmeler verme yoluyla kurumsal sürdürülebilir bağlamında performansa yol açan yeşil çalışan davranışını dönüştürmek için yeşil eğitimi vurgulamaktadır. Son olarak, Pakistan'ın inşaat sektörünü ele alınan çalışmada, sorumlu liderliğin yeşil eğitim ile kurumsal sürdürülebilirlik performansı arasında önemli bir rol oynadığını göstermektedir. Bu çalışma, yeşil eğitim ve kurumsal sürdürülebilirlik performansı hakkında kapsamlı bilgi vermektedir. Gelecekte boylamsal çalışmalar çalışmanın önemi nedeniyle daha kabul edilebilir olacaktır. Bu çalışma, yöneticilere, karar vericilere ve sürdürülebilir çevre ile performans uygulayıcılarına içgörü sağlamaktadır. Mevcut çalışma, Pakistan gibi gelişmekte olan ekonomilerde yeşil eğitimi keşfetme ihtiyacını karşılamaktadır. Bu çalışma, çevre hakkında endişe verici durumların ortaya çıktığı ve ilgili düzenlemelerinin yetersiz uygulandığı gelişmekte olan ülkeler için kritik bir öneme sahiptir.

Anahtar Kelimeler: *Yeşil Eğitim, Kurumsal Sürdürülebilir Performans, İnşaat Yönetiminde Bariyer, İnşaat Sektörü*

1. INTRODUCTION

The goal of this study is to look at the major factors of green training that contribute to corporate sustainability and are moderated by the effect of the construction management barrier. The building sector makes a substantial contribution to enhancing people's quality of life. However, the growth of the building sector and its products has resulted in worldwide environmental issues (Ngowi, 2000). The construction sector is estimated to be responsible for around 40% of world energy consumption, 30% of CO₂ emissions, and 40% of total solid production waste. As a result, significant adjustments are required to support the global population while doing more with less. Because the built environment is such an important part of civilization, building adjustments are required. The first step is to use highly renewable materials. Because the construction sector often employs a wide range of materials in large amounts, the design and construction of buildings and other facilities is a key area for implementing sustainable improvements. Improvements in material design and building procedures, according to Toor and Ogunlana (2008), are essential success factors for construction projects.

The architecture of buildings that are built is a major area for implementing sustainable changes since the construction sector frequently uses a wide range of materials in big quantities. According to Toor and Ogunlana (2008), advancements in material design and construction techniques are critical success factors for construction projects (Papargyropoulou, Preece, Padfield, & Abdullah, 2011). The fundamental goals of green development are to create buildings that are accessible, safe, healthy, and productive while reducing their influence on society, the ecosystem, and the economy (Shurrab, Hussain, & Khan, 2019). Although sustainability ideas are critical for the globe and future generations, there are various possible impediments to adoption, as previously stated. The primary hurdle is thought to be the initial expense, as the general image of sustainable buildings is that they have higher starting costs than conventional structures (Shawkat, Al-Din, & Kuzovic, 2018). Sustainable structures, according to Castillo and Chung (2004), increase initial expenses by an average of 2–7% above conventional buildings. One of the problems in embracing sustainability, according to Bartlett and Howard (2000) is unfavorable opinions about early expenses.

Though many investigators have looked into various dimensions of sustainability, a large percentage of them have focused on green envelope components

because of their effectiveness in reducing a building's energy consumption while also providing indoor thermal comfort and other environmental benefits, as several research studies have shown (Azari, 2014; Koo, Chung, & Ryoo, 2014; Watts et al., 2015). The built environment refers to the structural elements that make up most of a structure. The roof, walls, windows, and floors are all components that operate as an interface or physical divider between the internal and outside surroundings (Sadineni, Madala, & Boehm, 2011). Other research concentrated on green construction (also referred to as green buildings), which included resource-efficient practices such as energy conservation and the use of renewable radiation in lighting and water heating via solar energy systems (Dastrup, Zivin, Costa, & Kahn, 2012; Hoen, Wiser, Cappers, Thayer, & Sethi, 2011; Wu et al., 2015; Zhang & Ng, 2012).

Sustainability research is scarce on the green practices of building companies. In addition to the requirements for leadership in energy and environmental design (LEED), productivity, and material waste reduction, few studies are concentrating on construction businesses and sustainability initiatives. Furthermore, there was little information available on construction businesses' sustainability initiatives to measure the impact of these green practices on their long-term success. Green construction has several advantages, including ecological, economic, social, health, and public goods. Increased air and water quality, as well as reduced electricity and water use, are all advantages for the environment. Decreased operation and maintenance expenses, as well as increased sales price and rent, are the economic advantages; improved health and tenant comfort, as well as lower risk, are the social and well-being benefit (Baumann et al., 2005).

The principal goals of this study are to offer a framework for green building practices and to evaluate the influence of the proposed framework on the long-term performance of medium and large construction firms. A five-point strategy was used to achieve this goal. The use of green practices and retraining in construction enterprises was assessed using a like-scale survey questionnaire. Companies that work in the construction industry were given the questionnaire. The components were grouped using analysis, and a conformance factor analysis was created to assess the correlation between the variables as well as their impact on the development company's long-term productivity.

Adopting an entire green construction framework is predicted to result in considerable improvements for construction enterprises in terms of economic performance and competitiveness, speed, and cost. The findings of this study will have ramifications for the construction sector and the economy, as the construction industry makes a considerable benefit to the growth. As a result, enhancing build performance is critical for achieving short-term business goals as well as gaining a long-term competitive edge.

The model of the twenty-first century is to enable the company to interact differently with the context wherein they survive Baumgartner (2011), or to embrace sustainable principles that, in addition to creating social and environmental advantages, boost the organization's economic worth Fiksel, McDaniel, and Mendenhall (1999), and the drive for corporate citizenship, which led to the development of social impact judgment tool (Hutchins & Sutherland, 2008).

Green training is the advancement of mentalities, practices, information, and abilities in HR that prevent the loss of environmental views, abilities, and data. GT is defined as the planning of multi-talented employees who are concerned with the progression of information and skills required for growth (Guerci, Longoni, & Luzzini, 2016). Organizational performance is also linked to HR GT since GT instills information and skills in employees who are expected to achieve organizational goals and gain competitive advantages (Fawehinmi, Yusliza, Mohamad, Faezah, & Muhammad, 2020). Individuals should be equipped with the core skills needed to function well in the workplace. Through GT, workers may develop the ability to acquire new knowledge, which can be used to progress technologies and improve organizational long-term efficiency and concentration. Experiential learning has a favorable relationship with firms that are directing GT. The most likely approaches for boosting business advancements are expertise building and exploratory mastering.

1.1 Problem Statement

The green house has been seen to have significant results according to the literature, the topic concerns the type of relationship it develops with the construction management in developing corporate sustainability. Also, the barriers have not been explored in the previous research, thus his research tends to focus on the barriers that affect the green housing training's full potential to be shown in sustainability.

1.2 Research Gap

The literature currently available lacks a framework for describing the corporate sustainable performance in the construction industry research conducted by (Sharma and Gupta (2020)) of Pakistan through green training and employee, barriers in the construction sector This study effectively closes this gap. The report also provides suggestions for practitioners.

1.3 Research Objective the Study Aims to Explore

1. The relationship between green training and corporate sustainable performance
2. The impact of barriers in construction sector management as a moderator.

1.4 Research Question

In the case of green training and sustainable performance, most of the previous studies have focused on the supply chain perspective, and construction organizations through barriers in construction management perspective have been neglected (Norton, Parker, Zacher, & Ashkanasy, 2015). Therefore, it indicates that more research is needed to fully understand the effect of green training on corporate sustainable performance in the presence of barriers in construction management. So, the research question would be like this.

How does green training affect corporate sustainability performance in the construction sector of Pakistan?

How do barriers in construction management moderate between green training and corporate sustainable performance?

2. LITERATURE

2.1 Green Training

Green training considers a helpful activity that motivates employees to understand the issues of the environment and how to protect it (Emel & Caliskan, 2019). Green training's primary purpose is to erode attitudes that are unfavorable to the environment (Amrutha & Geetha, 2021). Prior literature also shows that training positive impact on employee skills, attitudes, and knowledge related to the workplace environment (Jabbour, McClelland, & Schipanski, 2021). However, those employees who are already sensitive to their environment, through training, perform more actively in the prevention process than others (Amrutha & Geetha, 2021). Green movement creates an emotional attachment of the employees to the environment, green knowledge, green attitude, green skills, green activities, and green environment management system (Pham, Phan, Tučková, Vo, & Nguyen, 2018). Green training launches and organizes live programs that create a green climate. In this green climate, introduce lots of programs and events on saving energy, waste reduction at the workplace, and sharing opportunities for everyone to contribute their part to the environment (Aragão & Jabbour, 2017). Literature shows that training is not enough for desired results, so need readiness, and criticism is also required (Jackson, Renwick, Jabbour, & Muller-Camen, 2011).

2.2 Corporate Sustainable Performance

Corporate sustainable performance was first time discussed (Brundtland, 1987). “It was defined as a type of development that satisfies current wants while without jeopardizing the capacity of future generations to satiate their own needs, However, corporations find it challenging to adhere to this macroeconomic definition, and several other notions are put out by large organizations and scholars to make this definition more microeconomic. The concept of ripple bottom line, firstly brought forward by Elkington in the book *Cannibals with the forks-The triple bottom line of the 21st century* in Borman and Motowidlo (1997), was widely acknowledged by academics and practitioners, It proposed a new, responsible approach to organizations that they should simultaneously consider and balance environmental, economic, and social dimensions of sustainable development in practice.”

In the construction sector, sustainable performance depends on sustainable manufacturing. US Department of Commerce defines sustainable manufacturing as “the creation of a manufacturing product produced using methods that are safe for workers and communities, preserve energy and natural resources, have little impact on the environment, and are financially stable.” (Székely & Knirsch, 2005). This definition is widely accepted because it follows the “Triple Bottom Line”. For sustainable manufacturing, organizations control and work on economic sustainability. So, organizations implement financial and non-financial performance improvements to save manufacturing costs (Jia & Li, 2020). However, environmental sustainability is implemented when careful use of resources, energy conservation, pollution reduction, energy efficiency, emissions reduction, and consumption of hazardous materials that also save manufacturing costs less cause environmental consumption. Social sustainability is also essential for the organization, where organizations provide equal opportunities, encourage all, and foster connections within and outside the community. After these steps, ensure the quality of life and accountable governance structures (Mousa & Othman, 2020). Sustainable performance requires measuring and assessing sustainability from time to time. In literature research, international institutions have developed many key performance indicators to measure the sustainability of performance (Saudi, Obsatar Sinaga, & Zainudin, 2019). The consensus of all indications, now three indications are more important for sustainable performance: economic second, social, and third environmental.

2.3 Barrier in Construction Management

Construction management is a complicated process that can be difficult to manage. The barriers it faces are not just internal, but also external. With the construction industry being notoriously unstable, barriers to sustainability can arise from many different sources. Different barriers affect construction such as coordination.

Coordination has a significant role in managerial activity (Fayol, 1949). Lack of coordination results in a loss of information exchange and interdependency linking. According to March (2009) construction is hired for contractual and temporary jobs and thus changing the workforce would be an impact on work as they are habitual of not developing long-term working relationships and team working, therefore the barrier them would play an efficient function in a working process. However, another

scholar, Chitkara (1998) believes that within construction the barrier role varies as per the department.

Research conducted by Hossain, (2009) shows coordination is a subjective term and can't be measured quantitatively. Thus, different categories are established to understand coordination in construction. The five main groups are the Construction's nature, its contributor, its management strategy, its organizational traits, and conventional contracting arrangements.

2.3.1 Nature of Construction

Few of the barriers are seen to be because of the construction nature. Its intangibility in project activity, different (i.e., low repetition and unique), temporary and short-term projects, and labor intensity. These cases result in a larger barrier in coordination with the effect of the construction.

2.3.2 Construction Participants

This includes the myriad related activities in construction that constrain a large number of participants to carry out a task (March 2009). These participants are multi-disciplinary and play different interdependent roles in a construction project, thus a barrier of coordination is seen. Similarly, unfavorably adversarial relationships and uncommon objectives among participants aggravate the problems of coordination.

2.3.3 Construction Management Approach

The informal tone of communication and method often leads to barriers to further coordination; thus, documentation is mandatory in construction management.

2.3.4 Characteristics of the Organization

At this point, project-based organizations or temporary partnerships that supply construction services are likewise viewed as defective.

2.3.5 Traditional Contractual Arrangement

Generally, design-bid-build is known as a traditional contracting system and is commonly practiced in construction project delivery. This is also found to be risk-taking in terms of low-bid pieces and multi-layer of construction. Fragmentation of the construction process and uneven risk allocation are also seen as a result.

3. HYPOTHESIS

This research uses three variables one is independent; the second dependent variable and the third variable uses a moderator. The Study proposed two hypotheses one hypothesis is green training's impact on sustainable performance and the second construction barrier play moderating role play between green training and corporate sustainable performance. All hypotheses are developed under the theoretical lens organization fit theory. Organizations make policies that increase employees' mindset toward goals.

3.1 Study Framework

In this study, the researcher uses the person-organization fit theory to test the existing mechanism. The theory known as the "Person-Organization Fit Theory" explains how well people and organizations get along. Positive outcomes will be encouraged when an individual finds a position inside an organization that satisfies his or her personal and professional standards. Other theories are also available that cover that phenomenon like, "organizational learning theory" Organizational learning theory does not cover all the mechanisms, the theory of organizational learning focuses on the creation of knowledge and the use of that knowledge within an organization, key aspects of organizational learning theory are that learning happens when people interact while finding and solving problems". But the person-organization fit theory focuses on productivity, performance, and personal well-being. It creates compatibility between a person and an organization where they are doing work. Moreover, person-organization fits theory congruence of patterns of organization values and congruence of individual values. So, that's why use person-organization fit theory that covers the whole phenomenon as per required.

3.2 Green Training and Sustainable Performance

Corporate sustainable performance is organized at the organization in different levels, like "operation, manufacturing processes, the whole facility, the supply chain, the world at large." For better performance, most countries set environmentally sustainable indicators like Europe's most famous environment agency set indicators, and these indicators evaluate by International Organization for standardized environment indexes. Not only in Europe but also United States of America indicators focus on sustainability. "Questions about the Walmart Sustainability Product Index

and the Global Report Initiative emphasize the status of the entire factory (Zaid, Jaaron, and Bon (2018)), Additionally, several investigations have demonstrated that the sustainable performance evaluation indicator systems could be classed into different functional views, such as operational performance, marketing performance, and financial performance developed by (Zaid et al. (2018)) Recently, most industries especially mineral industry, automotive have introduced some sustainability through evaluation performance and launch some indicators of sustainable performance (Habidin, Zubir, Conding, Jaya, & Hashim, 2013).

Manufacturing factories may choose different indicators to form their evaluation indicator systems of sustainable performance based on specific requirements (Habidin et al., 2013). What's important is that a unified evaluation indicator system of sustainable performance should be established when we intend to compare the performance improvements among different factories. A sustainable performance evaluation indicator system is not available in the context of production, and a unified one is pressingly needed (Amrina & Yusof, 2011).

So, lots of antecedents have been explored in the literature that help incorporate sustainable performance. Like, triple bottom approach (balancing environmental, economic, and social dimensions of sustainable development in practice), one of the antecedents of CSP (Henry, Buyl, & Jansen, 2019), green human resource management (Zaid et al., 2018), knowledge management process (Shahzad, Qu, Zafar, Rehman, & Islam, 2020) and sustainable leadership (Iqbal, Ahmad, Nasim, & Khan, 2020). The absence of research when green training is used for corporate sustainability performance in the construction sector. Green training the employees on managing, handling, and controlling the environment that will lead to sustainable performance (Amrutha & Geetha, 2021). Hence, based on the above arguments, the researcher proposes the positive relation of green training to corporate sustainability performance.

(H₁): Green Training is positively correlated to corporate sustainable performance.

3.3 Moderating role of Construction Barrier in Management

Green training and performance management is an increasingly popular topic in the green economy. The green economy relies on sustainable practices to increase efficiency, reduce costs, and create a better environment for future generations. Training is essential for green employees so they can learn how to use their skills more efficiently while also reducing waste. However, without coordination between green managers and HR departments, green training will not be effective enough to meet the expectations of green companies (Fathalizadeh et al., 2021; Zaid et al., 2018). Therefore, this study aims to identify the moderating effect of the coordination construction barrier in management on sustainable performance.

(H₂): Construction barrier is a moderating role between green training and employee corporate sustainable performance.

3.4 Framework

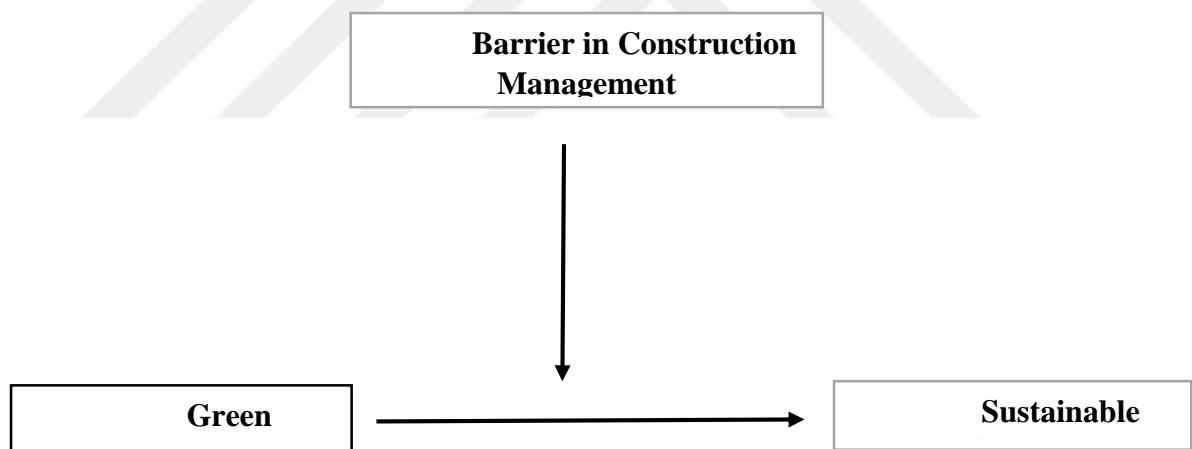


Figure 1. Theoretical framework

4. METHODOLOGY

The methodology defines and covers all the procedures of completing the research, like how to collect data through questionnaires or interviews. This study collects data through the instrument and then runs analysis in SPSS.

4.1 Philosophy and Paradigm

To examine the relationship, used positivist paradigm scholars have mostly used this paradigm in theory testing (Christiansen & Higgs, 2008). Literature in quantitative research uses data collection from respondents to address the research questions. Westbrook (1994) has discussed the quantitative method is used for an in-depth understanding of the phenomenon in social science. In this study, the Researcher chooses and targets the population construction sector of Pakistan. In this study quantitative approach is used to inspect the relationship between green training, responsible leadership, employee green behavior, and corporate sustainable performance. A total of two hypotheses have been tested in this study.

4.2 Research Design

Research, main two types of research design are used is cross-sectional and the second is the longitudinal research design. Cross-sectional research is conducted in a single period, but longitudinal research design is conducted in two or three different periods because longitudinal research collects data at two different times. In research longitudinal research is more worthy because data is more reliable, no biases in the data because collected at two different times. That research is also quantitative, so convenient sampling is used for this study, and sample selection and data are collected through a cross-sectional research survey design. To avoid social desirability and the anonymity of participants and organizations was ensured and participants would be informed that there are no right/wrong answers (Spector, 2006). The information provided would be treated with complete confidentiality and used for academic purposes only.

In this study, the researcher collects data on different demographic variables that make more significant results. The data is collected from Gender (Male and female), and different education groups like inter to master and experienced persons. In the next chapter of the analysis percentages of demographic variables are available in detailed form in table 2.

4.3 Population and Sampling

This study used a questionnaire as a measuring tool to collect data because a questionnaire offers reliable primary data for a large sample size. A closed-ended questionnaire is used to encourage higher response (Collis & Hussey, 2014), as close-ended questionnaires are easier for respondents to answer (Spector, 2006). As this research is conducted in Pakistan, data is collected from different construction sectors. A questionnaire was filled in with employees because they are facing all the challenges of the corporate sector. First, email the HR manager for a meeting, and after the appointment the researcher discussed the research's worth and authenticity and how it's important for all construction sectors. During the meeting, the researcher assures the manager about the confidentiality of the data and responses of all the employees will be fully secret. After confirmation, send emails and provide hard forms to the employees. After two to three follow-ups getting a response from the respondents. After receiving the response start the first screening and drop responses where information was missing.

4.3.1 Sample Size

According to Hair et al., (2011) sampling method is used for data collection. Fifty organizations in all, along with the data collected, are included in this study. Fifty organizations receive 300 respondents who complete the survey, however the actual data utilized for analysis is only 225 after filtering and treating missing values.

4.3.2 Unit of Analysis

“A unit of analysis is referred to as the type of case that the research topic, the variables under examination, and the data collection and analysis pertain to (Collis & Hussey, 2013). The unit of analysis is individual as the researchers investigated the triggering corporate sustainable performance in construction sector through green training, moderating effect of barriers in construction management. Then, this study focused on individuals who are all employed in the construction industry. The convenience sampling strategy, a type of non-probability sampling was used to select and approach employees who are available and willing to participate in the study (Creswell, Chung, Clark, & Martin, 2014). In this study convenience sampling is used because some of the respondents hesitate in giving the required information.

4.4 Data Collection Procedure

In this quantitative research, a questionnaire is administered to collect data from respondents using Google Forms to save cost, time, and provide convenience to respondents and reduce bias (Forza, 2002). Online questionnaires also enable the respondents to enter their responses directly into the database, which will reduce the errors that occur in inputting data into software (Forza, 2002). Questionnaires are forwarded to the respondents by email.

The questionnaires are distributed through contacts in various organizations. Then, after removing the questionnaires that show missing information as well as outliers, usable questionnaires are included in the statistical examination. Determining a suitable sample size is very critical (Kerlinger & Rint, 1986). This study is targeted at the construction sector of Pakistan. All staff members and managers are formally guaranteed the confidentiality of their replies. Taking responses on all variables from one respondent may lead to common method bias. To address common method bias, factor analysis was conducted.

4.4.1 Survey Administration Plan

In this research study, the researcher administers a survey through personal and online survey administration techniques to ensure a higher response rate and handle time and cost constraints. A typical five-level Likert item is used as follows for all the questions severe disagreement, disagreement, neither agreeing nor disagreeing, in agreement.

4.4.2 Questionnaire Distribution

The researcher distributes questionnaires to companies selected based on random sampling techniques through courier and email services in the mid of February 2022. After questionnaire distribution follow-up call will be made to participating companies to respondents to fill out the questionnaire.

Green Training

GT-1: I am provided with sufficient opportunities for training and development in environmental management.

GT-2: I receive the environmental training I need to reduce the environmental impact of my job.

GT- 3: Environmental training is given a high priority in this organization.

Corporate Sustainability Performance

CSP1. My company commonly reduces hazardous waste and emissions, etc. to conform to environmental regulations.

CSP2. My company commonly consumes a few resources, such as energy, water, electricity, gas, and petrol.

CSP3. My company achieves profit growth commonly due to energy consumption and materials reduction.

CSP4. My company always commits to better services and the code of ethics to satisfy the public's and the government's needs.

All Variables are reliable because Cronbach's Alpha value is greater than 0.7 (George & Mallery, 2010). Second, in this study validity confirm through bivariate correlation analysis all values of total column are significant that is showing validity of the constructs. (See Appendix Table 1).

4.5 Time Horizon (Cross-sectional/Longitudinal)

This research is carried out using a cross-sectional research design. Cross-sectional research is used in social science for quantitative analysis.

4.5.1 Measuring Scale

For this study, already developed and tested questionnaires are adopted. Responses for the variables were graded on a 5-point agreement 1 = "Strongly Disagree" and 5 = "Strongly Agree" on a Likert scale. higher ratings for each variable indicated increased levels of construct.

4.6 Control Variables

Previous research showed that individual characteristics like gender, qualification, and experience may influence relationships (Chen & Hou, 2016). In this study, used Gender, Organization Age, Organization Type, Organization Size, and employee Qualification as control variables. Similar control variables were used in research related to Green HRM.

4.6.1 Dependent Variable

Corporate sustainable performance is measured with a 4-item scale which is developed by (Mousa & Othman, 2020). One representative strongly disagrees, and the fifth strongly agrees.

4.6.2 Independent Variable

Green training is measured with a scale developed by (Voegtlin, 2011). This scale includes 3 items. Ask respondents how they agree or disagree with this statement, 1=little extent and 5 great extents, the respondents rate the items 1 to 5.

4.6.3 Moderation Variable

The barrier in construction management scale was adopted for this study. This scale includes 4 items. Ask respondents how they agree or disagree with this statement, 1=little extent and 5 great extents, the respondents rate the items 1 to 5.

4.7 Analytical Procedure

First, check the reliability of the Scales. Second tests and analysis are used to get the descriptive statistics, means, standard deviations, and third correlation analysis. And in the fourth step run regressions with assumptions. In the fifth and last step, run a mediation and moderation analysis of all variables and examine the effect of mediation and moderation by using PROCESS Macro for SPSS developed by Andrew F. Hayes (Hayes, 2014).

5. DATA ANALYSIS

Statistical Package for the Social Sciences (SPSS) version 23 was used for the data analysis for this study. Initially, data were screened for omissions and missing values, while the presence of outliers was assessed using boxplots. Following data cleaning, the preliminary analysis included the calculation of descriptive and frequencies as well as tests of normality. Normality is the basic assumption of multivariate data analysis and a requirement for accurate results. One manner of testing the normality of data is to measure item-wise skewness and kurtosis.

The reliability of a measure is an indication of its internal consistency. For this study, the reliability of the measures used was determined through Cronbach's alpha value, where $0.7 \leq \alpha$ is regarded to be acceptable (George & Mallery, 2010). In this study all variables are reliable (See Appendix) Moreover, variance inflation factor (VIF) scores and tolerance statistics were also obtained to measure collinearity among the predictor variables (Hair et al., 2011). Collinearity is defined as the condition wherein the independent variables are found to be highly correlated, leading to an inflated level of variation and accuracy of results (Hair et al., 2011). As a rule of thumb, VIF scores greater than 2 and tolerance statistics less than 0.1 are regarded as an indication of Multicollinearity (Hair et al., 2011).

As an ex-post measure, Harman's single-factor test with principal axis factoring via SPSS was used to assess common method bias (CMB). CMB is a concern that arises when the same method (e.g., single-source data, self-reports) is used to measure multiple constructs. This consequently raises the risk of encountering "spurious" variance based on the method rather than the actual predispositions of the participants. The maximum variance of greater than 50 percent explained by a single factor may point toward the presence of CMB (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Macros PROCESS software application for SPSS (Preacher & Hayes, 2008) was used for testing the hypothesized relationships between variables. For assessing direct and indirect effects, Model 4 of macros was used (Hayes & Preacher, 2014). In comparison to the multistep approach mediation analysis via macros PROCESS is given preference as this approach is based on formal significance tests of the indirect effect *ab*. Resultantly, it is argued that this method is more powerful and advanced for

conducting path analysis as it more directly focuses on the Macros process Model 1; developed by (Hayes and Preacher, (2014)) is also used for moderation analysis wherein moderation is considered to be present if the interaction term between the predictor and moderating variable is significant ($p < 0.05$).

5.1 Preliminary Analysis

The researcher collected data from approximately fifty organizations, it was difficult but use personal resources and linkages due to the possible activity. Just two organizations apologize for participating in this research, one organization arranged a meeting for a better understanding of the language of the questionnaire. Because literature shows this is very important before collecting data ensure language should be clear and easy. So, after the meeting, they fill out the questionnaire. After data collection and entering the data in the SPSS find out the missing values and outliers. Moreover, Means, standard deviations, alpha values, and correlations analysis run among the key variables and are presented in Table. All measures used were deemed to possess good internal consistency ($0.7 \leq \alpha$). This value shows all variables data reliable, with no item to delete in the questionnaire. As per Statistical experts when Cronbach's Alfa Value is 0.7 or more this is a sign of reliable data. Furthermore, findings indicate all relationships were significant in the hypothesized directions. Collinearity diagnostics computed via SPSS indicated that multicollinearity was not a problem as VIF scores were below 2 and tolerance scores above 0.5. Research shows if the value of IF is 0.5 then this can be ignored and if the value is greater than this then the issue of multicollinearity exists. Data was also indicated to be normally distributed as item-wise skewness values were less than ± 2 and kurtosis less than ± 3 (see appendix A). No significant outliers were identified.

5.2 Common Method Bias

Given the intrinsic and implicit nature of the variables, self-report measures were used. Such an approach is in line with previous research studying employee silence (Tangirala and Ramanujam (2008)), as the motivations underlying silence behaviors are generally known only to those who engage in them. Furthermore, literature repeatedly demonstrates that employees' perceptions of workplace practices significantly vary from managerial reports of the use practices, and it is these perceptions that subsequently shape employees' attitudes and behaviors (Bowen &

Ostroff, 2004; Den Hartog, Boon, Verburg, & Croon, 2013). Additionally, self-reported measures are also considered to be more appropriate in contexts where objective information is not readily available or is perceived to be biased. Particularly in developing countries such as Pakistan, organizations generally tend to not reveal or share accurate information, especially concerning their work practices and employee behaviors. Therefore, considering such evidence and the challenges present, the use of self-report was justified for current research.

Nevertheless, the threat of social desirability is a recognized issue and certain measures were incorporated to mitigate its impact (both ex-ante and ex-post). Following Podsakoff et al. (2003) guidelines, the identities of participants and their respective enterprises were kept completely anonymous. Furthermore, the participants were also informed that there are no right or wrong answers and temporal separation Podsakoff et al. (2003) was applied in the questionnaire to keep the predictor and criterion variables separated from each other. In addition to this, social desirability was incorporated as a control measure. Such an approach helps to control the presence of common method bias (CMB) and has been used in past research for the same purposes. According to Podsakoff et al. (2003), CMB may present as an issue when a single factor explains more than 50 percent of the variance. Since the maximum variance explained by a single factor was not more than 30 percent (see appendix A), CMB was not deemed to be a serious problem (Podsakoff et al., 2003).

5.3 Outliers and missing values

Without identifying, outliers cannot get a good result from the data. So, first Identify outliers and treat them properly the very first step after entering the data into the software. At the time of data collection, respondents sometimes write the wrong numbers like writing 33 in place of 3 or sometimes unintentionally miss the entry. Second, during the manual entry typing errors occur and miss or skip the values to enter the software. All these types of errors appear as outliers in the software that affect the results. So, it's compulsory before data analysis to resolve that problem for a clear picture of the results.

Table 1. Excluded data and the total number of attendees

Statistics	Gt_1	Gt_2	Gt_3	Con_1	Con_2	Con_3	Con_4	Con_5	CS_1	CS_2	CS_3	CS_4
Valid	223	225	223	223	222	223	225	224	224	225	225	225
Missing	2	1	0	2	3	2	0	1	1	0	0	0

5.4 Exploratory Factor Analysis

Exploratory analysis shows convergent validity and discriminant validity. Because before regression analysis is very important to check the validity of the data. In exploratory factor analysis, gather information on one very item loaded in the relevant field. If items load another field, then exclude them as per the literature.

5.5 Demographic Characteristics of Sample

Table 2. Demographic characteristics of respondents

Demographic Measures	N	%
Gender		
Female	91	0.38
Male	143	0.6
Organization age		
6-10 Years	41	0.17
11-15 Years	53	0.22
16-20 Years	140	0.59
Education		
Intermediate	1	0.42
Bachelors	121	0.51
Graduation	11	4.6
Master	104	0.43
Organization type		
Construction	225	100

Table 1 depicts the frequency distribution regarding the demographic characteristics of the respondents. The gender demographics represent that most of the respondents 143 were male, while 91 were female. Moreover, the statistics of age

represent most respondents lie in the middle age range of 16- 20 years. Furthermore, most of the respondents hold a graduation degree.

Frequency Tables, All demographic and variable details are mentioned below, in this table, detailed information about the ratio of our demographical respondents. So, the first table provides information about gender.

Table 3. Demographic characteristics

Main Category	Subcategory	Frequency	Percent
Gender	Male	151	67.1
	Female	74	32.9
Age	20-30	16	7.1
	31-40	111	49.3
	41-50	42	18.7
	Above 50	40	17.8
	less than one year	64	28.4
Work Experience	2 years-4 years	64	28.4
	5 years-7 years	17	7.6
	8 years-10 years	17	7.6
	Above 10 years	63	28.0
Qualification	Intermediate	35	15.6
	Graduation	70	31.1
	Masters	86	38.2
	M. Phil	32	14.2
	PhD	2	.9
Total		225	100.0

The detail of respondents that participated in this research is shown in Table 2. Male respondents 151 and female respondents 74 that part of this survey. This table also shows the percentages of the gender. The above table is showing the detail of the respondent's age that participated in this research. The research range selected for this research is 20 years to 50 years. The table is showing 21 to 30 years of respondents are more than other age criteria. Age participants in this research use twenty years and Fifty years. The above table is showing the detail of the respondents' Education that participated in this research. The table shows in this research dynamic people who participated in this research. In this research, the range is selected from Intermediate to Ph.D. Participants. Table is showing Mater degree holders are more than other education. Fewer participants related to the Ph.D. holders contribute to this research.

The above table is showing the detail of the respondents ages that participated in this research. The research range selected for this research is 20 years to 50 years. The table is showing 21 to 30 years of respondents are more than other age criteria. Fewer age participants in this research are between twenty and fifty years.

5.6 Correlation

Pearson correlation was used to evaluate the relationship between variables. This test is used to assess the relationship between two continuous variables, in terms of their magnitude and direction. Literature guides us before regression analysis needs to be run correlation analysis that would show the normality of the data. Second, correlation analysis confirms the results that are hypothesized, whether the relationships are positive or negative, and confirms the significance. A correlation between two variables is strong and significant when their *R*-value “R” value shows Correlation between two variables and the *p*-value in the bivariate analysis should be less than 0.05, in this research using software for data analysis is called the Statistical Package for Social Sciences (SPSS). As stated by this software manual “P” Value in results would show significant results. However, if *R*-value is greater than 0.7 may be an indication of collinearity between variables (Gravetter & Wallnau, 2013).

Table 4. Bivariate correlation analysis

Variable		1	2	3
		Green Training	Corporate Sustainable Performance	Construction Barrier
1.	Green Training	1		
2.	Corporate Sustainable Performance	0.430**	0.156*	
3.	Construction Barrier	0.133*	-0.081	0.171**

Note. *N* = 210. Values along the diagonal are Alpha reliability. **p* < .05. ***p* < .01.

Table 1 depicts the values of inter-correlations, of the variables. Green Training has a strong relationship with Corporate sustainable performance ($r = 0.430^{**}$, $p < 0.01$). This value shows both variables green training and corporate sustainable performance as positive and significant and correlates with each other because the “P”

value is less than .05. Furthermore, a Double star on the Value is a sign of strong correlation. Second, green training and construction barrier ($R= 1.333^*$, $p < 0.01$) is also positive and significantly correlated with each other. Moreover, one star shows a good correlation between variables. Third relation of corporate sustainable performance and construction barrier ($R= -0.081$, $p < 0.01$) R-value is showing a negative correlation with each other.

5.7 Hypothesis Testing

The results of the regression analysis are presented in Tables 3 and 4. In this study the following hypotheses are proposed. After the formation of the hypothesis, data from the respondents and perform analysis for accepting and rejecting the hypothesis. For analysis, SPSS software is used in this research. According to the results, all hypotheses are accepted.

According to this study and framework, the possible hypothesis that can be developed is given below.

Hypothesis 1.

(H₁): Green Training is positively correlated to corporate sustainable performance.

Hypothesis 2.

(H₂): Construction barrier is a moderating role between green training and employee corporate sustainable performance.

5.8 Regression Analysis

Table 3 shows the results of the regression analysis. Regression analysis is used for the impacts of variables, if you have two variables one is an independent variable second is a dependent variable researcher runs a regression analysis. Through regression analysis, the result shows the impact of the independent variable on the dependent variables. In regression analysis Beta value shows the impact of the variables and the P value shows the significance of the variables.

Table 5. Regression analysis for hypothesis 1

Job demand	β	<i>P</i>
Green Training	0.49	.000

Table 3 supports hypothesis 1 that green training impacts significantly sustainable performance ($\beta=0.49$). Beta Value shows if we add in one point in green training due to 0.49 positive change in corporate sustainable performance. As per statistics, if the P Values are less than 0.05 it means the relationship is significant. In this research, we use Statistical Package for Social Sciences (SPSS) for results. So, according to this software “P” value guide the significance, and the “beta” Value shows the impacts of one variable on the other.

Moreover, why, and when regression analysis needs to be run and why in this research researcher run regression analysis. Social science research when requiring information about one variable how much impact the other variable or how much change one variable is due to the other variables. However, this research also checks the impact of one variable like green training on corporate sustainable performance, so this is the reason we run a regression analysis.

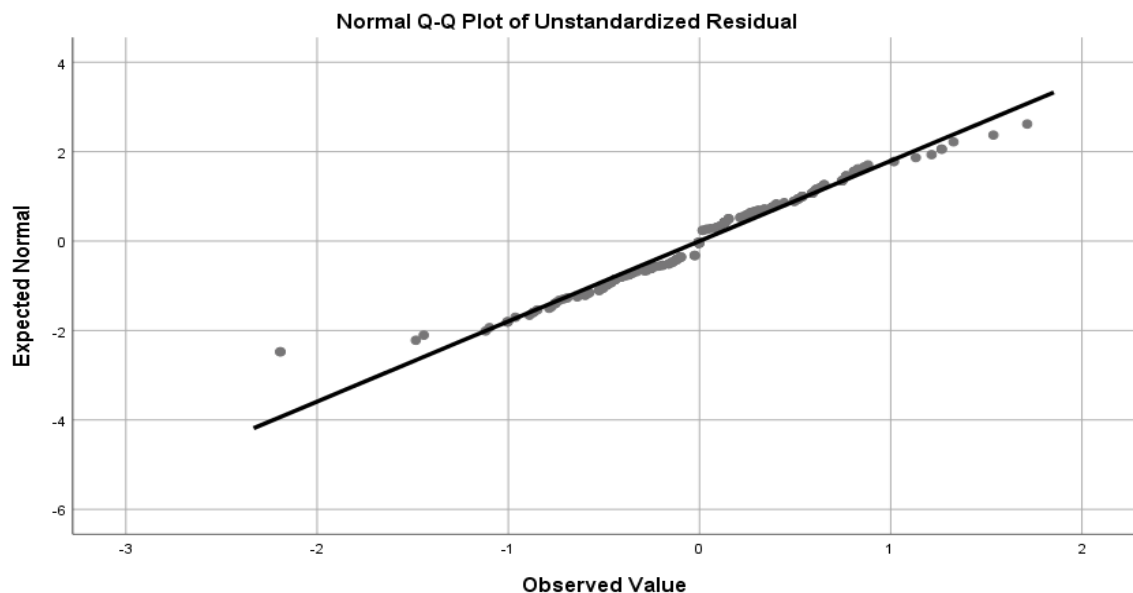


Figure 2. Normality graph details

Normality is one of the most important assumptions of regression. As per statistics, regression fulfills all the assumptions of the normality before regression. So,

this normality graph shows no normality in the data because all dots are near the line. If dots are far away from the line, then its means, normality exists in the data.

Table 6. Moderation analysis for hypothesis 2

	β	<i>P</i>
Green Training * Corporate Sustainable	-0.366	0.03

Table 5 supports hypothesis 2. Results show that the p-value is less than 0.05 which shows that the construction barrier is moderating between green training and corporate sustainable performance. In this table “ β ” Value is negative, which means due to the construction barrier the relationship between green training and corporate sustainable performance is weak.

5.9 Cost Analysis

Green building in the construction industry is a new and genuine sustainable solution. On the one side green buildings are beneficial for the environment and second, this new way of construction attracts more clients. It means green buildings have generated more sales for the construction industry. In the overall world are switching from old methods to green buildings. Green buildings are more reliable, beautiful, and good for the environment. However, the financial aspect consider is a key element of every business. Companies invest in research and development on how to make more innovation at a low cost. Because, after some time environment forcefully pushed every construction industry to adopt Green Construction.

Currently, some drawbacks are existing to this solution and technology, Research and development institute are working on this method. How and when do we get maximum benefits from this?

This research tries to find disadvantages or any harmful things in green construction but is unable to find out. Currently, this is very expensive to install, but near future after R&D prices will be decreased. Moreover, the conventional method in which the use of generators makes causes damage environment, thus businesses are adopting green technology that decreases carbon, less waste, and minor energy as

compared to the older one. Another benefit, of green training, is creating several jobs that have expertise in this area.

5.10 Breakeven Analysis

As per the researcher and literature review, one technology to shift other technology industries faces lots of challenges in the shape of time, expense, skill labor, research and development, and pilot testing. So, all these things demand time. The positive thing is this, not only does one country want to adopt this technology but also all the world wants to implement it. So, expectedly within five years companies will adopt this technology and save the environment.

The data is obtained by a construction company named Habib Construction located in Pakistan, Lahore. The fixed cost is 3,500,000 Pakistani Rupee (PKR), sale revenue is 60,000 PKR per month (rental Income) variable cost is 10,000 PKR per month break even comes after 58 months making 5.83 years.

Why this amount is considered, this is one of the projects that has been started by Habib Construction Company. So, this study uses this project as an example and estimation of the breakeven point.

Table 7. Breakeven point of the construct

Fixed Cost	3,500,000 PKR (Salaries, Interest, Insurance, Benefits, Utilities)
Sale Revenue	60,000 PKR / month (Rent Charges, Maintenance Charges, Seminars)
Variable Cost	10,000 PKR / month (Billable Staff Wages, Commissions, Production Supplies Freight Out)
Break-even	70.000 PKR
Years	5.83

Table 8. Yearly cost analysis

	2018	2019	2020	2021	2022	2023
Total Investment (PKR)	3,500,000	2,900,000	2,276,000	1,628,000	932,000	212,000
Revenue (PKR)	720,000	792,000	864,000	936,000	1,008,000	1,080,000
Expense (PKR)	120,000	168,000	216,000	240,000	288,000	336,000
Profit (PKR)	600,000	624,000	648,000	696,000	720,000	744,000
Remaining (PKR)	- 2,900,000	- 2,276,000	- 1,628,000	-932,000	-212,000	532,000

For touching this point company trained their resources a minimum of 20 and a maximum of 25 in this type of project mentioned above. According to the company information, nothing can share fix amount, every time margin and change is existing according to the situation. The second company to save expenses has built its production plant (That is the fixed expenses after installation, Salaries, Interest, Insurance, Benefits, and Utilities). It means first producing the material and then using it in construction. In this way, they save lots of expenses. Annual expenses include (maintenance expenses, Billable Staff Wages, Commissions, Production Supplies Freight Out). In total investment add all expenses like salaries, manufacturing, transportation cost, and installation cost included. However, by spending all expenses and getting revenue (Rent Charges, Maintenance Charges, and Seminars) the company will earn profit at the end of the 6th year.

The formula for break-even point is given in Equation 1, where TR represents the total revenue and TC represents the total cost.

$$TR = TC \quad (1)$$

In Equation 2, the remaining investment amount is calculated as:

$$\text{Remaining investment amount} = \text{Total investment} - (TR - TC) \quad (2)$$

The above table shows the breakeven of the company. For example, first in 2018 total investment is 3,500,000, expenses were 120,000, and revenue get from the whole year was 720,000. After the deduction of all expenses and variable costs, the remaining amount is 2,900,000 after getting the revenue. Now next year this amount of 290,000 was brought down in 2019 and so on. In 2023 no remaining balances are existed as per this table. After 5.83 years the company recovers the amount that was invested and goes for a profit.

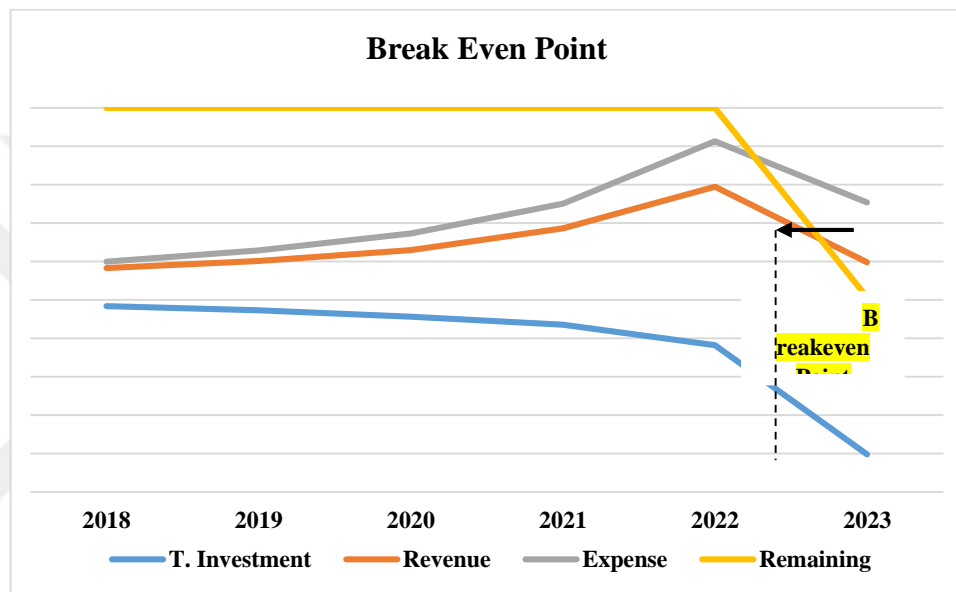


Figure 3. Breakeven Point

This Figure shows when the company touches 2023 will move the profit. The orange line shows in this figure the remaining amount of the construction industry. 2018 to 2022 the company is covering expenses and variable costs but after 2022 gets a breakeven point. In all processes, the company uses 5.83 years.

6. CONCLUSION

This chapter has discussed the findings of this study considering the findings of previous studies and theoretical perspectives.

The purpose of this study is to explore the direct effect of green training on corporate sustainable performance and moderating role of responsible leadership. As per the literature, all proposed hypotheses positively relate to each other. In this research, the researcher targeted the Construction sector of Pakistan. After analysis, all hypotheses are significant and positive about each other, rather than moderation. Detailed findings are discussed in given below.

6.1 Green Training and Corporate Sustainable Performance

This study shows that green training is positively associated with corporate sustainable performance. The main reason for this positive relation is that green training in the corporate sector creates a shared sense among staff members of the importance of the green environment. This training develops the positive green behavior of the employee that leads to corporate sustainable performance. In response, such behavior motivates the employee to put their efforts into achieving business goals. However, these perceptions and attachments encourage the employee's green behavior, and literature shows this behavior helps the employees to perform for the organization. The findings of this study are consistent with the assumptions of the P-O theory. Which stated that the compatibility between individuals and the organization creates value congruence (fulfillment of mutual values), personality congruence (similarity between individual's personality and other staff members of the organization), work environment congruence (shared individual and organizational goal). The results show that when employees adopt this behavior that gets from the training then not only performance but also the sustainable performance of the company increase. Hence, those organizations that want to increase performance and survive in the market first put efforts into green training that automatically positive impact on corporate sustainable performance. green training link with performance and corporate sustainable performance positive relation according to the literature. But the absence of research in this context, green training, and corporate sustainable performance. So, results are showing both are not only significant but also positive relationships with each other. However, findings suggest that the industrial sector implements green training in an organization that plays an influential role in the

environment, social, and economic activities. Such perception helps the other organization too to implement green training in organization.

6.2 Construction Barriers moderating role play

The moderation construction barrier is significant in this research. Several reasons that the researcher discusses are given below. Literature suggests that prior empirical research shows construction barriers negative and significant role play in green training and sustainable performance. So, when green training and construction barriers can combine role-play, weaker the relationship of corporate sustainable performance. However, one of the reasons for the significance, Pakistan still discusses under developing countries so there no advance technology and resources that support this technology. So that's why construction. Lots of studies reported that when the system is not supported the workplace performance of the employees and organization decreases.

6.3 Theoretical Implication

The findings domain of this study contributes to both theoretical and practical disciplines. In the theoretical field, this study contributes to the emerging literature on green training by explaining the impact of corporate sustainability performance. First, this study shows that organizational policies, when aligned with the vision and mission, enable them to promote green employee behavior towards its core business. Hence, in the construction sector, green training positively impacts sustainable corporate performance.

Hence, in the first stage, green training develops a shared sense of belonging towards green behavior on the alignment and current importance of the environment, which refers to congruence value. Such unity between employees and the construction sector enhances motivation (intrinsic and extrinsic) to perform for the organization's corporate sustainable performance. Similarly, the findings suggest that green training creates decorum between employees and the industrial sector based on their feeling that they are getting social and economic rewards in terms of fulfillment of sustainable corporate performance.

6.4 Practical Implications

In terms of practical implications, this study provides evidence to the construction sector of Pakistan that they need to formulate strategies and policies based on current requirements. The industrial sector has an essential role play in Pakistan's gross domestic profit. The current government gives a flexible environment in terms of rules and procedures to develop the construction sector. Second, Pakistan is more careful about environmental protection. This study is also helpful for not only the government but also the industrial sector which is already moving towards a green environment. Directly and indirectly, green training and employee behavior lead to corporate sustainability performance and, it's all possible when the environment is safe for economic and social activities.

6.5 Limitations and Future Research

Although this study provides promising findings on the role of green training and corporate sustainable performance, this study has some limitations. First, this used cross-sectional data to analyse the impact of green training on corporate sustainable performance which may lead to the methodological issue. This may limit the findings to confirm the cause-and-effect between these variables. Future studies may use longitudinal or time-lagged data to test the causality between green training in corporate sustainable performance. Second, this study examined the effect of the construction barrier as a contextual factor to understand the relationship between green training and corporate sustainable performance. The finding is showing the insignificant impact of the construction barrier due to any other contextual factors such as organizational culture should be studied. Hence, future studies may examine the impact of these contextual factors to understand the factors enabling the construction sector to promote corporate sustainable performance.

The finding of this study is green training positive impact on corporate sustainable performance. Further, the findings suggest that the construction barrier of the employees role-play between green training and corporate sustainable performance. Moreover, construction barriers have a significant role-play between green training and corporate sustainable performance. Study shows that in Pakistan's construction sector; construction barrier does a significant role play just because of the long process, and wastage of time. Employees are more performing when the system supports the employees.

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Appendixes

Reliability Analysis

Reliability Statistics

Variables	Cronbach's Alpha	Items
Green Training	0.789	3
Construction Barrier	0.833	5
Corporate Sustainable	0.705	4
Total	0.886	12

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	29.476	1	29.476	4.543	.000 ^b
Residual	69.524	23	.312		
Total	99.000	24			

a. Dependent Variable: CS_PMEAN

b. Predictors: (Constant), GT_MEAN

Coefficients^a

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
(Constant)	2.380	.152		15.625	.000
GT_MEAN	.406	.042	.546	9.723	.000

a. Dependent Variable: CS_PMEAN

Descriptive Statistics

Valid	20 years or below	16	7.1	7.1	7.1
	21 Years-30 Years	111	49.3	49.3	56.4
	31 Years-40 Years	42	18.7	18.7	75.1
	41 Years-50 Years	40	17.8	17.8	92.9
	50 years above	16	7.1	7.1	100.0
	Total	225	100.0	100.0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Intermediate	35	15.6	15.6	15.6
	Graduation	70	31.1	31.1	46.7
	Masters	86	38.2	38.2	84.9
	M.phil	32	14.2	14.2	99.1
	PhD	2	.9	.9	100.0
	Total	225	100.0	100.0	

Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than one year	64	28.4	28.4	28.4
	2 years-4 years	64	28.4	28.4	56.9
	5 years-7 years	17	7.6	7.6	64.4
	8 years-10 years	17	7.6	7.6	72.0
	Above 10 years	63	28.0	28.0	100.0
	Total	225	100.0	100.0	

GT_MEAN

		Frequ ency	Per cent	Valid Percent	Cumulativ e Percent
Valid	Strongly Disagree	6	2.7	2.7	2.7
	1	2	.9	.9	3.6
	2	1	.4	.4	4.0
	Disagree	16	7.1	7.1	11.1
	2	4	1.8	1.8	12.9
	3	13	5.8	5.8	18.7
	naturat	22	9.8	9.8	28.4
	3	23	10. 2	10.2	38.7
	4	28	12. 4	12.4	51.1
	Agree	74	32. 9	32.9	84.0
	4	14	6.2	6.2	90.2
	5	7	3.1	3.1	93.3
	Strongly Agree	15	6.7	6.7	100.0
	Total	225	100 .0	100.0	

CB_MEAN

		Freque ncy	Perc ent	Valid Percent	Cumulative Percent
Valid	1	1	.4	.4	.4
	2	3	1.3	1.3	1.8
	2	2	.9	.9	2.7
	Disagree	5	2.2	2.2	4.9
	2	3	1.3	1.3	6.2
	2	5	2.2	2.2	8.4
	3	6	2.7	2.7	11.1
	3	3	1.3	1.3	12.4
	naturat	19	8.4	8.4	20.9
	3	15	6.7	6.7	27.6
	3	11	4.9	4.9	32.4
	4	20	8.9	8.9	41.3
	4	37	16.4	16.4	57.8

Agree	54	24.0	24.0	81.8
4	15	6.7	6.7	88.4
4	6	2.7	2.7	91.1
5	9	4.0	4.0	95.1
5	2	.9	.9	96.0
Strongly Agree	9	4.0	4.0	100.0
Total	225	100.0	100.0	

CS_PMEAN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.9	.9	.9
	2	1	.4	.4	1.3
	Disagree	1	.4	.4	1.8
	2	1	.4	.4	2.2
	3	4	1.8	1.8	4.0
	3	11	4.9	4.9	8.9
	naturat	16	7.1	7.1	16.0
	3	13	5.8	5.8	21.8
	4	19	8.4	8.4	30.2
	4	20	8.9	8.9	39.1
	Agree	79	35.1	35.1	74.2
	4	24	10.7	10.7	84.9
	5	13	5.8	5.8	90.7
	5	11	4.9	4.9	95.6
	Strongly Agree	10	4.4	4.4	100.0
	Total	225	100.0	100.0	