The impact of green transformational leadership on pro-environmental behavior through mediating role of intellectual capital in hotel industry of Islamabad, Pakistan.

By:

Syed Muneeb Ur Redman Shah   **01-221212-031**

Supervisor:

Dr. Syed Haider Ali Shah

Department of Business Studies

Bahria University Islamabad

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Name of Student: Syed Muneeb Ur Redman Shah   Enroll #01-221212-031

Class: MBA (1.5)

Approved by:

_____

Dr. Haider Ali Shah
Supervisor

_____

Fatima Fazal
Examiner-I

_____

Qurat ul ain
Examiner-II

_____

Dr. Syed Haider Ali
Shah Research
Coordinator

_____

Dr. Khalil-Ullah
Head of Department
Business Studies

APPROVAL FOR EXAMINATION

Candidates' Name: Syed Muneeb Ur Rehman Shah

Enrollment No: 01-221212-031

Program of study: Master of Business Administration

Project/Thesis Title: Impact of Green transformational leadership on pro environmental behaviour through Intellectual capital

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DEDICATION

TO MY FATHER (LATE)

I am here in this position just because of you. I wish you could see me successful in my life. You are still a guiding light, whose love show me the way.

TO MY MOTHER

You always had motivated me in the time of need, you are my first educator, you are my first mentor you are my first coach I am here, it is because of you

TO MY SUPERVISOR

I thought I cannot do research because it was difficult for me, but   your words of motivation has given me strength and it is because of you I was able to complete my thesis

TO MY ELDER BROTHER

You are my role model. You have supported me in my difficult times I am blessed to have a brother like you

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ABSTRACT

The purpose of this study was to find out the impact of Green transformational leadership on pro environmental behaviour through intellectual capital. And the research conducted in the hotel industry of Pakistan. In developed countries they are following green practices their leaders shows positive attitude towards pro environmental behaviour. They want sustainability focusing more on environment friendly things but in under developing countries like Pakistan Environment friendly approach is not common i have conducted research in hotel industry in this I selected 3 star, 4 star, and 5 star hotel in twin city my population size was 300 i-e the frontline employee working in 3 star, 4 star, 5 star, 300 frontline employees of hotel were approached only 169 responded to the survey which I have conducted for my thesis. The investigation shows that Green transformational leadership has positive impact on pro environmental behaviour and Intellectual capital significantly mediate the relationship between Green transformational leadership and pro environmental behaviour. it added a valuable knowledge that how they can effectively hire Green transformational leaders and give them full authority to influence employees towards having environmental friendly behaviour. Furthermore, the current research will assist Pakistani hotels in determining the extent to which increased intellectual capital might affect the link between GTL and PEB. Additionally, this research will help managers of hotels (local and abroad) better understand how important is green transformational leadership for improving intellectual capital

KEYWORDS: (Green transformational leadership, pro environmental behaviour, Intellectual capital, Frontline employees, and Hotel industry in Pakistan)

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CHAPTER 1

1. INTRODUCTION

1.1 Background of the Study

In 21st century, competition in corporate world has enhanced as a result of globalization, as business firms throughout the world have started improving their organizational structures and policies to cope with consistently changing dynamics of business world (Peng et al., 2021). Majority of the business firms have taken initiatives to implicate an effective leadership, as firms have understood the significant role of a business leader in helping them accomplishing their predetermined goals and sustaining their competitive advantages within their respective industries (Saleem et al., 2019). While discussing about leadership, Green transformational leadership is an important type of business leadership. Green Transformational leadership is applied by companies across the globe, as leaders influence employees to make them feel like they belong to the organization and transform the employee towards green thinking (Nisar et al., 2021). This helps in improving sense of feeling amongst employees resulting in full commitment and devotion shown by the employee to assist their leader in accomplishing pre-determined mutual goals (Molnár et al., 2021).

Possessing transformational leadership is being able to influence others through speaking and acting in a way that inspires them to act and adopt the leader's viewpoint. (Singh et al., 2020).Green Transformational leadership is based on two basic elements such as leader's personality traits that can transform followers to work for common cause i-e towards Green environment friendly cause and to accomplish mutual goals, and willingness or desire of followers to work to their potential to accomplish mutual goals (Mansoor et al., 2021).Green Transformational leaders possess personality traits such as confidence, charisma, risk-taking ability, and sense of responsibility regarding environments related issues. Green Transformation leader is also found responsible for empowering employees eventually helping them in improving their environment friendly behaviour and transform them towards environmental causes (Li et al., 2020). In this exchange relationship, the benefits that followers realize are in the form of promotions, status, awards, salary, information,

resources etc. whereas the leaders benefit in the form of attainment of goals and commitment with the organization (Murtaza et al., 2021).

Customers, the general public, and government regulatory agencies have been concerned about global warming and the damaging consequences of commercially generated goods and services on the environment for several decades. (Ahmad et al., 2021). Company leaders have begun realising that there is a significant environmental risk present in the management of their companies in this age of increased competitiveness as the impact of business operations and rising competition on the environment becomes more pronounced and problematic.(Ari et al., 2020). Pro Environment approaches to adopting such procedures that create little environmental harm have typically been viewed as "end-of-pipe" or conventional control solutions, in which a commercial entity works to mitigate its already-existing negative environmental consequences. (Atiku, 2019). Sometimes, taking into account problems within corporations may not give a whole picture. For instance, poor environmental policies of small vendors might harm the reputation of major companies. (Mi et al., 2019).

The introduction of new technologies has resulted in an increase in the number of people who are aware of, and interested in, environmental issues. This includes multiple organisations from both upstream and downstream working towards green practises. (Unsworth et al., 2021). Companies that adopt green practises see cost savings from using less energy and recycled materials, as well as the ability to improve their reputation with customers, who are more interested in how businesses do their business. (Peng et al., 2020). Customers and employees like businesses that are more committed to implementing green initiatives and lowering environmental liabilities. Poor environmental practises can affect stock values and harm a company's reputation. Companies now understand that the more they practise social responsibility, the more they may develop a positive social reputation that will aid in their long-term survival. (Mukonza et al..2020).

2 Research Gap

Many researchers have conducted their research on many facets of leadership and workforce behaviour throughout the world., as majority of researchers have emphasized over identifying how different leadership styles influence behaviours of

employees (Saifulina et al., 2020). Similarly, few researchers have focused on exploring the relationship that exists between leadership styles and pro environmental behaviour (Peng et al., 2021). Referring to Molnár et al. (2021), intellectual capital is yet to be used as a mediating variable to look at the connection between pro-environmental conduct and transformational leadership (Swarts, 2019). itself is a research void that must be filled. The relationship between Green transformation leadership and pro-environmental behaviour in Pakistan has also received very little scholarly attention.(Hameed et al., 2021). Hence, this study will aim to investigate the relationship between transformational leadership (independent variable), intellectual capital (mediator), and pro environmental behaviour (dependent variable) in Pakistan.

1.3 Problem Statement

Businesses are facing more and more competition in today's fiercely competitive business environment. Many corporate firms are working on to deal with it leadership and using them for better handling of issues relevant to employees and organization (Begum et al., 2021).Throughout the world, business firms operating in developed countries have understood the importance of effective leadership and been focusing on obtaining effective leader to take care of business and employee matters (Rizvi & Garg, 2020). On the contrary, business firms operating in developing countries are yet to understand the importance of leadership due to limited research work (Nisar et al., 2021). Such lack of awareness or understanding among business firms operating in developing countries is the research problem to be addressed through this study (Mansoor et al., 2021). Therefore, this study will focus on assessing the impact of Green transformational leadership on pro environmental behaviour with mediating role of intellectual capital in Pakistan. After the decades long war on terror now Pakistan is the most peaceful country and many international tourist guides Declared Pakistan among safest and beautiful country on the face of the earth. Due to increase in the number of foreign tourists the demand of the Pakistan's 3 stars, 4 stars and 5 stars increased drastically but unfortunately hospitality industry in Pakistan don't consider the environmental problem And consuming more environmental goods . their employees have lack of knowledge about environmental damages . The research will be helpful in giving them (hotels) awareness about the environmental friendly behaviour and will lead them towards sustainability.

1.4 Research Question(s)

1. What is the impact of Green transformational leadership on intellectual capital in Pakistan?

2. What is the impact of Green transformational leadership on pro environmental behaviour in Pakistan?

3. What is the impact of intellectual capital on pro environmental behaviour in Pakistan?

4. Does intellectual mediates the relationship between Green transformational leadership and pro environmental behaviour in Pakistan?

1.5 Objectives of the Study

- To assess the impact of GTL on Intellectual capital in Pakistan.
- To identify the impact of Green transformational leadership on pro environmental behaviour in Pakistan.
- To find out the impact of intellectual capital on pro environmental behaviour in Pakistan.
- To investigate whether intellectual capital mediates the relationship between Green transformational leadership and pro environmental behaviour in Pakistan.

1.6 Significance of the Study

This study will focus on assessing that how Green transformational leadership impacts pro environmental behaviour with mediating role of intellectual capital in Pakistan. The significance of this study will be for Pakistani hospitality industry which desire to acquire a sustainable competitive advantage. Findings of this study will clarify the relationship between green transformational leadership, intellectual capital, and pro environmental behaviour, as it will help hospitality industry in Pakistan in taking care of pro environmental behaviour by better implication of Green transformational leadership. In addition, it will also provide logical evidence about how important has been leadership style to promote intellectual capital and pro environmental behaviour among employees. Furthermore this study will be significantly important for the business managements because it can add a valuable knowledge that how they can effectively hire Green transformational leaders and give

them full authority to influence employees towards having environmental friendly behaviour. Finally, this study will be beneficial for human resource management students and research student

1.7 SCOPE OF THE STUDY

Green transformational leadership is an important type of business leadership. Green Transformational leadership is applied by companies across the globe, as leaders influence employees to make them feel like they belong to the organization and transform the employee towards green thinking (Nisar et al., 2021). Nowadays there is some positive trend in Green Environment even in Developing country. it added a valuable knowledge that how they can effectively hire Green transformational leaders and give them full authority to influence employees towards having environmental friendly behaviour.(Furthermore, the current research will assist Pakistani hotels in determining the extent to which increased intellectual capital might affect the link between GTL and PEB. Additionally, this research will help managers of hotels (local and abroad) better understand how important is green transformational leadership for improving intellectual capital. Furthermore, the current research will assist Pakistani hotels in determining the extent to which increased intellectual capital might affect the link between GTL and PEB. Furthermore this is latest study for developing countries like Pakistan. In recent years there is a positive trend in this aspect.

Chapter 2

2. LITERATURE REVIEW

2.1 Green Transformational Leadership

Transformational Leaders are those who exhibit unwavering confidence in their positions and skills, often to the point of arrogance. This assurance becomes an enduring component of their self-image, despite their feelings of depression or the risk of failure. Transformational leaders benefit from having self-confidence since it stems from having strong self-esteem. (Karatepe et al., 2021). They tend to have more followers than other leaders, surpassing one's usual and intermittent self-doubt. The study of Saleem et al. (2019)believes that Green transformational leaders have inherent meaning, uniqueness, self-consciousness, sense of responsibility, and responsibility and push their employees towards Green thinking giving them direction to adopt environment friendly behaviour. The study of Liu & Jie (2019) defines self-esteem as the most vital characteristic of Green transformational leader needed to encourage the followers. The self-determination expressed in an extreme and consistent manner shows that charismatic leaders, though regarded themselves as part of a larger whole, decide their own future through the decision of personal self-interest. Perhaps, self-confidence has been one of the most appealing qualities of Green transformational leaders (Liu & Jie, 2019).

A transformational leader is someone who possesses the necessary intelligence and brilliance to rule both themselves and their followers. They must also possess the desired charm to persuade their followers to act in the manner that the leader desires.(Molnár et al., 2021). A transformational leader must be able to serve as an example for their followers and give them guidance on what to emulate. Risk-taking, passion, imagination, and a vision that may point people in the right path are traits that are linked to the personality of a transformative leader. Other characteristics of a Green transformative leader's personality include tenacity, intuitive thinking, confidence, honesty, and proactiveness mindset of green thinking, green innovations and environmental friendly behaviour (Peng et al., 2021). In addition, transformational leader has the charisma to persuade the followers and influence others to become followers. Transformational leader is the influential person who has the art of leading others with deliberation to acquire a result that wouldn't have

happened otherwise. Transformational leader possesses the intimate knowledge of his emotional state and must be having the ability of self-awareness. In addition to that, transformational leader has the capability to set directions for others to follower with effectiveness and efficiency (Singh et al., 2020).

2.2 Intellectual Capital

Intellectual capital is the intellectual property that a company has and it is usually the most important asset that a company owns. Intellectual capital can be anything from patents to copyrights to trademarks to trade secrets(Mansoor et al., 2021). Intellectual capital is an important asset because it can help a company make more money by protecting their intellectual property and by giving them an edge over their competitors. Intellectual capital is a term that was first coined by economist Edward N. Wolff in the late 1990s, but it has been used more broadly since then. It refers to the sum total of all the knowledge and skills possessed by an organization's employees and other resources such as patents, copyrights, and trade secrets(Li et al., 2020).In many ways, intellectual capital is similar to physical capital in that they both represent a type of resource that can be invested in order to produce future economic benefits. The difference is that intellectual capital can be hard to measure because it takes on so many different forms(Atiku, 2019).

Intellectual capital is a form of intangible asset that is created when knowledge and skills are used to generate new ideas, products, processes, or services(Ahmad et al., 2021).Intellectual capital can be categorized into three types: human capital, social capital, and structural capita Human capital is a type of intellectual capital which refers the knowledge and skills that an individual possesses. It is the most important form of intellectual capital because without it there would be no innovation. In addition, social capital is a type of intellectual capital which refers to the connections between individuals in a society or organization. These connections allow for people to share their ideas and knowledge in order to create new ones (Murtaza et al., 2021). However, structural capital is a type of intellectual property which refers to organizational structures such as organizational charts, policies and procedures manuals, or patents which help facilitate innovation (Unsworth et al., 2021).

2.3 Pro Environmental Behaviour

One must first comprehend the meaning of the word "environment" in order to support environmental causes. The phrase "totality of all living and nonliving entities in a certain region, especially one regarded to influence the growth or behaviour of living things" is used to characterize an environment(Mukonza & Swarts, 2019). It's crucial to take note of this concept since it provides us with guidelines for appropriate behaviour in many contexts. Being an environmentalist entails understanding how our actions affect the environment and how they may be harmful to our health(Mi et al., 2019).Being an environmentalist involves more than simply recycling; it also entails being aware of what we do and how we might change things. Being aware of our environment is becoming more and more crucial due to the development of technology and rising pollution. For instance, many individuals now choose to cycle to work rather than drive a car, which lowers pollution and carbon emissions (Hameed et al., 2021).

Recycling lessens the quantity of rubbish that needs to be gathered and disposed of, which is another approach to benefit the environment. Additionally, some consumers choose to purchase goods created from recycled materials, such as clothing and gadgets.We can lessen our influence on the environment by recycling and utilizing limited resources (Peng et al., 2020). Although most people are aware of how important it is to be environmentally conscious, there are many different methods to do so. By turning off the lights and the air conditioner when you leave a room, for instance, you may lessen your carbon impact(Ari et al., 2020). Reusing your old paper to print out critical papers is another way to limit the amount of paper you consume. Utilizing reusable shopping bags is another method to practice environmental responsibility. Finally, you may save the environment by utilizing a reusable bag or cup in place of plastic or Styrofoam ones.These small adjustments will all significantly affect the ecology and contribute to the preservation of our world. Everyone, not only those who care about the world, should protect the environment. If the environment worries you, you should make an effort to safeguard it in your daily activities. Recycling and cutting back on trash production are good places to start (Mansoor et al., 2021).

2.4 GTL, PEB and IC

The very sole purpose of this study is to investigate the direct impact of Green Transformational Leadership on pro environmental behavior in hospitality industry in Islamabad Pakistan we will use Intellectual capital as a mediator to investigate does it mediates the between GTL and PEB. Previous literature tells us about GTL encourages the employees towards PEB i-e Environmental friendly thoughts (Tseng et al., 2020). Similarly Being an environmentalist involves more than simply recycling; it also entails being aware of what we do and how we might change things. Being aware of our environment is becoming more and more crucial due to the development of technology and rising pollution. For instance, many individuals now choose to cycle to work rather than drive a car, which lowers pollution and carbon emissions (Hameed et al., 2021).Intellectual Capital is all about intangible assets of an organization which is nowadays useful for org goodwill and brand image it can influence pro environmental behavior and employees toward Environmental friendly (De hortag et al., 2019).GTL will be positively impact on PEB if the Intellectual capital mediates the link between GTL and PEB. If Employees will be influenced by GTL then it will be helpful to direct them towards positive green thinking and push them towards the things doing for environment (Zhou et al., 2019). Employees don't take seriously and no so much concerned about environment until unless they are not being influenced by there Managers or Leaders who have Green thoughts and have ability to transform the behaviors of Employees(Shi Wang et al., 2018).

2.5 Theoretical Evidence

Green Transformational leadership is a leadership style that is focused on developing a shared vision and creating an environment in which followers can become more self-aware, committed to the organization's goals, and willing to contribute their full potential(Karatepe et al., 2021). Transformational leadership can be an effective way of influencing pro environmental behaviour. There are three dimensions of transformational leadership that are important when trying to influence pro environmental behaviour including inspirational motivation,

individualized consideration, and idealized influence. Transformational leadership is one of the most important leadership styles and it has a direct impact on the pro environmental behaviour. It is a leadership style that focuses on people, their potential and their development. Leaders who are able to transform themselves into better leaders are more likely to be successful in transforming others(Saifulina et al., 2020). Liu & Jie (2019) gives an overview of transformational leadership and how it relates to pro environmental behaviour.

Transformational leadership is the process of motivating, inspiring, and guiding followers to change themselves and their environment. When a leader has this kind of power over their followers, they can have a big impact on the environment (Rizvi & Garg, 2020). Transformational leadership is not just about changing oneself but also about changing the environment. This type of leadership can be seen in various ways throughout society. For example, it can be seen in businesses as well as communities and schools. Transformational leaders are able to create an environment that fosters pro-environmental behaviour through their influence on those around them (Begum et al., 2021). Transformational leadership is a type of leadership that is all about the people, their development and growth. It is also about how they can contribute to the organization's goals. The intellectual capital of an organization consists of two things: knowledge and creativity. Intellectual capital is a company's most valuable resource (Peng et al., 2021).

Leaders with transformational skills are more likely to encourage pro-environmental behaviour in their employees because they know how to engage them in the process (Saleem et al., 2019). Transformational leadership is a type of leadership that is characterized by a set of five characteristics: (1) the leader's behaviour is moral and ethical, (2) the leader has a vision for the future, (3) the leader inspires followers to be committed and engaged in their work, (4) the leader builds trust with followers, and (5) followers are committed to achieving goals that are in alignment with their own interests. Intellectual capital is defined as "the collective knowledge and skills of an organization's employees". It can also be described as "know-how" or "know-what (Nisar et al., 2021). Pro environmental behaviour refers to actions taken by individuals or groups to reduce environmental degradation. Transformational leadership is a powerful form of leadership that is based on the idea that leaders

should be able to motivate and inspire their followers. They should be able to change the behaviour of their followers for the better (Molnár et al., 2021).

The Green transformational leadership model consists of three main components: 1) Inspirational motivation: Leaders can use this component to motivate employees by providing them with a vision for success, setting goals for them, and encouraging them to take risks, 2) Intellectual stimulation: Leaders can use this component to help employees develop new skills and think creatively about their work, and 3) Individualized consideration: Leaders can use this component to show respect for each employee as an individual, provide feedback, and show concern for their well-being (Mansoor et al., 2021). Transformational leader uses the charisma to persuade people to avoid changing their values based on the situations, rather they must have distinct set of values which does not change with any changes occurred in the situation (Atiku, 2019). If a transformational leader fails to do so, then leader must try to develop such a situation where people's values can be created the way leader wanted to (Singh et al., 2020).
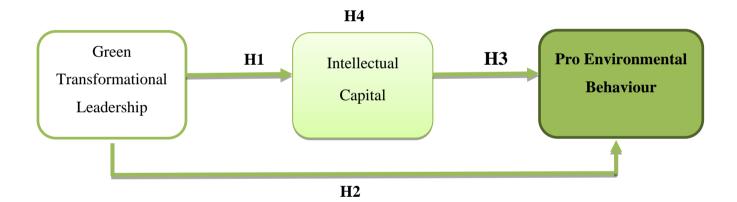
The concern of transformational leader should always be for the good of collective. As it has been described before that transformational leader is someone who has the characteristics of consideration and courtesy. Therefore, transformational leader never prefers to be selfish by thinking about his/her personal goals (Ahmad et al., 2021). Transformational leader always thinks about the group of followers one has and always take decision that suits the followers. This proves that a transformational leader must be taking decision based on what will be good for the group of people collectively rather than personal preferences and choices(Ari et al., 2020). The variables that a transformational leader considers while deciding what is good for the collective has been the ultimate benefits driven form the decision and the betterment it will provide to the community for which that decision has been taken. Transformational leader is someone who keeps personal benefits aside while taking decisions (Unsworth et al., 2021).

2.5 Theoretical Background

This research project is based on the leader-member exchange (LMX) theory, which describes the social exchange or social relationship between a leader and a subordinate. It is significant in examining interactions between leaders and those

who might be connected to different work line streams and offering them unique opportunities for career development. (Mi et al., 2019). The leader-member exchange is one of the most well-known theories in the literature on leadership and organisational behaviour. It primarily examines the interpersonal interactions between people like leaders and their followers (subordinates) and the effects that a leader has on the various organisational members.(Mukonza & Swarts, 2019). The leader-member exchange theory is useful in analysing the characteristics of a relationship between a leader and a subordinate. It also contributes to the analysis of relationships between leaders and people who might be associated with various work line streams. Additionally, it gives them the chance to take advantage of a unique set of career-enhancing prospects (Peng et al., 2020).

2.6 Theoretical Framework

2.7 Research Hypotheses

Research hypotheses of this study are as follows:

H1: Green Transformational leadership has positive impact on intellectual capital in Pakistan.

H2: Green Transformational leadership has positive impact on pro environmental behaviour in Pakistan.

H3: Intellectual capital has positive impact on pro environmental behaviour in Pakistan.

H4: Intellectual capital significantly mediates the relationship between Green transformational leadership and pro environmental behaviour in Pakistan.

CHAPTER 3

3. PROPOSED RESEARCH METHODOLOGY

Introduction

Methodology provides a rationale for each method used to conduct a study along with an explanation of why it was chosen. It also describes the study's objectives, methods, structure, and research methodology. The ability of data collection and research tools to produce results that answer the study's questions is also highlighted..

3.1 Research Design

Quantitative methods were employed as the research method for the purposes of this study. The investigation starts with a thorough analysis of the relevant literature, and it continues until it draws conclusions based on observations and generalises its findings. The necessity of this investigation has contributed to the need for quantitative research..

3.2 Research Nature

The research strategy used for this study's objectives was quantitative methodology. The research begins with an in-depth examination of the relevant literature and continues until it comes to conclusions based on observations and generalises its results. Quantitative research is now more necessary than it was before this examination was conducted..

3.3 Research Approach and Philosophy

According to the deductive method, positivist philosophy will necessitate either analysing the study's components or simply employing a technique to generate data from quantitative sources (Nayak & Singh, 2021).

3.4 Research Strategy

The survey strategy is the most often used method in any quantitative research (Mukherjee, 2019). Since this flexible methodology chooses to gather primary data from a small set of respondents to analyse specific situations and opinions relevant to a research subject, the method utilised for this study was conducting a survey utilising a structured questionnaire.. To measure GTL scale is adopted from 5 item scale developed by and cronbach alpha for this scale was recorded as 0.751 and for

pro environmental behaviour scale is adopted from 5 item scale develop by and cronbach alpha is 0.794 and For intellectual capital 5 scale item develop by and cronbach alpha for this scale recorded is 0.732

3.5 Time Horizon

Due to the fact that this study utilised population data observation during a single time period, it was cross-sectional.

3.6 Research Locale

The locale chosen to conduct the research is twin cities (Islamabad and Rawalpindi) of Pakistan. Frontline Employees working in 3star 4 star and 5star hotels in Rawalpindi and Islamabad

3.7 Unit of Analysis

Individuals (frontline employees) who works 3s, 4s and 5s hotels in in Pakistan's Islamabad serve as the study's unit of analysis.

3.8 Population (Universe of Study)

The population is the set of all subjects, subjects' groupings, or more tightly defined units of analysis to which the researcher can apply the study questions. (universe of the study) (Pandey & Pandey, 2021). Frontline Employees who work in Pakistan's twin cities of Islamabad's three, four, and five-star hotels make up the study's population. An appropriate sample is selected to reflect the overall population.

3.9 Sample Size

To choose a representative sample of the population, one can utilise a variety of tools (including the Sample Size Calculator, Morgan Table, and others). In the meantime, the current study will employ Morgan's Table to finalise the population of 300 respondents. (frontline employees) working in hotel industry in Islamabad's Pakistan, by applying morgan table 169 is the sample size of our research.

3.10 Sampling Technique

In general, sampling refers to the intentional selection of a small group of individuals from a broader population. (Patel & Patel, 2019we applied multi stata technique in second stage we proportionate the 3s, 4s, 5s hotels in Islamabad and in

3rd stage employees were selected through proportionate sampling and questionnaire were distributed in Islamabad. We have selected population of from hospitality industry. 300 was our sample size i-e the frontline employees from 3 star 4 star and 5 star hotel in Islamabad out of 300 only 169 responded to our research call. I adopted the questionaire from authore yu-shan chen(2020) no of items of GTL are 5. For Pro Environmental behaviour I adopted Questionnaire from author Osisioma(2019) and no of items are 5. And for Intellectual Capital I adopted questionnaire from the author Fam Busi Manag(2020) and no of items are 5.

3.11 Research Instrument

Data gathered using a questionnaire that was adapted from research articles that were published by other researchers and related to our literature topic. The adopted questionnaire shall be made plain and understandable to express its distribution and data collection goals. The adopted questionnaire will ask questions on demographics and every study variable. The 5-Likert Scale will be used to evaluate each item.

3.12 Data Collection Method

The majority of the questionnaires were handed out in person, but a small number of them were also shared on social media to solicit participation in the study. The audience (respondents) will understand the questionnaire more easily as a result of the researcher's efforts to simplify it. For the participants' convenience, questionnaires were made available in both paper and electronic formats..

3.13 Data Analysis Technique

Data analysis came after data collection, and it will involve performing statistical tests on the information gathered from survey respondents (correlation, regression, and mediation analysis). The association will be investigated using SPSS software. Among Green transformational leadership (independent variable), intellectual capital (mediator), and pro environmental behaviour (dependent variable) in Pakistan.

3.14 Ethical Considerations

From obtaining employee agreement to gathering information from them via distributed questionnaires, the study will take into account all ethical issues that may

arise during the research procedure. To avoid identity concealment, the researcher's identity will not be kept secret during the research procedure. No particular response will be required of the participants. Additionally, the responders' identities will remain a secret. Additionally, there won't be any profanity or other abusive language used in the talks between the respondents and the researcher.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

Introduction

This chapter presents the questionnaire results linked to research hypotheses. Results acquired were divided into two sections. First section includes a demographic evaluation. Meanwhile, second section offers analyses pertinent to study hypotheses. At the end of the chapter, there are crucial findings and key outcomes. A standardized questionnaire was provided to 169respondents (front line employees working in hotels of Islamabad) in a survey, and data was collected from them.

4.1 Data Analysis

4.1.2Descriptive Frequencies

Descriptive Frequencies

Demographics		Frequencies	Percentages	Cumulative Percentage
Gender	Male	131	78	78
	Female	38	22	100
Age	Less than 30 years	48	28	28
	30 to 45 years	87	52	80
	More than 45 years	34	20	100
Education	Undergraduate	31	18	18
	Graduate	93	55	73
	Postgraduate	45	27	100
Experience	Less than 5 years	76	45	45
	5 to 10 years	54	32	77
	More than 10 years	39	23	100

Different categories were developed within the questionnaire for distribution of data, as categorization has helped in better interpretation of results. The demographic component of the questionnaire is divided into subsections for gender, age,

education, and experience. The survey asks respondents for the following demographic data as well In terms of gender, 131 out of 169 responders (78 percent) were males. Females made up 38 of 169 responses (22 percent). In terms of age, 48 out of 169 responders (28 percent) were under the age of 30. 87 of 169 responders (52 percent) were between the ages of 30 and 45. 34 of 169 responders (20 percent) were beyond the age of 45. According to education, 31 of 169 respondents (18 percent) were undergraduates. Graduates made up 93 of 169 responders (55 percent). Postgraduates accounted for 45 of169 respondents (27 percent). In terms of experience, 76 out of 169 respondents (45 percent) were having less than 5 years of experience. 54 out of 169 responders (32 percent) have experience between 5 to 10 years. 39 of 169 responders (23 percent) were having more than 10 years of experience.

4.1.1Reliability Analysis

A questionnaire's reliability is determined by using relevance, consistency, and dependability of the questionnaire. Reliability analysis is mainly done to explore the reliability of both the items used within the questionnaire as well as responses gathered as a result of data collection by using the questionnaire. The score of reliability analysis must be equal or more than 0.7 in order to consider both questionnaire and responses collected through it as reliable (Hair et al., 2014). Results of reliability analysis for the questionnaire used for present research and responses gathered for data analysis are as follows:

Reliability Statistics

Variable	Cronbach's Alpha	NO of Items
Green Transformational Leadership	.751	5
Intellectual Capital	.794	5
Pro Environmental Behaviour	.732	5
Total	**.759**	**15**

The reliabilities of green transformational leadership, intellectual capital, and pro environmental behaviour are 0.751, 0.794, and 0.732, respectively. Cronbach's Alpha values (0.751, 0.794, and 0.732) for all variables are more than 0.7, It shows that every question on the questionnaire and the replies it elicits are very Reliable. Cronbach's Alpha of 0.759 suggests that value of entire questionnaire is above recommended threshold level by Hair et al (2014).Once the desired data was obtained, the study proceeded on to investigate the association between the study's variables.

4.1.3Correlation Analysis

The process of determining how two or more variables are connected is known as correlation.

Correlation

	1	2	3
1. Green Transformational Leadership	1		
2. Intellectual Capital	.482	1	
3. Pro Environmental Behaviour	.429	.451	1

The findings of above correlation table show that there is a positive association between the variables. The findings indicate a moderately significant and favorable correlation between GTL and IC, with a magnitude of.482. The GTL and PEB show a moderately significant and positive relationship with a magnitude of.429. Similarly, With a magnitude of.451, there is a moderately strong and favourable correlation between intellectual Capital and pro-environmental behaviour.

4.1.4Regression Analysis

The findings of the linear regression analysis are shown in the table below.

4.1.4.1 Impact of Green Transformational Leadership and Intellectual Capital on Pro Environmental Behaviour

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.673[a]	.453	.449	.48013	1.927

a. Predictors: (Constant), Green Transformational Leadership, Intellectual Capital

R-square reflects the variance in dependent variable (pro environmental behaviour) caused by predictive variables (green transformational leadership and intellectual capital). According to R2, green transformational leadership and intellectual capital accounted for 45.3percent of variation in pro environmental behaviour. Durbin Watson's value needs to be within 0-4. The Durbin Watson value of 1.927 is quite respectable. The theoretical model's fitness is demonstrated by adjusted R2. The adjusted R2 value is 44.9 percent, indicating a 44.9 percent match for the theoretical model used in this study.

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.162	2	3.804	18.227	.000[b]
	Residual	71.201	166	.351		
	Total	77.363	168			

a. Dependent Variable: Pro Environmental Behaviour

b. Predictors: (Constant), Green Transformational Leadership, Intellectual Capital

In accordance to results of ANOVA, significance value is below 0.05 and value of F value is above 4. Hence, statistical significance of theoretical model is proven. In accordance to ANOVA, green transformational leadership and intellectual capital have positive impact on pro environmental behaviour.

Coefficient

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.138	.241		3.852	.001
	Green Transformational Leadership	.358	.073	.354	2.891	.000
	Intellectual Capital	.501	.082	.497	2.935	.001

a. Dependent Variable: Pro Environmental Behaviour

The table above illustrates that GTL and IC have positive impact on PEB. In the model, significance value of green transformational leadership and intellectual capital for pro environmental behaviour is below 0.05, indicating a substantial positive link between them. Green transformational leadership (b = 0.358) is significant and coefficient is positive, showing that increased pro environmental behaviour is associated with increased green transformational leadership. Intellectual capital (b = 0.501) is significant and coefficient is positive, showing that increased pro environmental behaviour is associated with increased intellectual capital.

4.1.4.2 Impact of Green Transformational Leadership on Intellectual Capital

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.632[a]	.400	.395	.46162	1.783

a. Predictors: (Constant), Green Transformational Leadership

R Square indicates green transformational leadership accounts for 63.2 percent variance in intellectual capital. Durbin Watson is value is 1.783. The adjusted R2 value is 40%, which implies that the theoretical model is 40% fit.

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	5.016	1	3.719	25.924	.000[b]
1	Residual	81.215	167	.362		
	Total	86.231	168			

a. Dependent Variable: Intellectual Capital

b. Predictors: (Constant), Green Transformational Leadership

In accordance to results of ANOVA, significance value is below 0.05 and value of F value is above 4. Thus, the theoretical model's statistical significance is established. Green transformation leadership significantly affects intellectual capital, according to ANOVA..

Coefficient

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	1.082	.237		3.629	.001
1	Green Transformational Leadership	.745	.089	.741	3.117	.000

a. Dependent Variable: Intellectual Capital

A significant positive value between intellectual capital and green transformational leadership is indicated by the model's significance value, which is less than 0.05. Green transformational leadership has a substantial and positive coefficient (b = 0.745), demonstrating a relationship between increasing intellectual capital and greater green transformational leadership..

4.1.5 Mediation Analysis

Direct and Indirect Effects of Green Transformational Leadership on Pro Environmental Behaviour

H4: Intellectual capital significantly mediates the relationship between transformational leadership and pro environmental behaviour in Pakistan.

	Effect	SE	t-value	p	LLCI	ULCI
Direct Effect of GTP on PEB	.3378	.0485	2.2816	.0000	.2016	.4812
Indirect Effect of GTP on PEB	.5381	.0536	2.6916	.0000	.3813	.6859

Green transformational leadership is a strong interpreter of pro environmental behaviour, seeing at the results, B = 0.5381, SE =0.0536, p < 0.05. After adjust for

intellectual capital, GET is no longer an important predictor of pro environmental behaviour, B = 0.3378, S.E =0.0485, p<0.05, demonstrating partial mediation .The value of R for indirect impact is 0.5381, representing that the mediating variable has a 0.5381 unit persuade on the relationship (R2 = 0.5381). This indicates that intellectual capital has a 0.5381 percent mediation effect on the link between green transformational leadership and pro environmental behaviour.

4.2Data Findings

Data Findings

Hypothesis	Statement	Accepted/Rejected
H1	Green transformational leadership has positive impact on intellectual capital in Pakistan.	Accepted
H2	Green transformational leadership has positive impact on pro environmental behaviour in Pakistan.	Accepted
H3	Intellectual capital has positive impact on pro environmental behaviour in Pakistan.	Accepted
H4	Intellectual capital significantly mediates the relationship between GET and PEB in Pakistan.	Accepted

CHAPTER 5

Chapter 5

CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study sought to assess the connection between intellectual capital, green transformational leadership, and pro-environmental behaviour in Pakistan. Green transformational leadership was the study's independent variable. Pro-environmental conduct was the dependent variable, and intellectual capital served as the mediator. However, front line staff members operating in Islamabad's 3s, 4s, and 5s hotels were selected as the target audience for evaluating the relationship between the afore mentioned variables. To obtain data from respondents, a structured questionnaire was employed. A significance level scale with a range of up to 5% was used to analyse the acceptance and rejection of the study's hypotheses. The acceptance or rejection of the study's three hypotheses (H1, H2, and H3) was determined by the significance level scale. Green transformational leadership and intellectual capital have a significance level of less than 0.05 for pro-environmental conduct. Because of the significance level, the hypotheses H1 and H3 were accepted. The green transformation leadership's significance level for intellectual capital was less than 0.05. H2 was accepted due to its relevance level.. Regression analysis has proved the significant relationship between green transformational leadership (independent variable), intellectual capital (mediator), and pro environmental behaviour (dependent variable) in Pakistan, accepting H_1, H_2, and H_3. Finally, mediation analysis has proved the mediating effect of intellectual capital in relationship between green transformational leadership and pro environmental behaviour in Pakistan.

5.2 Conclusion

The purpose of this study was to evaluate the impact of GET on PEB with mediating role played by intellectual capital in Pakistan. A questionnaire was distributed among 169 respondents (front line employees working in hotels of Islamabad) to

collect data and assess the relationship between study variables. For investigating the association, green transformational leadership and intellectual capital were empirically tested with pro environmental behaviour rand found a positive correlation between them. Findings have shown that green transformational leadership and intellectual capital were positively correlated with pro environmental behaviour with the magnitude of0.429and 0.451. Furthermore, green transformational leadership was empirically tested with intellectual capital and found a positive correlation between them. Findings have shown that green transformational leadership was positively correlated with intellectual capital with the magnitude of0.482.In addition, regression analysis revealed a strong association between green transformational leadership(independent variable),intellectual capital (mediator), and pro environmental behaviour (dependent variable) in Pakistan. Mediation analysis has shown the mediating role played by intellectual capital in relationship between green transformational leadership and pro environmental behaviour in Pakistan. Findings of mediation analysis show that a shift in intellectual capital causes a definite change in relationship among green transformational leadership and pro environmental behaviour in Pakistan.

5.3Research Limitations

The researcher faced relatively few obstacles when researching the relationship between green transformational leadership, intellectual capital, and pro-environmental behaviour (such as limited time period, limited sample size, etc.). The study's time frame was severely constrained since more time was required to perform this research than was available. A more in-depth survey with respondents from various backgrounds would have been possible if time had permitted. The researcher, on the other hand, should be given more time to collect information from people from various backgrounds. Researchers would be able to acquire data by include those who were previously not considered respondents due to time constraints. Furthermore, the sample size of 169 was insufficient for gathering data from front-line personnel operating in Islamabad hotels. to offer a completed. The sample size might be increased to 300 or more for a more representative sample of front-line personnel working in Islamabad hotels. Finally, the majority of academics and researchers on this issue have only undertaken cross-sectional studies, ignoring the demand for longitudinal investigations, which was another constraint.

5.4 Recommendations and Direction for Future Research

Most of the study's aspects have been addressed properly; however, small changes could be made to improve the effectiveness and reliability of this research. Minor changes to time period, sample size, and study type, are possible. To allow the researcher to perform a comprehensive research, time limit should be extensive. A fair time limit for the researcher to collect data from respondents of various races and cultures may be advantageous. The researcher may be able to use the extra time to include those who did not complete the survey in order to assist with data collection. Members of the public can be encouraged to be excited since this will help to increase the sample size, which will improve the validity and reliability of data gathered and processed. Furthermore, while the focus of this study was on front-line personnel working in hotels in Islamabad, data related to study variables might be acquired and evaluated using people from other

locations in Pakistan. Furthermore, if a researcher is granted more time to complete a study project, the sample size may be raised. Finally, longitudinal research, rather than cross-sectional research, might be used to investigate the link between study variables.

5.5 Research Implications

This study will be useful to managers, research students, business analysts, and other government organization,s related to hospitality sectors in the Pakistani hotel industry. As a result, they will be more aware of the value of GTL and IC in encouraging PEB in Pakistan. The outcome of this study can be very helpful to Pakistani hotels in understanding how important it is for them to foster pro-environmental behaviour through fostering GTL and IC. The results of this study will allow students studying human resource management to evaluate the strength and direction of intellectual capital's influence on pro-environmental behaviour in Pakistani hotels and green transformational leadership. Furthermore, the current

research will assist Pakistani hotels in determining the extent to which increased intellectual capital might affect the link between GTL and PEB. Additionally, this research will help managers of hotels (local and abroad) better understand how important is green transformational leadership for improving intellectual capital.

Additionally, This study will aid human resource management students, research students, trade analysts, market researchers, and academics by improving their grasp of the important linkages between green transformational leadership, intellectual capital, and pro-environmental behaviour. The basic aspect of this study will benefit research students since it will help them comprehend more fully how IC mediates the GTL and PEB in Pakistan's hotel industry. . As a consequence of this study's assistance in helping them better understand the importance of green transformational leadership, hoteling managers and administration will give green transformational leadership more attention as they work to improve intellectual capital and pro-environmental conduct. The new research will similarly contribute significantly to the field of human resource management both theoretically and practically. Additionally, by paying attention to improved management of GTL and IC, hotel management can leverage the study's findings to encourage PEB

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APPENDIX- A

Green transformational leadership

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The leader of the green innovation project inspires the project members with the environmental plans	1	2	3	4	5
The leader of the green innovation project provides a clear environmental vision for the project members to follow	1	2	3	4	5
The leader of the green innovation project gets the project members to work together for the same environmental goals	1	2	3	4	5
The leader of the green innovation project encourages the project members to achieve the environmental goals	1	2	3	4	5
the leader of the green innovation project acts with considering environmental beliefs of the project members;	1	2	3	4	5

APPENDIX-B

Pro Environmental Behaviour

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I talked to others in my community about environmental issues.	1	2	3	4	5
Are you currently a member of any environmental, conservation, or wildlife protection group	1	2	3	4	5
I voluntarily carry out environmental actions and initiatives in my daily work activities	1	2	3	4	5
I encourage my colleagues to adopt more	1	2	3	4	5
I help my co-workers be environmentally friendly at work	1	2	3	4	5

APPENDIX-C

INTELLECTUAL CAPITAL

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel motivated to apply my experience and talent in solving the problems of my organization	1	2	3	4	5
Every employee is encouraged to acquire the ability to acquire information relevant to performing their jobs creditable	1	2	3	4	5
My organization encourages employees to acquire the ability to identify the problems and produces acceptable solutio	1	2	3	4	5
My firms insist we make it our business to understand the way things are done around here irrespective of our gender.	1	2	3	4	5
our employees develop new ideas and knowledge	1	2	3	4	5