The Relationship Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP) in ISO 14001 Certified Manufacturing Organisations Across India

A Thesis submitted in partial fulfillment for the Degree of

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In Goa Business School

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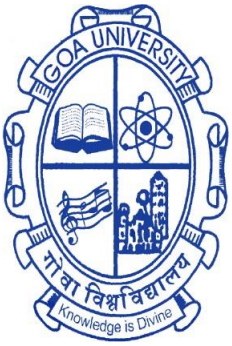

By

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January 2024

DECLARATION

I, Tari Sandesh Deelip, do hereby declare that this thesis titled **'The Relationship Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP) in ISO 14001 Certified Manufacturing Organisations Across India'** is a record of original research work done by me under the supervision of Dr. R. Nirmala, Associate Professor, Goa Business School, Goa University, Taleigao, Goa.

I also declare that this dissertation or any part thereof has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Place: Taleigao Plateau.

Date: 24-01-2024 Tari Sandesh Deelip

CERTIFICATE

This is to certify that the Ph. D. thesis titled **'The Relationship Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP) in ISO 14001 Certified Manufacturing Organisations Across India'** is a record of original research work carried out by Mr. Tari Sandesh Deelip under my guidance, at the Goa Business School, Goa University. under the supervision at Goa Business School, Goa University, Taleigao, Goa.

I also declare that this dissertation or any part thereof has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

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Contents

List of Tables……i

List of Figures……iv

Abstract……v

Chapter 1: Introduction 1

1.1 Background 1

1.1.2 Indian Manufacturing Sector 4

1.1.3 International Standards Organisation (ISO) 14001 6

1.2 Operational Definitions 8

1.3 Significance of the study 10

1.4 Problem Statement 11

1.5 Scope of the study 13

Objectives of the study: 13

Research Questions of the study 14

1.6 Research Methodology 14

1.7 Limitations 15

1.8 Implications 16

1.9 Organisation of Thesis 17

Chapter 2: Literature Review 19

2.1 Overview 19

2.2 Green Human Resource Management Practices (GHRMP) 20
2.2.1 Green Job Description (GJD) 20
2.2.2 Green Recruitment and Selection (GRS) 21
2.2.3 Green Training and Development (GTD) 21
2.2.4 Green Performance Assessment (GPA) 22
2.2.5 Green Reward Management (GRM) 22
2.3 Green Organisational Culture (GOC) 22
2.3.1 Leadership Emphasis (LEM) 23
2.3.2 Message Credibility (MC) 24
2.3.3 Peer Involvement (PI) 25
2.3.4 Employee Empowerment (EE) 25
2.4 Organisational Performance (OP) 26
2.4.1 Environmental Performance (EP) 26
2.4.2 Financial Performance (FP) 27
2.4.3 Social Performance (SP) 28
2.5 Relationship between GHRMP and GOC 28
2.6 Relationship between GHRMP and OP 31
2.7 Relationship between GOC and OP 34
2.8 GOC as a mediator of GHRMP and OP 36
2.9 Research Gap 37
2.10 Conceptual Framework 38

2.11 Hypotheses of the study 39

2.12 Summary 41

Chapter 3: Research Methodology 43

3.1 Research Design 43

3.2 Study Population, Sampling Frame and Sample 45

3.3 Research Instrument for Data Collection 46

3.3.1 Item Generation and Scale Development 46

3.3.2 Face Validity of Research Instrument 47

3.3.3 Content Validity of Research Instrument 47

3.4 Data Collection Procedure for Pilot Study 51

3.4.1 Pilot Testing 53

3.5 Data Collection Procedure for Final Study: 54

Chapter 4-Data Analysis and Testing of Hypotheses 55

4.1 Demographic Profile of the Respondents 55

4.2 Descriptive Statistics 60

4.3 Reliability Statistics 60

4.4 Harman's single factor analysis (Common biased method) 61

4.5 Confirmatory Factor Analysis (CFA) 61

Table 10: Acceptable Model fit Indicator 62

4.6.1 Zero Order CFA 63

4.5.2 First Order CFA: 89

4.5.3 Second Order CFA: 91

4.6 Convergent Validity: 93

4.7 Discriminant Validity: 94

4.8 Multicollinearity 95

4.9 Correlation Analysis Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC) and Organisational Performance (OP) 98

4.10 Common Method Bias using Common Latent Factor: 100

4.11 Testing of Hypotheses 101

Chapter 5: Findings, Discussion and Implications 119

5.1 Discussion of findings 119

5.2 Implications 135

5.2.1 Research/Academic Implications 135

5.2.2 Managerial Implications 137

5.3 Conclusion 142

5.4 Limitations 143

5.5 Recommendations for future research 144

References 145

ANNEXURE I 168

ANNEXURE II 178

ANNEXURE III 191

List of Tables

Table 1: Gender 55

Table 2: Position 56

Table 3: Years worked in the current firm 57

Table 4: Educational Qualification 57

Table 5: Organisation Type 58

Table 6: Ownership 58

Table 7: Region 59

Table 8: Investment Size 59

Table 9: Reliability Statistics 61

Table 10: Acceptable Model fit Indicator (CFA) 62

Table 11: Unstandardized Regression Coefficients of GJD 64

Table 12: Standardized Regression Weights and Model Fit Indices of GJD 64

Table 13: Unstandardized Regression Coefficients of GRS 66

Table 14: Standardized Regression Weights and Model Fit Indices of GRS 66

Table 15: Unstandardized Regression Coefficients of GTD 68

Table 16: Standardized Regression Weights and Model Fit Indices of GTD 68

Table 17: Unstandardized Regression Coefficients of GPA 71

Table 18: Standardized Regression Weights and Model Fit Indices of GPA 71

Table 19: Unstandardized Regression Coefficients of GRM 73

Table 20: Standardized Regression Weights and Model Fit Indices of GRM 73

Table 21: Unstandardized Regression Coefficients of EP 75

Table 22: Standardized Regression Weights and Model Fit Indices of EP 75

Table 23: Unstandardized Regression Coefficients of FP 77

Table 24: Standardized Regression Weights and Model Fit Indices of FP 78

Table 25: Unstandardized Regression Coefficients of SP 80

Table 26: Standardized Regression Weights and Model Fit Indices of SP 80

Table 27: Unstandardized Regression Coefficients of LEM 82

Table 28: Standardized Regression Weights and Model Fit Indices of LEM 82

Table 29: Unstandardized Regression Coefficients of MC 84

Table 30: Standardized Regression Weights and Model Fit Indices of MC.....84

Table 31: Unstandardized Regression Coefficients of PI 86

Table 32: Standardized Regression Weights and Model Fit Indices of PI 86

Table 33: Unstandardized Regression Coefficients of EE.....88

Table 34: Standardized Regression Weights and Model Fit Indices of EE 88

Table 35: Model Fit Indices (First Order CFA).....90

Table 36: Model fit indices (Second Order CFA).....92

Table 37: Model Fit Indices (Second Order CFA) 93

Table 38: Convergent Validity.....94

Table 39: Discriminant Validity 95

Table 40: Model Fit (Discriminant Validity).....95

Table 41: Conventional approach to interpret correlation coefficient 99

Table 42: Correlations.....99

Table 43: Standardized Regression weights with and without Common Latent Factor.....100

Table 44: Structural Model Path Coefficients and its Significance-GHRMP and GOC 102

Table 45: Fit Indices for the structural model for relationship between GHRMP and GOC 102

Table 46: Coefficients and its Significance-individual GHRMP, GOC and OP…….... 104

Table 47: Coefficients and its Significance-individual GHRMP, GOC and OP 105

Table 48: Coefficients and its Significance-individual GHRMP, GOC and OP..... 106

Table 49: Coefficients and its Significance-individual GHRMP, GOC and OP..... 107

Table 50: Structural Model Path Coefficients and its Significance-GHRMP and GOC..... 110

Table 51: Fit Indices for the structural model for relationship between GOC and OP..... 110

Table 52: Structural Model Path Coefficients and its Significance- GHRMP and OP..... 114

Table 53: Fit Indices for the structural model for relationship between GHRMP and OP ... 114

Table 54: Mediation Analysis Summary..... 118

List of Figures

Figure 1: The proposed Conceptual Model....38
Figure 2: Zero Order SEM model of GJD....63
Figure 3: Zero Order CFA of GRS....65
Figure 4: Zero Order CFA of GTD....67
Figure 5: Zero Order CFA of GPA....70
Figure 6: Zero Order CFA of GRM....72
Figure 7: Zero Order CFA of EP....74
Figure 8: Zero Order CFA of FP....77
Figure 9: Zero Order CFA of SP....79
Figure 10: Zero Order CFA of LEM....81
Figure 11: Zero Order CFA of MC....83
Figure 12: Zero Order CFA of PI....85
Figure 13: Zero Order CFA of EE....87
Figure 14: First Order CFA-Preliminary Model....89
Figure 15: Second Order CFA-Preliminary Model....91
Figure 16: Second Order CFA-Path Model....92
Figure 17: Common Method Bias-Path Model....100
Figure 18: Structural Model for relationship between GHRMP and OP....103
Figure 19: Structural Model for relationship between GOC and OP....113
Figure 20: Structural Model for relationship between GHRMP and GOC....115
Figure 21: Final Conceptual Model....118

Abstract

Green Human Resource Management Practices (GHRMP) and Green Organisational Culture (GOC) have emerged as important areas of research due to their potential impact on organisational performance (OP) in the context of sustainable development. The purpose of this research is to investigate the relationship between GHRMP, GOC, and OP in ISO 14001 accredited manufacturing organisations across India. The primary data collected via self-administered quantitative questionnaires employing criterion-based purposive sampling technique and the data was analysed using IBM SPSS Statistics 21 software and AMOS. Manufacturing organisations, in particular, play an important role towards environment since they account for a major share of global carbon emissions. The ISO 14001 standard has become a generally accepted strategy for organisations to efficiently manage their environmental impact.

The study gathered information from 200 Human Resource (HR) professionals who work in ISO 14001 accredited manufacturing organisations across India. The study reveals that there is a positive relationship between GHRMP, GOC, and OP. The study states that organisations that adopt GHRMP and have a positive GOC tend to have higher levels of OP.

This research contributes to a better understanding of the relationship between GHRMP, GOC, and OP in ISO14001 certified manufacturing organisations in India, which will benefit academic, research, and business sectors.

One of the major contributions is the theoretical shift from the traditional Resource-Based View (RBV) framework to the Triple Bottom Line (TBL) framework, which highlights the interconnectedness of economic, social, and environmental factors specific to ISO 14001 certified organisations. The RBV framework primarily focuses on the firm's internal resources and capabilities as the main source of competitive advantage. However, the TBL framework goes beyond this by emphasising the importance of considering not only economic factors but also social

and environmental aspects in business decision-making. This shift in perspective allows ISO 14001 certified organisations to holistically evaluate their impact on society and the environment while still maintaining their economic viability.

According to the study's findings, there is a significant relationship between GHRMP, GOC, and OP in all ISO 14001 organisations assessed. As a result, ISO 14001 can be a reliable indicator of a company's dedication to environmental management. The study found that organisations with ISO 14001 certification are more likely to implement effective green policies and practices. These organisations demonstrated better compliance with environmental regulations, social norms, and profitability. The study has investigated the relationship between individual components of GHRMP, GOC, and OP in manufacturing organisations based on ownership, organisation type, investment size, and region stating considerable difference between these interplay.

As ISO 14001 is considered as a reliable indicator of a company's dedication to environmental management, The policy makers can insist all the organisations to adopt and implement this standard. By doing so, organisations will be able to reduce their environmental impact and enhance their OP. The government can also provide support and incentives organisations to comply with ISO 14001, further driving the adoption of GHRMP across various sectors.

The findings of the study indicate that a strong green culture within an organisation can substantially enhance overall OP through leadership commitment, message credibility, peer involvement, and employee empowerment. This suggests that organisations that prioritize and promote green practices are more likely to actively engage in initiatives that benefit the environment and society also. So it is of eminent importance that top management actively support and encourage the development of a green culture within their organisation. By providing

leadership and resources, top management can ensure that employees are empowered to make sustainable choices and contribute to the overall success of the organisation.

The study's findings demonstrate the practicality of the proposed conceptual model and provide valuable insights for its application in business-world scenarios. These significant relationships established in the study confirm the model's effectiveness and reliability. The findings of the study revealed that GHRMP has a significant positive effect on GOC. Additionally, GOC was found to have a positive and significant impact on OP. Furthermore, the study found that GHRMP has a significant direct effect on OP. The results indicate that organisations need to focus on GHRMP to build GOC, which in turn can improve OP.

The study has some limitations that highlight challenges and potential areas for future research. First, the study primarily focused on the relationships between GHRMP, GOC, and OP in ISO 14001 certified Indian manufacturing organisations. Therefore, the results of the present study may not be applicable to other industries or organisations that are not ISO 14001 certified. Second, the study collects primary data from HR professionals at various organisational levels via a quantitative research approach. A qualitative approach may yield more detailed results. Third, the cross-sectional design of the study limits its ability to capture the long-term effects of GHRMP and GOC on OP.

Key Words: Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), Organisational Performance (OP), ISO 14001, Manufacturing Organisations, Triple Bottom Line (TBL)

Chapter 1: Introduction

1.1 Background

Green Human Resource Management Practices (GHRMP) and Green Organisational Culture (GOC) have emerged as important research areas due to their potential impact on Organisational Performance (OP). GHRMP can be defined as "practice of acquiring, training, appraising, and compensating employees to promote and achieve sustainable goals" (Shaikh, 2013; Jackson, Schuler and Jiang, 2014; Arulrajah et al. 2015; Sakka, 2018). Green Human Resource Management (GHRM) focuses on integrating sustainable practices and environmental considerations into HRM strategies and policies. The emergence of GHRM can be attributed to several factors, the first being rising demand from stakeholders such as customers, employees, governments, and communities for organisation to be environmentally responsible. Second, there are regulatory constraints and environmental legislation that require companies to engage in eco-friendly activities. Third, the recognition that workers are an integral part of an organisation's initiatives

The green movement started in the late 1960s as a response to growing concerns about environmental degradation and the impact of human activities on the planet. It emerged as a grassroots movement, with individuals and organisations advocating for sustainable practices, conservation of natural resources, and raising awareness about the importance of protecting the environment for future generations. The green movement has since evolved into a global phenomenon, influencing policies, shaping public opinion, and driving efforts towards a more sustainable and eco-friendlier world. GHRM became a concept with the emergence of the green movement. The guiding ideologies of then green movement are environmentalism, sustainability, social justice, and non-violence. These ideologies form the foundation of GHRM.

Developing and developed nations are addressing environmental issues equally due to industrial degradation. Environmental protection has become a significant social concern, and organisations are taking corrective action. The concept of GHRM first appeared in 1990s and globally accepted in 2000s (Lee, 2009). GHRM is a systematic approach that aligns conventional Human Resource Management Practices (HRMP) with environmental goals, addressing the degradation caused by heavy industrial activity.

GHRMP consists of HRM activities aimed at reducing environmental impact through onboarding, induction, performance management, training, development, and compensation and reward management (Shaikh, 2013). It was determined from the literature that GHRM encompasses Green Reward Management (GRM), Green Performance Assessment (GPA), Green Training and Development (GTD), Green Job Description (GJD), and Green Recruitment and Selection (GRS). These components of GHRM are essential for organizations aiming to incorporate sustainability practices into their workforce. GJD ensures that job roles and responsibilities align with environmental goals, while GRS focuses on attracting and selecting candidates with a strong commitment to sustainability. GTD then equips employees with the necessary knowledge and skills to contribute effectively to green initiatives. GPA evaluates their performance in relation to sustainability targets, and GRM recognizes and rewards employees who actively contribute to environmental conservation efforts. (Jabbour, Santos and Nagano, 2010; Jackson et al., 2011; Renwick, Redman and Maguire, 2013; Zibbaras and Coan, 2015; Tang et al., 2018).

GOC is “a comprehensive concept represented by a combination of elements constituting Leadership Emphasis (LEM), Message Credibility (MC), Peer Involvement (PI) and Employee Empowerment (EE) to minimise the negative and maximise the positive impact of organisational activities on the environment” (Roscoe et al., 2019; Sroufe, Liebowitz, and Sivasubramaniam,

2010). GHRMP fosters GOC by emphasising the need for developing a workforce that is dedicated to environmental concerns since people's poor behaviour has an influence on the planet and organisation. Through GHRMP, people are encouraged to adopt eco-friendly behaviours. The HR department plays a crucial role in creating an Organisational Culture (OC) conducive to achieving green objectives by influencing employee attitudes, beliefs, and behaviours through recruitment and selection, training and development, performance assessment, and reward processes (Amini et al., 2018). Many business organisations now actively involve their employees in sustainability issues, with board directors and executive compensation linked to sustainability objectives. Stakeholder engagement is deeper and more effective, with mechanisms in place to make it as effective as possible. Attaianese (2012) and Cherian and Jacob (2012) suggest that motivating and educating employees to engage in environmentally friendly activities helps businesses foster a green culture.

GOC is one of the most heated discussions between the general public and socially elite groups of individuals in society. The notion of "green culture" is primarily concerned with achieving ecological balance (Mohezara et al., 2016). Green culture is important because it incorporates both the environment and people, promoting ecological development and long-term economic growth based on "politics, science, and aesthetics" (Galpin et al., 2015). As a result of globalisation, many economies have profited from embracing green trends and implementing such practices into their business cultures. Most organisations are changing their cultures to reflect new environmental concerns, behaviors, and attitudes (Firoz and Abinakad, 2016).

GOC is not developed during the regular course of business; it develops through the adoption of green policies by the management. The managers have to actively collaborate with different stakeholders, such as investors and the government, to ensure it stays within the financial and legal ecosystem of the economy (Tahir et al., 2019).

The GHRM concept has lately acquired popularity as the emphasis has switched from merely economic to ecological and social concerns, which is referred to as the Triple Bottom Line (TBL) approach. TBL approach analyses an OP in a broader perspective rather than being restricted to profit-making and can be measured using Environmental, Financial and Social Performance (Mishra, 2017). OP is "a strategy for the organisation to seek the balance among the economic profit, environmental and social responsibility" (Qiuhong Jiang et al., 2018). There are no reported studies of the impact of GHRM systems as a whole on either environmental outcome, such as waste reduction, or on wider OP metrics (Renwick et al., 2013). Little is known about the effect of GHRM on OP on the empirical ground. A considerable amount of literature has suggested a positive relationship between GHRMP and OP (Renwick et al., 2013; Jabbar and Abid, 2015; Obaid and Alias, 2015; Yong et al., 2019). For instance, Renwick et al. (2013) suggested that GHRM has the capacity to make contributions undoubtedly to each worker well-being as well as improve OP.

1.1.2 Indian Manufacturing Sector

Manufacturing is a secondary sector that includes the conversion of raw materials into products that are finished. It is the production of goods after the raw materials have been processed into more valuable products.

The manufacturing sector in India is segmented by Ownership (Private Sector, Public Sector, Joint Sector, and Cooperative Sector), by Raw Materials Used (Mineral Based Industries and Agro Based Industries), and by End-user Industries (Automotive, Textile and Apparel, Construction, Consumer electronics, Food and Beverages, and Other End-user Industries). But for the purpose of this research manufacturing organisations based on ownership (between Indian and global participants), the type of organisation (polluting and non-polluting), the size of the investment (small, medium, and large), and the location (north, south, east, west and central India).

Purely Indian manufacturing organizations are those with Indian control and ownership, ensuring decision-making and profits remain within the country. Global participants include those with foreign ownership or control, as well as those with branches or subsidiaries in India. Polluting manufacturing organisations are those that produce harmful products like chemicals, pharmaceuticals, textiles, glass, metal, machinery, aviation, mining, construction, and heavy engineering, while non-polluting organisations produce products with minimal or no environmental impact, such as health and wellness, FMCG, agriculture, food and beverage, electronic and electrical products, IT products, and energy. Small manufacturing companies are classified as those with an investment amount ranging from 5 to 75 crore Indian rupees. Large organisations with investment of 250 crores whereas medium sized organisations with invest between 75 and 250 crores.

The Indian manufacturing sector generated 16-17% of India’s GDP pre-pandemic and is projected to be one of the fastest growing sectors. India's manufacturing sector market is expected to register a Compound annual growth rate (CAGR) of more than 4 % during the forecast period (2023 - 2028).

India is a desirable location for international industrial ventures. Several mobile phone, luxury, and car companies, among others, have established or intend to establish manufacturing bases in the nation. Implementation the Goods and Services Tax (GST) made India a common market with a GDP of USD 2.5 trillion and a population of 1.32 billion people, which is a big draw for investors. India's manufacturing industry has expanded into new areas and segments, propelled by development in key industries and influenced by favorable megatrends. Significant initiatives have been launched under the Aatmanirbhar Bharat and Make in India programs to improve India's manufacturing capacity and exports in a variety of industries. In the wake of the pandemic, sector-

specific production-linked incentives (PLI) were implemented to foster international and domestic investment and create worldwide leaders in the manufacturing sector.

However, the manufacturing sector is seen as a source of numerous types of environmental pollution in both developed and developing nations, demanding a critical assessment, monitoring, and correction of its management operations (Rehman et al., 2016). The sector is a major contributor to the country's carbon emissions, which hit 2.88 gigatonnes in 2021. Likewise, the industry consumes a significant amount of energy and natural resources (such as water) while generating waste that is harmful to the environment.

To ensure the safety and quality of their products, manufacturing organisations have to adhere to a variety of rules and standards. Environmental restrictions, labour legislation, and product safety requirements are examples of such rules. Compliance with these rules is critical for manufacturing organisations in order to retain their reputation, avoid potential lawsuits, and safeguard the health and safety of their staff and consumers. To that end, International Standards Organisation (ISO) 14001 certification could prove to be a beneficial step for manufacturing businesses. Obtaining this certification allows businesses that manufacture to demonstrate their dedication to ethical and environmentally friendly operations, giving them a competitive advantage in the market and recruiting environmentally concerned clients.

1.1.3 International Standards Organisation (ISO) 14001

ISO 14001 is a globally recognised standard that specifies the standards for an environmental management system. It assists organisations in improving their environmental performance through more effective resource utilization and waste reduction, obtaining a competitive edge and stakeholder trust. ISO 14001 is suitable for organisations of all sizes and types, whether private, non-profit, or governmental. It demands an organisation take into account

all environmental challenges important to its operations, such as air pollution, water and sewage difficulties, waste management, soil contamination, climate change mitigation and adaptation, and resource utilization and efficiency.

Like the other ISO management system standards, ISO 14001 stipulates that an organisation's processes and attitude toward environmental issues must be continuously improved. Recent revisions to the standard include significant enhancements like a stronger commitment to proactive initiatives that improve environmental performance (EP), increased prominence of environmental management within the organisation's strategic planning processes, and increased leadership input.

ISO 14001 is a strategic approach to improving an organisation's environmental performance. It helps demonstrate compliance with statutory and regulatory requirements, increase employee leadership involvement, improve company reputation, and stakeholder confidence. It incorporates environmental issues into business management, providing a competitive and financial advantage through improved efficiencies and reduced costs. Additionally, it encourages better environmental performance of suppliers by integrating them into the organisation's business systems and supply chain.

Accredited certification to ISO 14001 is not a requirement, and organisations can reap many of the benefits of using the standard without going through the accredited certification process. Third-party certification, in which an independent certification authority examines your operations against the standard's requirements, is a way of indicating to your buyers, customers, suppliers, and other stakeholders that you have correctly applied the standard. Furthermore, for certain firms, it is useful to demonstrate how they satisfy regulatory or contractual criteria.

The adoption of GHRM and GOC is influenced by customers, employees, and society. Customers can influence the adoption of by demanding companies follow ISO or other similar standards. When customers prioritise working with companies that adhere to these standards, businesses are more likely to adopt GHRM practices to retain their customer base. Employees can also play a role in influencing the adoption of GHRM. If employees are aware of the benefits of GHRM and advocate for its implementation within their organisations, it can lead to increased adoption. Additionally, society as a whole can influence the adoption of GHRM through social pressure and expectations. When society values sustainable practices and expects businesses to be environmentally and socially responsible, companies are more likely to adopt GHRM to align with these expectations.

1.2 Operational Definitions

Construct/Variable	**Definition**
Green Human Resource Management Practices (GHRMP)	"Practice of acquiring, training, appraising, and compensating employees to promote and achieve sustainable goals" (Shaikh, 2013; Jackson et al., 2014; Arulrajah et al. 2015; Sakka, 2018).
Green Job Description (GJD):	"Comprehensive document that delineates the specific tasks, responsibilities, and working conditions associated with a job role incorporating environmentally conscious criteria and objectives" (Renwick, 2013).
Green Recruitment and Selection (GRS):	"Process of hiring people having behaviour, knowledge and skills of environment management systems" (Obaid, 2015).

Green Training and Development (GTD):	"The series of events that are adopted for stimulating employees for acquiring skills and abilities for addressing environmental concerns" (Shah, 2019).
Green Performance Assessment (GPA):	"Measure of the annual or periodic performance of employees with respect to two different sets of attributes, namely the factors related to the job role and secondly, the factors related to environmental conservation" (Singh et al., 2020; Ubeda-Garcia et al., 2022).
Green Reward Management (GRM):	"The provision of monetary or non-monetary rewards offered to employees for the purpose of taking initiative and contributing to environmental performance" (Tamunomiebi and Mezeh 2022).
Green Organisational Culture (GOC):	"A comprehensive concept represented by a combination of elements constituting Leadership Emphasis, Message Credibility, Peer Involvement and Employee Empowerment to minimise the negative and maximise the positive impact of organisational activities on the environment" (Roscoe et al., 2019; Sroufe, Liebowitz, and Sivasubramaniam, 2010).
Leadership Emphasis (LE):	"Ability of the leaders to modify the policies of the firm, which determines the overall culture of the organisation" (Roscoe et al., 2019).
Message Credibility (MC):	"The perception of employees towards the communication by the managers or directors of the company" (Muisyo et al., 2021).

Peer Involvement (PI):	"Employee participation and mutual involvement in environmental initiatives" (Roscoe, 2019; Srinivasan and Kurey, 2014; Jabbour, 2011).
Employee Empowerment (EE):	"The level of employee autonomy for making effective decisions involving situations and requirements that are beyond formative rules" (Srinivasan and Kurey, 2014).
Organisational Performance (OP):	"Strategy for the organisation to seek the balance among the economic profit, environmental and social responsibility" (Qiuhong Jiang et al., 2018).
Environmental Performance (EP):	"The measurement of the implications of the firm on the natural environment through its activities" (Seman et al., 2019).
Financial Performance (FP):	"A measure of how much a company's ability to create profit, profit or revenue" (Fatihudin et al., 2018).
Social Performance (SP):	"The impact which a firm has on the communities in which it works" (Żak, 2015).

1.3 Significance of the study

This study is extremely important for a number of strong reasons. First, by adopting the Triple Bottom Line (TBL) framework in place of the conventional Resource-Based View (RBV) theory, it presents a significant theoretical advancement. This shift reveals an extensive understanding of how economic, social, and environmental factors are interrelated and is in accordance with the holistic ideology of ISO 14001 certification.

The study provides operational recommendations for ISO 14001 certified manufacturing organisations in India, focusing on the impact of GHRMP and GOC on OP. It offers actionable strategies to enhance OP and operational effectiveness, aiding strategic decision-making and aligning green initiatives with ISO 14001 certification requirements, especially in the global business landscape.

The research offers a foundation for benchmarking and identifying best practices across various manufacturing sectors in India, promoting sustainability guidelines, and establishing organisations as pioneers. It also influences policymakers and regulatory bodies, providing evidence on the effectiveness of ISO 14001 certification in promoting sustainable practices and OP in the manufacturing sector, thus shaping future environmental policies and regulations.

Academically, the study enhances debate on green management approaches, particularly in developing countries like India. The study adds to the growing body of knowledge on the topic of sustainability and OP by exploring issues peculiar to the Indian manufacturing setting.

The study's global relevance extends beyond geographical boundaries, offering universal applicability for ISO 14001 certified manufacturing organisations worldwide, enhancing its impact within the broader global community committed to environmental sustainability, despite its roots in the Indian context.

Overall, this research is important and has significant implications for researchers, business professionals, decision-makers, and the international community. In an effort for a greener and more sustainable future, it not only advances scholarly knowledge of sustainable practices but also acts as a useful manual for businesses establishing the challenging path to ISO 14001 certification.

1.4 Problem Statement

The manufacturing sector in India, despite its economic significance, faces a critical environmental challenge concerning sustainability and ecological responsibility. ISO 14001 certification, a widely recognised environmental management standard, underscores a commitment to green practices. However, the effective implementation of this certification, particularly within the area of GHRMP and GOC remains underexplored.

One central concern lies in the existing gap between environmental certifications, such as ISO 14001, and their translation into tangible OP outcomes. Despite the global push towards sustainable business practices, a dearth of comprehensive research hinders the understanding of how the integration of GHRMP and GOC influences OP, especially in the context of manufacturing industries adhering to ISO 14001 standards.

While businesses globally are embracing GHRMP to achieve organisational goals and environmental restoration (Khan et al., 2020; Chowdhury et al., 2022), the link between GHRMP, GOC, and OP remains inadequately explored, particularly in the manufacturing sector. In previous literature GHRM area is generally overlooked, where, researchers have just conceptually considered GHRM in segregation. (Jabbour et al., 2010; Berrone and Gomez- Mejia, 2009; Massoud et al., 2008), and its implementation or empirical proof is laid back (Mahmood et al., 2016; Sayed, 2015; Daily et al., 2012; González-Benito and González-Benito, 2006;). GOC encompasses employee's nature, perception and participation (Kiziloglu, 2021; Sathasivam et al., 2021; Maqbool and Jowett, 2022), its impact on OP, crucial for growth and sustainability (Garza-reyes et al., 2018; Eslami et al., 2019; Cheng et al., 2022), lacks clear establishment in manufacturing studies, thus highlighting a critical research gap. Jackson et al. (2011) affirms that the interaction between GHRM and GOC is one of the most relevant topics for investigation by today's scholars.

Empirical studies linking HRM practices to the establishment of a GOC are necessary for an advance in this state of the art (Abbas et al. 2021). GHRMP have been discussed by several researchers, but its connection with OP has not been clearly established with respect to manufacturing organisations, leading to a critical literature gap. Despite separate discussions on GHRMP, GOC, and OP, the interplay among them, especially the mediating role of GOC between GHRMP and OP, remains unexplored. Therefore, this study seeks to address this gap, focusing on the manufacturing sector.

1.5 Scope of the study

The main aim of the current study is to investigate the relationship between GHRMP, GOC and OP. Geographically, the study spans the diverse landscape of manufacturing industries, ensuring a representative examination of varied challenges and opportunities across regions and sectors. Inclusivity extends to organisations of different sizes and structures, embracing both small and medium enterprises (SMEs) and large-scale corporations. Centrally anchored to the ISO 14001 certification framework, the study meticulously explores the spectrum of GHRMP and GOC, emphasising their role in achieving environmental management standards. Performance metrics encompass environmental, financial, and social measures, ensuring the impact of green initiatives on the overall OP.

Objectives of the study:

The following objectives of the study shall be justified through the course of the current study:

RO1 (RO=Research objective): To study the relationship between GHRMP and GOC in manufacturing organisations.

RO2: To study the relationship between GOC and OP in Manufacturing organisations.

RO3: To study the relationship between GHRMP and OP in manufacturing organisations.

RO4: To examine the mediating effect of GOC on the relationship between GHRMP and OP in manufacturing organisations.

RO5: To investigate the relationship between individual components of GHRMP, GOC, and OP in manufacturing organisations based on ownership, organisation type, investment size, and region.

Research Questions of the study

RQ1: What is the relationship between GHRMP and GOC in manufacturing organisations?

RQ2: What is the relationship between GOC and OP in manufacturing organisations?

RQ3: What is the relationship between GHRMP and OP in manufacturing organisations?

RQ4: Does GOC mediate the relationship between GHRMP and OP in manufacturing organisations?

1.6 Research Methodology

The primary data collected via self-administered questionnaires using the quantitative survey method was analysed using IBM SPSS Statistics 21 software and AMOS. Self-administered questionnaires were appropriate because quantifiable information required for the purpose of the research was obtained thoroughly. This research aims at establishing relationship between GHRMP, GOC, and OP in ISO 14001 certified manufacturing organisations across India. Specifically, for the purpose of this research, ISO 14001 organisations are the ones who implement and maintain an environmental management system (EMS). This international standard provides a framework for organisations to identify, control, and reduce their environmental impact.

The sampling frame for this research includes HR professionals employed in these organisations. Primary data was collected using quantitative survey instrument employing criterion-based purposive sampling technique. The criterion-based purposive sampling technique involves selecting participants based on specific criteria that align with the research objectives.

For analysing the data, the study used descriptive statistics to provide an overview of the data, assessing central tendency and dispersion. Multicollinearity was assessed to prevent high correlations between independent variables, ensuring the reliability of results. Normality tests were conducted to determine if the data followed a normal distribution. Validity was examined to ensure the measures accurately captured the intended constructs. Common bias methods (CMB) were employed, including selecting and balancing the dataset, using statistical techniques, and performing robust sensitivity analyses. Confirmatory Factor Analysis (CFA) of different orders was performed to test the validity of the measurement model, and exploratory factor analysis was conducted to identify potential latent factors. Finally, Structural Equation Modelling (SEM) was used for hypothesis testing, providing a comprehensive statistical analysis of the data, a deeper understanding of variable relationships, and valuable insights into the research question.

1.7 Limitations

The study has some limitations that highlight challenges and potential areas for future research:

1. The study primarily focused on the relationships between GHRMP, GOC, and OP in ISO 14001 certified Indian manufacturing organisations. Therefore, the results of the present study may not be applicable to other industries or organisations that are not ISO 14001 certified.

2. The study collects primary data from 200 HR professionals at various organisational levels via a quantitative research approach. A qualitative approach may yield more detailed results.

3. The cross-sectional design of the study limits its ability to capture the long-term effects of GHRMP and GOC on OP.

1.8 Implications

This research contributes to a better understanding of the relationship between GHRMP, GOC, and OP in ISO14001 certified manufacturing organisations in India, which will benefit academic, research, and business sectors.

One of the major contributions is the theoretical shift from the traditional Resource-Based View (RBV) framework to the Triple Bottom Line (TBL) framework, which highlights the interconnectedness of economic, social, and environmental factors specific to ISO14001 certified organisations. The RBV framework primarily focuses on the firm's internal resources and capabilities as the main source of competitive advantage. However, the TBL framework goes beyond this by emphasising the importance of considering not only economic factors but also social and environmental aspects in business decision-making. This shift in perspective allows ISO 14001 certified organisations to holistically evaluate their impact on society and the environment while still maintaining their economic viability.

According to the study's findings, there is a significant relationship between GHRMP, GOC, and OP in all ISO 14001 organisations assessed. As a result, ISO 14001 can be a reliable indicator of a company's dedication to environmental management. The study found that organisations with ISO 14001 certification are more likely to implement effective green policies

and practices. These organisations demonstrated better compliance with environmental regulations, social norms, and profitability.

As ISO 14001 is considered as a reliable indicator of a company's dedication to environmental management, The policy makers can insist all the organisations to adopt and implement this standard. By doing so, organisations will be able to reduce their environmental impact and enhance their OP. The government can also provide support and incentives organisations to comply with ISO 14001, further driving the adoption of GHRMP across various sectors.

The findings of the study indicate that a strong green culture within an organisation can substantially enhance overall OP through leadership commitment, message credibility, peer involvement, and employee empowerment. This suggests that organisations that prioritize and promote green practices are more likely to actively engage in initiatives that benefit the environment and society also. So it is of eminent importance that top management actively support and encourage the development of a green culture within their organisation. By providing leadership and resources, top management can ensure that employees are empowered to make sustainable choices and contribute to the overall success of the organisation.

The study's findings demonstrate the practicality of the proposed conceptual model and provide valuable insights for its application in business-world scenarios. These significant relationships established in the study confirm the model's effectiveness and reliability. These were the brief implications that were presented here. While chapter five goes into more detail on the implications.

1.9 Organisation of Thesis

Chapter 1: Introduction

This chapter provides an overview of the research background, operational definitions, research, problem statement, aim, objectives, research questions, research methodology, significance, scope, limitations, implications, and thesis structure.

Chapter 2: Literature Review

This chapter reviews the literature on the previous subjects in order to acquire a thorough understanding of the available evidence and identify any gaps in it. This chapter provides the study's proposed conceptual framework and hypotheses.

Chapter 3: Research Methodology

This chapter describes the research approach that was used in the study. The research design, sampling unit and methodology, scale development, research instrument validity, data collection procedure, and data analysis procedure has been explained.

Chapter 4: Data Analysis and Testing of Hypothesis

This chapter focuses on the quantitative study results based on statistical tests.

Chapter 5: Findings, Discussion and Implications

This chapter summarises the entire research and highlights its important results. This chapter lists the similarities and contrasts between the current investigation's findings and the body of past literature. This chapter also discusses the academic and managerial implications, the study's limitations, and the scope for further research.

Chapter 2: Literature Review

2.1 Overview

The term "GHRMP" indicates the combination of conventional HRMP with initiatives designed to protect and enhance the overall corporate environment. The primary objective of the GHRMP is to foster the growth and sustainability of organisations while at the same time conserving the environment, conforming to the social responsibility ethos of organisations (Paulet et al., 2021).

Isensee et al. (2020) have noted that the implementation of GHRMP can serve as a catalyst for nurturing a GOC. GOC is the active incorporation of environmental and social responsibility principles into daily business operations, including employee performance. It is critical to emphasise that this applies to the internal business environment, where the influence of external factors such as government policies and economic conditions, being limited, indirectly shapes the OC.

According to Khan and Naeem (2018), OP can be classified based on monetary value, environmental impact, and the achievement of targets established in the organisation's vision and mission. It has been ascertained that both GHRMP and GOC have a positive and direct impact on performance, hence must be considered by the management.

This is important for both employees and employers because it leads to mutual benefit for both, which leads to the development of the overall economy. An intensive review of past studies related to GHRMP, GOC, and OP has been done below with its different variables and the relationship among them in both theoretical as well as practical manner. The research gap has also been identified along with the conceptual framework and hypotheses are developed with respect to the literature gap and objectives of the study.

2.2 Green Human Resource Management Practices (GHRMP)

GHRMP refers to “practice of acquiring, training, appraising, and compensating employees to promote and achieve sustainable goals” (Shaikh, 2013; Jackson et al., 2014; Arulrajah et al. 2015; Sakka, 2018). It is the implementation of specific HRM policies which aim to ensure the sustainability of the organisation, by aligning the goals of the firm with environmental conservation practices. The quality of an organisation's HRM significantly influences its sustainability and effectiveness (Tari and Nirmala, 2023). These practices are built after considering the industry type, size, available revenue, perception of employees and management, and the overall environmental attributes like carbon footprint, and the impact the company can cause on local biodiversity. GHRMP is an extension of traditional HR practices, hence the models adopted are still traditional, which have been modified in order to accommodate new changes in business and attention given to environmental policies. This has to be regarded while HR managers frame GHRM policies to be implemented as practices (Yong et al., 2019).

GHRMP are important for aligning the objectives of an organisation with environmental conservation. Five major aspects of it have been discussed below.

2.2.1 Green Job Description (GJD)

GJD is a “comprehensive document that delineates the specific tasks, responsibilities, and working conditions associated with a job role incorporating environmentally conscious criteria and objectives” (Renwick, 2013). It is the development of job responsibilities in such a way that it leads to the fulfilment of company objectives along with ensuring sustainable environment restoration which includes broader aspects of the environment and not the local environment under which the company operates. The description however shall not exaggerate or diminish the job responsibilities or the ways through which candidates will associate with the environment during

the process. The human resource managers have to ensure that such description is also within the ambit of the legal ecosystem and doesn't go beyond the objectives of the organisation (Adjei-Bamfo et al., 2020; Shah, 2019).

2.2.2 Green Recruitment and Selection (GRS)

GRS is a "process of hiring people having behaviour, knowledge and skills of environment management systems" (Obaid, 2015). This refers to the adoption selection and recruitment methods which doesn't cause environmental damage. Furthermore, prefer prospective candidates for roles in the organisation who have a greater proclivity to work toward environmental conservation and the achievement of job objectives over candidates who do not have such proclivity. Here, it should be noted these policies have to be adopted throughout the organisation for better impact not in some positions, though initially they can be adopted for top management positions. These mechanisms, in the initial stage, reflect the transit process to a more environment-friendly system (Saeed et al., 2019; Jamal et al., 2021).

2.2.3 Green Training and Development (GTD)

GTD program comprises different initiatives taken by management in an organisation to ensure the availability of sufficient knowledge regarding environment conservation to the employees. It refers to "the series of events that are adopted for stimulating employees for acquiring skills and abilities for addressing environmental concerns" (Shah, 2019). This has to be a continuous process and it shall be ensured that there is sufficient participation among different employees of the organisation. Firms can seek assistance from external experts for this purpose to ensure better handling of environmental processes and integration with existing job roles, ensuring the effective outcome of various training programs conducted by the organisation for employees (Ojo and Raman, 2019; Ojo, Tan and Alias, 2022).

2.2.4 Green Performance Assessment (GPA)

GPA refers to a “measure of the annual or periodic performance of employees with respect to two different sets of attributes, namely the factors related to the job role and secondly, the factors related to environmental conservation” (Singh et al., 2020; Ubeda-Garcia et al., 2022). The key point to note in this case is how much attention is placed on integrating work environment and performance, which ensures that workers don't feel overworked and that their output is fairly assessed for performance reviews and potential advancement within the company. However, because there are many interconnected elements at work, GPA may get complicated.

2.2.5 Green Reward Management (GRM)

GRM refers to “the provision of monetary or non-monetary rewards offered to employees for the purpose of taking initiative and contributing to environmental performance” (Tamunomiebi and Mezeh 2022). It is established by the organisation with the aim of providing rewards for better conservation of the environment and fulfilment of job targets simultaneously. This system has to be established throughout the organisation or in specific departments, which has the most carbon footprint. It can lead to change in the behaviour of the employees by providing them with a physical motivation to adopt desired behaviour, which in this case is the preservation of the environment. Such practices can lead to a shift of perception even in employees who have a limited willingness to adopt new practices and tend to continue on old systems (Rawasdeh, 2018; Bazrkar and Mohsirpour, 2021).

2.3 Green Organisational Culture (GOC)

GOC refers to “the comprehensive concept represented by a combination of elements constituting Leadership Emphasis (LE), Message Credibility (MC), Peer Involvement (PI) and Employee Empowerment (EE) to minimise the negative and maximise the positive impact of

organisational activities on the environment" (Roscoe et al., 2019; Sroufe, Liebowitz, and Sivasubramaniam, 2010). It is the framework adopted by organisations to accomplish work objectives while also managing environmental challenges in which the organisation has been involved owing to its operations or location. Adoption of such a culture has resulted from activist and investor movements aimed at attaching social duties to the organisation as a whole, which would contribute to improved long-term viability. Green culture has been defined as a multifaceted strategy including the engagement of many stakeholders ranging from management to employees in the organisation (Gurlek and Tuna, 2018).

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There are different factors ranging from leadership to perception of employees which can affect the adoption of such culture, and they have been discussed below:

2.3.1 Leadership Emphasis (LEM)

The impact of leadership on the OC is well-known. Such impact is due to the ability of the leaders to modify the policies of the firm, which determines the overall culture of the organisation. LEM refers to the "ability of the leaders to modify the policies of the firm, which determines the overall culture of the organisation" (Roscoe et al., 2019). The long-term strategy set by managers serves as the foundation for culture development, while the organisational culture affects the ability

to overcome difficulties and achieve various goals in relation to the organisation's plan. Leaders must also ensure that they do not create significant variations in OC, which can lead to employee disagreement (Roscoe et al., 2019).

On the one hand, OC may have an influence on leaders since new managers must operate within the boundaries imposed by organisational culture. The GOC, on the other hand, will make sure that leaders adopt procedures that support such activities while also acting as a safeguard against deviations (Musiyo et al., 2022). Also, the GOC will advise and assist leaders in complying to established organisational standards and rules. Furthermore, the GOC will examine and monitor leaders' adherence to these principles on a regular basis, taking corrective action as needed.

2.3.2 Message Credibility (MC)

Message credibility refers to “the perception of employees towards the communication by the managers or directors of the company” (Muisyo et al., 2021). To have an efficient green culture in the organisation, management must be fully committed to achieving environmental goals, which cannot be done unless employees believe management cares about the environment and prioritises sustainable practices. This requires serious and continuous attempts by different sections of management (Muisyo et al., 2021)

The credibility of the message has to be established by developing a mutual trust with the management as well as considering the opinions of different stakeholders including employees as well. The credibility is closely associated with the existing communication framework, both formal as well as informal, and both shall be considered by the management (Vargas-Hernández and Calderón-Campos, 2022).

2.3.3 Peer Involvement (PI)

Peers play an important role in the organisation and can influence the activities of employees and managers by becoming a collective force for change and adoption in the organisation. It should be noted here that this involvement plays an important role in the development of the actual culture of the organisation, which may often differ from that of writing or expression. If the culture supports the growth of environmental consciousness, such activities will take place much faster than they are implemented by management, just as this requires incentives for the employee to adopt them as well (Chaturvedi, 2022)

PI is the "employee participation and mutual involvement in environmental initiatives" (Roscoe, 2019; Srinivasan and Kurey, 2014; Jabbour, 2011). PI is when a candidate engages with peers and is influenced, whether in a direct or indirect manner, to decide whether or not to become a part of the GOC. The direct influence can be easily established by analysing the conversation, whereas the indirect influence can only be determined through the analysis of implied meaning and non-verbal actions (Agrawal and Agrawal, 2022).

2.3.4 Employee Empowerment (EE)

EE refers to "the level of employee autonomy for making effective decisions involving situations and requirements that are beyond formative rules" (Srinivasan and Kurey, 2014)., and it can be both in the form of trust placed by the manager as well as the delegation of responsibility to complete a given task in a certain period of time. EE must be integrated into the overall ecosystem to ensure that the OC does not deviate. It should also be noted that this attribute takes into account both social models and overall, OC (Ashraful et al., 2021).

EE combines the elements of technical work with skills such as leadership and the courage and adaptability of employees. Therefore, the social model is given more priority here as it impacts

the personal mindset of employees, which can be reflected in the adoption of green cultural practices (Hameed et al., 2020).

2.4 Organisational Performance (OP)

OP refers to the "strategy for the organisation to seek the balance among the economic profit, environmental and social responsibility" (Qiuhong Jiang et al., 2018). The organisation can achieve its objectives effectively by utilizing various available resources which can be both financial and non-financial. OP is closely related to the performance of different employees and therefore can also be viewed as the overall performance of employees including machine usage. OP can be viewed as a result of HRM activities from the very beginning, i.e. from recruiting to daily management, and also includes training and development activities (Macke and Genari, 2018).

OP is also closely linked to the process used, as its efficiency is closely linked to improved results. This must be taken into account especially in environmental activities, as such activities require not only committed participation but also changes in the work process itself that can impact the organisation (Khajeh, 2018).

The three types of OP as per TBL approach and the impact of HRM on such have been briefly discussed below:

2.4.1 Environmental Performance (EP)

Hameed et al. (2020) suggested that HRM has an indirect influence on the organisation's EP as it is an important influencing factor that can promote the growth of the organisation's environmental awareness. EP can be defined as "the measurement of the implications of the firm on the natural environment through its activities" (Seman et al., 2019). EP has been calculated by

making moderate assumptions about the impact of an organisation's processes on fundamental natural factors such as land, air and water. Since these are carried out by employees, the HR practices in the organisation are directly related to EP. This connection is also established based on social models that define the responsibility of individuals to preserve and restore the environment through daily activities.

In this regard, Ren et al. (2020) compared the concern of EP with the rise of GHRMP and outlined that such consciousness and awareness have changed the basic framework of managing HR without modifying the general strategy of the organisation. This factor is more important than transformation, as such has led to companies not witnessing much reduction in their growth ratio and profitability, which is expected to encourage other firms to adopt the same measures. This has also signified the close connection between the environmental impact of companies on employees and the need for a collective effort to improve performance in this regard.

2.4.2 Financial Performance (FP)

FP is “a measure of how much a company's ability to create profit, profit or revenue” (Fatihudin et al., 2018). Since FP is reflected in the organisation's annual and periodic financial statements, which include the balance sheet and the revenue and income statements, it is simple to compare it to the other concepts. The role of human resources is based on the direct assumption that FP is the sum total of the efforts done by the employees, but it undermines the importance of technological systems as well as other financial aspects like the exchange rate of the organisation (Lo and Liao, 2021).

HRM is related to FP in two ways, namely employee performance and employee expected profitability. Such profitability can be the profit that the company wants to achieve after deducting compensation and other elements of the organisation's compensation structure. FP is about optimal

allocation of resources, while human resource management aims at providing suitable people for the relevant role, thus becoming two cornerstones of the organisation. Both have deep connections that are not visible on the surface (Taamneh et al., 2018).

2.4.3 Social Performance (SP)

SP refers to "the impact which a firm has on the communities in which it works" (Żak, 2015). Ren and Jackson (2020) have defined SP as "The alignment of the vision and mission of an organisation with the development of general society". This was determined based on organisational social responsibility promoted by activists, with the only difference that it also continuously measures the impact of actual implementation. This was done to consider any discrepancies and act appropriately to satisfy the various stakeholders.

This idea was proposed by Aust et al. compared with HRMP. (2020), who pointed out that the idea of HRM to find the right person for the right job in an organisation has led to a closer connection of SP with the HRM system in force in the organisation. HRM also plays an important role in aligning the workforce with the vision of the organisation which forms the basis for measuring SP and in turn is a close enabler and facilitator. It was pointed out that corporate social responsibility, which is also measured within the framework of SP, is closely related to HRMP.

2.5 Relationship between GHRMP and GOC

GHRMP is closely linked to the OC in a very significant way. This relationship is based on two aspects, namely the commitment of employees to implement such policies in the organisation and the influence that such HRMPs have on employees' environmental behavior. These elements are closely related to HRM as it defines employee responsibilities by providing job descriptions, selecting suitable candidates and then conducting appropriate training programs to ensure

compliance without compromising productivity. GHRMP also provides adequate assessment methods that enable continuous reality testing (Ansari et al., 2021).

However, Chen and Yan (2022) established the relationship between GHRM and OC based on the vision of the organisation as well as the moderating role of leadership that provides the connection between the two roles. The role of leadership was considered as a moderator as different leadership styles confer different preferences on the adoption of green practices. However, due to stakeholder activism, such a relationship has become less moderating but more influential on leadership factors such as communication and persuasion. Organisational strategy has been linked to the broader boundaries within which both activities operate and it determines the validity of an action. It can be concluded that the strategy forms the basis for the development of the relationship between GHRM and GOC.

Ali et al. (2021) have described the relationship between GHRM and GOC by viewing GHRMP as an enabler for promoting GOC for any organisation around the world. It was suggested here that GHRM practices set the general framework to be adhered to by employees, which can lead to the simultaneous development of an environmentally conscious culture if one has not already been developed through management activities. Therefore, it also aids management.

According to Tanova and Bayighmong (2022), employees are now more aware of the connection between GHRM and GOC. They claim that both the adoption of GHRMP and the growth of an existing culture ultimately contribute to the creation of awareness, which in turn promotes the development of other characteristics. This idea complicates interactions by creating interconnected paths, but has also demonstrated the benefits an organisation can gain from growing the two traits together. Here too, consciousness is not understood in the broadest sense, but rather in the sense of an awareness of environmental qualities.

Sustainability could be the result of GHRMP and environmentally conscious OC. Sustainability therefore also may also be considered as an effective measure of the interaction between GOC and GHRM. It is important to note that sustainability does not define the role of each variable individually and then measure the combined effect, but rather it is a single measure of both sustainability and GHRMP. Therefore, there may also be a relationship between GOC and GHRMP analysed from the perspective of sustainability. This aspect has gained importance due to the measurement opportunities it offers external stakeholders such as investors and government regulators (Abbas et al., 2022).

On the other hand, Yong et al. (2022) claimed that GHRM should not be viewed as a stand-alone system, but that each part of it must be considered when analysing the impact on the GOC. This notion was proposed due to two main aspects: firstly, different functions of HRM have both direct and indirect effects, so it is important to consider the individual relationship, and secondly, HRM is associated with activities related to HR of the organisation as they are complex and involve different psychological models, a more comprehensive analysis needs to be carried out in which different factors are covered differently.

Shreevamshi et al. (2022) in their study defined the relationship between GHRMP and GOC based on various environmental activities of the organisation, ranging from reducing resource waste to promoting environmental protection activities. This distinction was introduced to connect the relationship between both aspects based on each environmental activity. This has enabled easier distinction between social and psychological behavior exhibited by the organisation's employees. This leads to practical implications for management to change the two activities simultaneously, further linking the two elements.

Vargas-Hernandez et al. (2022) examined the relationship between GHRMP and GOC, concluded that there is a close relationship which can be defined by a few different variables. However, the broader variable is the company's environmental footprint, which must be continually assessed to ensure better environmental management in the organisation.

2.6 Relationship between GHRMP and OP

GHRMP aims to improve OP by integrating circular economy and sustainability measures into HRM. The circular economy includes various activities, ranging from recycling to adopting more environmentally conscious activities, which can be actively promoted through GHRMP in the organisation. The GHRM system also helps select and develop employee skills, focusing on both productivity and environmental awareness. It has been hypothesized to improve performance by reducing additional expenses that may arise due to environmental pollution (Marrucci et al., 2022).

In this context, Marrucci et al. (2021) stated that GHRMP has directly contributed to employee EP as it focuses on environmental awareness in every activity of the organisation, whether related to production or management. However, there are two points to note here: When EP is positive, it does not always contribute to a positive OP, as such activities can generate additional expenses. Therefore, the net impact should be considered, including the fees and costs incurred in the event of non-compliance. The second point relates to the nature of the industry and the relative damage it causes to the environment.

Comogilo et al. (2022) have proposed a practical approach to determining the impact of GHRMP on OP by comparing the level of resource wastage by employees or human resources managers throughout the process, which can be reduced by adopting environmentally friendly practices. Here it may be that the net contribution is not significant and approaches the minimum

value after a few years of implementation. Such a continuous phase with minimal positive contribution is considered an optimal phase or should be considered as a starting point for introducing further innovations in the system.

Furthermore, Daddi et al. (2022) in their study considered the analysis of total waste limits as a measure of the relationship between GHRM and OP. This variable has been considered for long term conclusions as in the short-term people may adopt such pro-environmental behavior but in the longer term this is intended to lead to motivation among the employees which ensures that the employees themselves are motivated to perform better activities increasing productivity and environmental efficiency. The reduction of waste should not be viewed as the primary goal, but local factors such as biodiversity, which can lead to conflicts, are also considered as factors for defining the connection.

Mouso and Othman (2020) distinguished between different factors of the GHRM system and highlighted GRS and GTD as the primary aspects that define the relationship by acting as facilitators. This assumes that such services can lead to the selection of new environmentally conscious employees and the development of such perceptions among existing employees, which can lead to an improvement in operational processes. One of the key points made clear here is that the relationship has been established and each factor of the two parts of the relationship must follow the pattern set by the broader ecosystem.

Raut and Gardas (2020) further examined the relationship between GHRM and OP and argued that the impact of such GHRM on OP needs to be determined on the overall organisational structure. This idea tends to differentiate between new and existing employees in order to better understand the changes that have occurred due to training programs and selected programs. This concept was proposed to distribute resources more responsibly among the various activities of the

GHRM, which would ensure further improvement of the organisation's FP over a longer period of time.

Suharti and Sugikarto (2020) assumed that the relationship should be considered on the basis of total resource consumption, and that such resources can be both tangible such as raw materials and intangible such as the goodwill of the organisation. Goodwill and reputation are expected to grow directly due to the positive opinion that the introduction of such systems can generate among external stakeholders including investors and the employees themselves. Resource consumption is an important factor because it directly determines both the environment and the financial performance of the organisation and is often also considered by investors. This term can also be helpful in an effective comparative analysis of different companies in the same industry.

Ahmed et al. (2021) mentioned in the study that the connection is also closely linked to the individual level. A senior manager who actively promotes GHRM to improve OP has a different impact than a colleague who promotes the same, although both tend to be positive.

Within the manufacturing context, GOC refers to the collective consciousness of the workforce regarding environmental responsibility. This includes employees' willingness to actively participate in sustainable efforts and promote an environmentally conscious work ethic (Nureen et al., 2023, Shahriari et al., 2023 and Rehman et al., 2023). Examining the relationship between GHRMP and GOC reveals a dynamic relationship where the adoption of sustainable HR practices encourages employees to adopt environmentally responsible behavior. This, in turn, promotes a culture in which environmental awareness is deeply rooted and contributes to the organisation's holistic commitment to sustainable development.

2.7 Relationship between GOC and OP

GOC and its relative impact on OP were determined based on the values that this culture promotes among the organisation's diverse employees. Individual and group dynamics should be considered separately, as an employee can perform differently in both an individual and a group setting. It should also be considered that every factor that defines the relationship between OC and performance also works with the involvement of environmental practices. Therefore, it is relatively easier to analyse than the relationship between other variables in the dynamic business environment (Chu et al., 2018).

El Baz and Iddik (2021) suggested that the relationship between GOC and OP is closely related to internal factors of the organisation, such as employee perception and participation rate. Since internal factors are just as important as external factors, this connection must be adequately taken into account by management. However, the internal factors can also consist of individual elements such as the compensation structure and objectives that must be managed by employees, but which are not covered under OC and therefore must also be analyzed based on cultural aspects. When developed in this way, this relationship is also applicable to global offices.

However, El baz and Ibidik (2020) found that OC is significantly influenced by national customs as well as perceptions among the country's general population. The relationship between GHRM and OP becomes more complex when such national and global aspects are also considered. Global aspects need to be considered more for global organisations as the corporate vision would be aligned with such perception to develop the OC, which would then impact performance. Culture is therefore considered constant for developing frameworks for the two variables.

OP was calculated based on certain performance indicators determined by the organisation's management. Therefore, the relationship between OP and GOC can only reflect the validity of

these indicators, which are also reflected in the performance evaluation. This has led to the idea that only those cultural factors that imply variation in performance can be considered here. It has led to a slightly objective relationship; However, most organisations prefer subjective relationships where the net impact is seen as performance improvement. However, the objective relationship should be used to determine the validity of new changes (Rizzi et al., 2022).

The study conducted by Arfara and Samanta (2020) has shown the relationship between GHRM and OP in different ways, namely from the perspective of SP in a group context and employee performance in an individual role. The relationship is determined using GHRM and OP, but with different measures. The main reason for this relationship is that SP can be measured as the achievement of organisational goals and such goals can lead to increased economic returns and environmental benefits. This term also helps understand the overall impact of relationships in financial transactions such as mergers and acquisitions.

The analysis by Najib et al. (2022) offers a distinct perspective. The researchers point out that short-term factors such as price movements and inventory fluctuations can impact the relationship, although a longer term is not seen as fostering a positive culture. Positive performance growth rates can lead to higher earnings, considering the limited impact of price fluctuations leading to higher stock prices. It should be noted that short-term changes may not produce significant organisational responses. Meanwhile, Farhan and Nawaz (2022) conclude that although the relationship is sound in theory, it is difficult to put into practice due to dynamic business environments and market factors. Nevertheless, maintaining a positive growth rate remains favorable for companies.

The manufacturing sector, characterised by resource-intensive operations, plays a unique role in both environmental protection and economic growth. GHRMP, with its focus on integrating

sustainable practices into HR functions, sets the stage for examining their impact on OP (He et al., 2023 and Afzal et al., 2023). In a time of growing environmental concerns and the imperative of sustainability business practices, the interface between GHRMP and OP in the manufacturing sector is crucial. The aim of this scientific research is to uncover the complicated relationship between these two dimensions and to reveal how the implementation of GHRMP affects an OP metrics.

2.8 GOC as a mediator of GHRMP and OP

GOC is believed to have a direct impact on both the implementation of a GHRM system and the OP. On theoretical grounds, the effects were found to be both positive and significant and therefore need to be considered for research. From a practical perspective, it was believed that the Chinese government would effectively promote a GHRM system as it would support the growth of a green culture among the organisation's employees. GOC is directly related to the growth of OP in both financial and environmental terms and impacts both variables (Doghan et al., 2022). Zhang et al. (2022) found that a GOC can promote employee engagement and belonging, which is crucial for both performance improvement and the implementation of a GHRM system. It is important to note here that commitment is considered a more important factor than affiliation, as the latter is directly variable with the former. OC also consists of various aspects such as motivation, but can be defined by the combination of two elements discussed above.

Shah et al. (2019) stated that the relationship can be determined not only by psychological aspects, but also by financial aspects. The implementation of GHRMP requires significant effort, which may not produce effective results if not accepted by the staff designated by the OC. OP is determined by the active participation of employees, as conflicts are known to cause significant

damage to employees' sales and growth potential. This can be improved by developing a more innovative and collaborative culture, which in turn requires moderating the role of the GOC.

To demonstrate the universality of this relationship, Awan et al. (2022) have suggested that such relationships also apply to small and medium-sized organisations around the world because they also have many employees reporting to them. Smaller organisations may notice the effects of another variable, leadership style, because here the number of employees is small, making leadership style a greater influence on OC. However, the implications assume that more managers in larger organisations can make rational decisions and reduce the impact of ineffective leadership. In addition, Islam et al. (2020) highlighted in the study that the roles may vary between different GOC, GHRMP and OP, but under normal circumstances the relationship would not have any deviations, demonstrating the validity of relationships worldwide.

2.9 Research Gap

While businesses globally are embracing GHRMP to achieve organisational goals and environmental restoration (Khan et al., 2020; Chowdhury et al., 2022), the link between GHRMP, GOC, and OP remains inadequately explored, particularly in the manufacturing sector. In previous literature GHRM area is generally overlooked, where, researchers have just conceptually considered GHRM in segregation. (Jabbour et al., 2010; Berrone and Gomez- Mejia, 2009; Massoud et al., 2008), and its implementation or empirical proof is laid back (Mahmood et al., 2016; Sayed, 2015; Daily et al., 2012; González-Benito and González-Benito, 2006;). GOC encompasses employee’s nature, perception and participation (Kiziloglu, 2021; Sathasivam et al., 2021; Maqbool and Jowett, 2022), its impact on OP, crucial for growth and sustainability (Garza-reyes et al., 2018; Eslami et al., 2019; Cheng et al., 2022), lacks clear establishment in manufacturing studies, thus highlighting a critical research gap.

Jackson et al. (2011) affirms that the interaction between GHRM and GOC is one of the most relevant topics for investigation by today's scholars. Empirical studies linking HRM practices to the establishment of a GOC are necessary for an advance state of the art (Abbas et al. 2021). GHRMP have been discussed by several researchers, but its connection with OP has not been clearly established with respect to manufacturing organisations, leading to a critical literature gap. Despite separate discussions on GHRMP, GOC, and OP, the interplay among them, especially the mediating role of GOC between GHRMP and OP, remains unexplored. Therefore, this study seeks to address this gap, focusing on the manufacturing sector.

2.10 Conceptual Framework

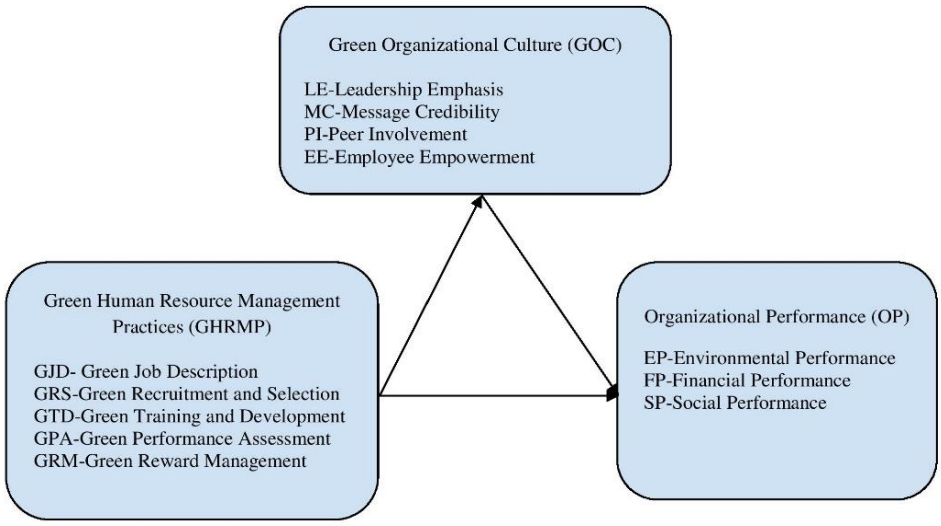

Figure 1: The proposed conceptual model to study the relationship between GHRMP, GOC and OP in ISO 14001 certified manufacturing organisations across India.

The conceptual framework has been developed through intensive analysis of past literature. GHRMP have been considered as an independent variable with OP being considered as the dependent variable. GOC has been considered as mediating variable and its impact on both GHRMP and OP has been considered.

The conceptual framework accomplishes a considerable integration of GOC, GHRMP, and OP while being rooted in the Triple Bottom Line (TBL) approach theory. GHRMP work as a catalyst to systematically integrate sustainable principles into HRMP. Employee values and behaviors with regard to environmental responsibility are significantly influenced by the GOC. This results in resource conservation (Environment), increased participation (Social), decreased operational costs (Finance) and improved overall OP.

GHRMPs functioning as a catalyst, seamlessly links sustainable paradigms into HR functions. Such practices engender a sense of employee contentment (People) while concurrently fostering resource conservation (Planet). This constructive interaction augments talent management strategies and operational efficiency (Profit), yielding holistic benefits.

OP, the cornerstone of this framework, encompasses multifaceted and comprehensive dimensions- FP, SP, and environmental stewardship. GOC and GHRMP significantly amplify social engagement and eco-friendly behaviors (People and Planet), thereby reinforcing the organisation's steadfast commitment to sustainable practices. This intricate interplay further results in the organisation's long-term profitability and unwavering dedication to the strategy of sustainability.

The TBL approach fosters a collaborative relationship between environmental, social, and economic imperatives, ensuring a holistic alignment of goals and values across various organisational facets. This symbiotic relationship fosters an iterative cycle, promoting a scholarly depth that aligns with the research objectives.

2.11 Hypotheses of the study

The following hypotheses have been tested during the study:

H1: There is a significant relationship between GHRMP and GOC in manufacturing organisations.

H1a: The relationship between individual GHRMP and GOC in manufacturing organisations varies depending on the type of ownership.

H1b: The relationship between individual GHRMP and GOC in manufacturing organisations varies depending on the organisation type.

H1c: The relationship between individual GHRMP and GOC in manufacturing organisations varies depending on the investment size.

H1d: The relationship between individual GHRMP and GOC in manufacturing organisations varies depending on the region.

H2: There is a significant relationship between GOC and OP in manufacturing organisations.

H2a: There is a significant relationship between GOC and EP in manufacturing organisations.

H2b: There is a significant relationship between GOC and FP in manufacturing organisations.

H2c: There is a significant relationship between GOC and SP in manufacturing organisations.

H2d: The relationship between individual individual GOC and OP in manufacturing organisations varies depending on the organisation type.

H2e: The relationship between individual GOC and OP in manufacturing organisations varies depending on the organisation type.

H2f: The relationship between individual GOC and OP in manufacturing organisations varies depending on the investment size.

H2g: The relationship between individual individual GOC and OP in manufacturing organisations varies depending on the region.

H3: There is a significant relationship between GHRMP and OP in manufacturing organisations.

H3a: There is a significant relationship between GHRMP and EP in manufacturing organisations.

H3b: There is a significant relationship between GHRMP and FP in manufacturing organisations.

H3c: There is a significant relationship between GHRMP and SP in manufacturing organisations.

H3d: The relationship between individual individual GHRMP and OP in manufacturing organisations varies depending on the organisation type.

H3e: The relationship between individual GHRMP and OP in manufacturing organisations varies depending on the organisation type.

H3f: The relationship between individual GHRMP and OP in manufacturing organisations varies depending on the investment size.

H3g: The relationship between individual individual GHRMP and OP in manufacturing organisations varies depending on the region.

H4: GOC significantly mediates the relationship between GHRMP and OP in manufacturing organisations.

2.12 Summary

The growing recognition among business organisations to balance sustainability and environmental protection has prompted the development of GHRMP. These practices revolutionise traditional HRM by incorporating environmental awareness and consciousness into every facet.

This shift has given rise to a GOC where employees embrace efficiency and environmental responsibility in their roles within the organisation. This encompasses various aspects including social objectives, leadership, and the workforce. These elements, in turn, have a direct link to OP, a critical gauge of an organisation's growth and sustainability. OP can be categorised into financial, environmental, and social dimensions based on the specific attributes assessed. Of these, OP stands as the most proximate indicator of the success of GHRM and the GOC within the organisation. Prior research has firmly established the distinct relationship between GHRM, GOC, and OP, encouraging managerial adoption of these practices. While GOC has been scrutinised as a mediator between the implementation of GHRM and OP, this relationship has not been comprehensively examined within the manufacturing industry, an aspect this study will address. An advanced state-of-the-art system demands empirical research linking each component of GHRMP to creating GOC and GOC to OP. Based on the literature, the influence of each component of GHRMP, GOC, and OP has been studied. This study is necessary because there may be variations in how these components interact.

Chapter 3: Research Methodology

The methodology used for the study is covered in this chapter, including the population, sample size and sampling method, data gathering methods, instruments designed and validated, and data collection procedure.

3.1 Research Design

The study employed the quantitative survey method to analyse the primary data obtained from self-administered questionnaires. IBM SPSS Statistics 21 software and AMOS were utilised for the purpose. This study used a criterion based purposive sampling method. The criterion based purposive sampling method is a non-random sampling technique that is used to select participants based on specific criteria or characteristics. This method allows researchers to carefully choose individuals who meet the desired qualifications for their study, ensuring that the sample is representative of the population they are studying. By using this approach, researchers can gather data from participants who possess the necessary knowledge, experience, or expertise relevant to their research objectives. Self-administered questionnaires were appropriate because quantifiable information required for the purpose of the research was obtained.

While analysing data following tests were conducted:

1. **Descriptive statistics** for summarising and organising large sets of data. It helps to provide a clear and concise understanding of the data by presenting measures such as mean, median, and standard deviation. Additionally, descriptive statistics can be used to identify patterns, trends, and outliers within the data, making them a valuable tool for researchers and analysts in various fields.

2. **Multicollinearity** was used, to describe the phenomenon where two or more predictor variables in a regression model are highly correlated with each other. This can cause issues in the interpretation of the model's coefficients and can lead to unstable and unreliable results. One common approach to dealing with multicollinearity is to remove one or more of the correlated variables from the model, either by using domain knowledge or statistical techniques such as variance inflation factor (VIF) analysis. Additionally, regularisation techniques like ridge regression or lasso regression can also be employed

3**. Normality test** was conducted to ensure that the data collected for the study follows a normal distribution. This test helps to determine if the assumptions of parametric statistical tests are met, allowing for accurate and reliable analysis. Additionally, by assessing the normality of the data, researchers can identify any potential outliers or skewness that may impact the validity of their findings.

4. **Validity** to ensure that the measurements and procedures used in the study accurately represent the constructs being studied. It helps to determine if the results obtained are reliable and can be generalised to a larger population. Additionally, validity also assesses whether the study measures what it intends to measure, ensuring that the conclusions drawn from the research are valid and meaningful.

5. **Common Bias Method** to minimise the impact of any potential biases in the study. This method involves implementing various strategies, such as randomisation and blinding, to reduce the influence of confounding variables and ensure that the results are not skewed by any external factors. By employing a common bias method, researchers can increase the internal validity of their study and enhance the overall credibility of their findings.

6. **Confirmatory Factor Analysis (CFA)** of different orders was used to determine the most appropriate model fit for the data. This involves testing different models with varying numbers of factors to see which one best represents the underlying structure of the variables being measured. By conducting CFA of different orders, researchers can ensure that their chosen model accurately captures the relationships between variables and provides a reliable representation of the construct being studied. This helps to strengthen the validity and reliability of the research findings, ultimately enhancing the overall quality of the study.

7. **Structural Equation Modeling (SEM)** is used to analyse the relationships between latent variables and observed variables, allowing researchers to test complex theoretical models and hypotheses. It provides a comprehensive framework for understanding the underlying mechanisms and processes that drive the observed data patterns. By utilizing SEM, researchers can gain a deeper understanding of the relationships between variables and make more accurate predictions about their effects. This enhances the robustness of their findings and contributes to the advancement of knowledge in their respective fields.

3.2 Study Population, Sampling Frame and Sample

This research established relationship between GHRMP, GOC, and OP in ISO 14001 certified manufacturing organisations across India. Therefore, the population of this research is ISO 14001 certified manufacturing organisations across India, who have obtained ISO 14001 certification for Environmental Management System. Primary data was collected from 200 HR professionals employed in these organisations.

There are particular factors to be consider when establishing the minimum number of participants needed for a research study that makes use of the AMOS software for structural equation modelling (SEM). "A sample size of 200 to 300 participants is generally regarded a

reasonable starting point for SEM studies," claims Kline (2016). Byrne (2012) states that "a frequently advised guideline is to have at least 10–20 cases per observed variable in SEM analysis to ensure adequate sample size" (p. 123). Therefore, to meet the sample of 200 to 300, around 1200 questionnaires were circulated.

3.3 Research Instrument for Data Collection

The present study's scale development procedure used the following three steps to ensure reliability and validity: 1) Literature review; 2) Item generation; and 3) assessing reliability and validity.

3.3.1 Item Generation and Scale Development

A multidimensional scale was developed to study the relationship between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP). This scale is a combination of various scales based on the literature and an adaptation of the GHRMP Scale developed by Tang et al., 2018; Roscoe et al., 2019; Alavi and Aghakhani, 2021, GOC Scale developed by Roscoe et al., 2019; and OP Scale developed by Bansal, 2005.

The scale consists of two sections. The first section comprises general information about the organisations and respondents. The other part consists of 73 items to measure all constructs, namely, GHRMP consists of a total of 31 indicators across five dimensions or variables; GOC consists of a total of 20 indicators across four dimensions or variables; OP consists of a total of 22 indicators across three dimensions or variables on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3.2 Face Validity of Research Instrument

Allen and Yen (1979), Anastasi (1988), and Nevo (1985) defined face validity as the degree that the respondents or users judge the items of an assessment instrument if are appropriate to the targeted construct and assessment objectives, cited by Hardesty and Bearden, (2004).

Face Validity was tested using three industry experts by evaluating the items using a 5-point Likert scale using ratings as follows: 1: Not important; 2: Slightly important: 3: Somehow important; 4: Important: and 5: Very important.

Then, all the questionnaires were collected and analyzed, the impact score was computed for each item, using the following formula and scores ≥ 1.5 were considered acceptable.

Impact score for each item was calculated using the following formula:

"Impact score = Frequency (%) × Importance".

"Frequency" in the formula is the number of respondents rated the item 4 or 5, while "Importance" is the mean score of the item on the 1–5 rating scale.

From the initial pool of 73 items, 71 items had a mean impact score ≥ 1.5. and remaining 2 items had a mean impact score of 1.1 and 1.2 respectively but these items were retained as they are extremely important for the purpose of final study having Relevance I-CVI being 1 each and UA also being 1 each for the item in the content validity analysis using CVI method rated by 6 academic experts in the relevant field.

3.3.3 Content Validity of Research Instrument

Content validity has been defined as ''the degree to which an instrument has an appropriate sample of items for the construct being measured'' (Polit and Beck, 2004, p. 423)

There is currently no consensus on the number of content experts required to review an instrument. Lynn et al. (1986) suggested a minimum of three. However, Gable and Wolf (2012); Waltz, Strickland and Lenz (1991) recommend between 3 and 20 panel members. The maximum number of experts has not been specified, but, often up to 10 experts are used. Using a larger number of experts will decrease the probability of chance agreement and may better inform instrument development (Rubio et al., 2003) Therefore, Almanasreh, Moles and Chen (2006), suggest using between 5 and 10 experts in the content validation process.

For this Study three Academic experts in the field of Management Studies and three Industry Experts have been considered.

Criteria for Content Validity Index:

Relevance	Clarity	Simplicity
1= Not Relevant	1= Not Clear	1= Not Simple
2= Item needs some revision	2= Item needs some revision	2= Item needs some revision
3= Relevant but needs minor revision	3= Clear but needs minor revision	3= Simple but needs minor revision
4=Very Relevant	4=Very Clear	4=Very Simple

Content Validity using CVI (Content Validity Index):

CVI is the most widely reported approach for content validity in instrument development (Rodrigues, 2017) because it is easy to understand and interpret as compared to other methods and it can be calculated for each item on an instrument (Item level-CVI or I-CVI) along with the content validity index for the overall instrument (Scale level-CVI or S-CVI) cited by Almanasreh, Moles and Chen, 2006. Lynn (1986) quoted that the researchers compute two types of CVIs, the first type

being the content validity of individual items of the scale (I-CVI) and the second being the content validity of the overall scale (S-CVI)

The CVI indices	Definition	Formula
I-CVI (item-level content validity index)	The proportion of content experts giving item a relevance rating of 3 or 4	-CVI = (agreed item)/ (Number of expert)
S-CVI/Ave (scale-level content validity index based on the average method)	The average of the I-CVI scores for all items on the scale or the average of proportion relevance judged by all experts. The proportion relevant is the average of relevance rating by individual expert.	S-CVI/Ave = (sum of I-CVI scores)/ (Number of item) S-CVI/Ave = (sum of proportion relevance rating)/ (Number of expert)
S-CVI/UA (scale-level content validity index based on the universal agreement method)	The proportion of items on the scale that achieve a relevance scale of 3 or 4 by all experts. Universal agreement (UA) score is given as 1 when the item achieved 100% experts in agreement, otherwise the UA score is given as 0.	S-CVI/UA = (sum of UA scores)/(number of item)

Source: Yusof et al., 2019.

I-CVI: is computed as the number of experts giving a rating of either 3 or 4 divided by the total number of experts. Polit and Beck (2006); Lynn, (1986) developed criteria for item acceptability that incorporated the standard error of the proportion and recommended that with a panel of six or more judges, the acceptable standard of I-CVIs should be no lower than .78.

Number of experts Acceptable	CVI values	Source of recommendation
Two experts	At least 0.80	Davis (1992)
Three to five experts	Should be 1	Polit and Beck (2006), Polit et al., (2007)
At least six experts	At least 0.83	Polit and Beck (2006), Polit et al., (2007)
Six to eight experts	At least 0.83	Lynn (1986)
At least nine experts	At least 0.78	Lynn (1986)

Source: Yusof et al., 2019.

S-CVI: is computed using the Average expert proportion (SCVI/Ave) and the Universal Agreement (SCVI/UA). S-CVI/Ave is the best to conceptualize and accepted widely as compared to Universal Agreement (SCVI/UA) since it demands 100% agreement and is hard to achieve an acceptable standard when the number of experts increases (Almanasreh, Moles and Chen, 2006). S-CVI/Ave is the average of I-CVI value, i.e., the mean of the proportion of items that were rated either 3 or 4 across all the six experts. Lynn's (1986) criteria would have an SCVI/ Ave of .90 or higher when 6 to 10 experts are involved. While, Davis (1992) and others have recommended a minimum S-CVI of .80. Calculation of S-CVI/Ave is solely good enough to prove the validity however reporting the value of UA-CVI with the Ave-CVI is recommended for more informative procedure (Almanasreh, Moles and Chen, 2006).

Result of the Content Validity:

Scale level-CVI or S-CVI

Relevance		Clarity		Simplicity	
SCVI/Ave	0.920959	SCVI/Ave	0.918904	SCVI/Ave	0.907397
UA	41	UA	41	UA	38
S-CVI/UA	0.561643836	S-CVI/UA	0.561643836	S-CVI/UA	0.520547945

The S-CVI/Ave for scale was more than the criteria of 0.9 set for S-CVI/Ave by Lynn (1986) i.e., 0.92 for relevance, 0.92 for clarity, and 0.91 for simplicity. Therefore, the scale is acceptable.

Item level-CVI or I-CVI

The I-CVI of individual items was equal to or more than 0.83 across relevance, fulfilling the criteria. All items have been found relevant calling for no deletion of the individual item.

The I-CVI of individual items was equal to or more than 0.83 across clarity for 70 items, fulfilling the criteria. While for 3 items I-CVI was less than 0.83, these items have been clarified further based on the comments and suggestions of the experts.

The I-CVI of individual items was equal to or more than 0.83 across simplicity for 69 items, fulfilling the criteria. While for 4 items I-CVI was less than 0.83, have been simplified further based on the comments and suggestions of the experts.

3.4 Data Collection Procedure for Pilot Study

A primary data collected from HR Professionals employed in IS0 14001 (Environmental Management Systems) certified manufacturing organisations only- who were aware of the

organisation and was capable of representing the views of the organisation appropriately through a questionnaire, comprises of different sections designed to achieve different purposes.

For Pilot study, respondents were contacted with the help of their official email addresses noted from the company websites, provided by the friends and acquaintances, Through HR WhatsApp groups and also through LinkedIn Profiles contacting them personally via sending messages on this platform across India. While many respondents from the State of Goa were contacted via official email addresses taken down from the official database provided by the Goa Chamber of Commerce and Industry (GCCI).

Approximately 150 questionnaires (Google Forms) were sent across the country with the help of the above-mentioned sources but only 18 questionnaires were filled in. Out of 15 questionnaires were retained and 3 were discarded as they were not in the scope of the research (1- Service Sector and other 2- Not ISO 14001 certified). Around 14 questionnaires were filled by the LinkedIn connections and 3 through WhatsApp contact and 1 through email contact.

Before sending the questionnaires to the respondents, personal contact was established with them and they were asked about their designation in the company, years of experience in the present organisation, and whether the organisation has ISO 14001 certification. Based on the satisfactory answers to the questions, brief information about the research topic was provided to them for better conceptual clarity and then the questionnaire was shared.

The majority of the respondents did not reply. Many agreed to answer the questionnaire but later they replied saying it is lengthy and time-consuming and cannot proceed further. Few said their information is confidential in nature, hence can’t fill in.

No errors/missing values were found in the questionnaires administered since all the questions were marked mandatory.

The sampling technique used in the pilot study was the convenience sampling technique because no detailed database or exact information was found about the total number of manufacturing organisations having ISO 14001 certifications across India. Organisations were contacted on a convenience basis and data were collected. On similar grounds, data will be collected for the purpose final study.

3.4.1 Pilot Testing

Hertzog (2008) made several different recommendations for sample size depending on the purpose of the pilot study in her recent and comprehensive article. For a feasibility study, her recommendations were, "samples as small as 10-15 per group sometimes being sufficient". For instrument development, her recommendation was 25 to 40.

The data obtained from the 15 responses were entered into IBM SPSS Statistics 21 software and Cronbach's alpha was calculated to test the instrument's reliability and provide a measure of the internal consistency of a scale. Generally, a questionnaire with an α of 0.8 is considered reliable (Field, 2009). However, values above 0.7 are acceptable indicators of internal consistency as suggested in literature (Nunnally, 1967). For this research, Cronbach's alpha for 73 items is **.966**, which indicates a relatively high level of internal consistency and Mean Value is **3.889** which is very good, mean value above 3.5 is considered good.

Data imported from IBM SPSS Statistics 21 software for 15 Responses:

Case Processing Summary

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.966	.969	73

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.889	3.267	4.400	1.133	1.347	.084	73

3.5 Data Collection Procedure for Final Study:

Data for final study was collected with similar approach as for pilot testing. Around 1200 questionnaires were circulated across the country from July 2021 till May 2022. Around 207 filled in questionnaires were received back with response rate of 17.25 with after constant reminders to the respondents. Out 207 questionnaires only 200 could be used for further study as five questionnaires were from service sector and two from non IS0 14001 manufacturing organisations. Other limitations for final data collection remains same which were encountered during data collected for pilot study.

Chapter 4-Data Analysis and Testing of Hypotheses

Following a pilot study of 15 responses, the instrument's reliability was confirmed using Cronbach's alpha for 73 items. The results showed that the instrument's mean value was 3.889, which is very good, and that Cronbach's alpha was.966, which indicated a relatively high level of internal consistency. A mean value above 3.5 is considered good. Final data were gathered from 200 HR professionals working for manufacturing organisations with ISO 14001 certification (about 1200 questionnaires were distributed), and IBM SPSS Statistics 21 and AMOS were used for analysis. The study used CFA of different orders, multicollinearity, normality, validity, the common bias approach, and, finally, SEM to assess the hypotheses.

4.1 Demographic Profile of the Respondents

Inquiries were made to understand the demographic profile of the participants on various grounds.

Gender

The table below displays the responses that were obtained by asking about the respondent's gender. In accordance with this, male accounted for 88.5% of them, while the remaining 11.5% were females. This data is consistent with industry estimates, which show that the country's manufacturing industry remains male-dominated, with female accounting for only 12% of manufacturing organisations on average.

Table 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	177	88.5	88.5	88.5
	Female	23	11.5	11.5	100.0
	Total	200	100.0	100.0	

Position

Participants were asked to highlight the position at which they were currently designated. Data consist of Top Level: 12% (President, Managing Director, Vice President HR, Senior HR Manager and General HR Manager), Middle Level: 61.5% (HR Manager, HR Business Partner and Deputy HR Manager) and Lower Level: 26.5% (HR Assistant, HR Associate and HR officer). It can be stated that the study was able to acquire data from HR professionals from different designations. Researcher used diverse, representative samples and rigorous protocols to minimise bias, establishing generalisability.

Table 2: Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Top Level	24	12.0	12.0	12.0
	Middle Level	123	61.5	61.5	73.5
	Lower Level	53	26.5	26.5	100.0
	Total	200	100.0	100.0	

Years worked in the current firm

In order to enable them to provide correct information about the organisation, participants were also asked how long they had been employed in the current organisation. Accordingly, it was found that 60.5% of HR professionals have been working for five years or less, 20.5% of them have been employed for 5–10 years, and 19.0% have been employed for ten years or longer. The effort was made to collect data from an equal number of respondents with experience of 5 years and above and those below 5 years. This data represents a good mix of respondents with good experience and those who are fresher or have less experience.

Table 3: Years worked in the current firm

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5 years and below	121	60.5	60.5	60.5
	05-10 years	41	20.5	20.5	81.0
	10 years and above	38	19.0	19.0	100.0
	Total	200	100.0	100.0	

Educational Qualification

Participants were asked about their educational backgrounds, and it was found that 67.0% of them had a postgraduate degree, 30.0% of HR professionals were undergraduates, and 3.0% held a doctorate. Every respondent had at least an undergraduate degree. They were equipped with the information and abilities needed to read, comprehend, and fill out the questionnaire.

Table 3: Educational Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under Graduate	60	30.0	30.0	30.0
	Post Graduate	134	67.0	67.0	97.0
	Doctoral	6	3.0	3.0	100.0
	Total	200	100.0	100.0	

Organisation Type

The respondents were asked to mention the nature of the organisation to which they belonged. In this regard, it was found that polluting organisations accounted for 57.5% (Chemicals and Pharmaceuticals, Textiles, Glass, Metal and Machinery Products, Aviation/Defence, Mining, Construction and Infrastructure, and Heavy Engineering), whereas non-polluting organisations settled at 42.5% (Health and Wellness, FMCG, Agriculture, Food and Beverage,

Electronic/Electrical Products, including IT Products, and Energy). Efforts were made to include both polluting and non-polluting organisations to ensure a comprehensive representation of the business landscape. By including a mix of polluting and non-polluting industries, the study aimed to provide a balanced understanding of the environmental impact across various sectors. This approach made it possible to analyse sustainability practices more thoroughly overall and identify possible areas for development within various

Table 4: Organisation Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Polluting	115	57.5	57.5	57.5
	Non-Polluting	85	42.5.0	42.5	100.0
	Total	200	100.0	100.0	

Ownership

The respondents were sked to delineate the ownership type of their organisation. In this regard, it was revealed through the statistics that 74.0% of them were employed in purely Indian organisation and 26.0% were from globally participating organisations in India. A significant number of both purely Indian and global participants were included in the study.

Table 5: Ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Purely Indian	148	74.0	74.0	74.0
	Global Participants	52	26.0	26.0	100.0
	Total	200	100.0	100.0	

Region

Participants were asked about the region where the organisation is located, North India accounts for 24% of the data, South India for 17%, Central India for 16.5%, East India for 16.5%, and West India for 26%. Consequently, it can be said that the research collected data across India.

Table 6: Region

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	North India	48	24.0	24.0	24.0
	South India	34	17.0	17.0	41.0
	Central India	33	16.5	16.5	57.5
	East India	33	16.5	16.5	74.0
	West India	52	26.0	26.0	100.0
	Total	200	100.0	100.0	

Investment Size

Lastly, a question on the organisation's investment size was posed. The findings showed that 65% had invested over 250 crores, while 21.0% had made investments between 5 and 75 crores. Furthermore, 14.0% of the company has made investments totaling more than 75 crores but less than 250 crores. Hence, this study covers a wide range of investment sizes, providing a comprehensive understanding of the organisation's investment landscape.

Table 7: Investment Size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5 Crores - 75 Crores	42	21.0	21.0	21.0
	75 Crores – 250 Crores	28	14.0	14.0	35.0
	Above 250 Crores	130	65.0	65.0	100.0
	Total	200	100.0	100.0	

4.2 Descriptive Statistics

In order to provide the most information in the clearest possible terms, descriptive statistics are employed to summarise a set of data. Using the variables mean, median, mode, and standard deviation (SD), descriptive statistics are a type of information that quickly summarises the important elements of data (Mishra et al., 2019). Descriptive statistics were used as a result in order to obtain insight into the trends and concepts that emerged from the replies to each particular question. Respondents were asked to rate their impressions and level of agreement with the statement on a five-point Likert scale in the surveys. From 1 (very disagree) to 5 (absolutely agree), there was a scale. Based on their scores for each statement, the average score (mean) for each variable was determined. It was observed that the value of multivariate kurtosis was less than 1.96 for all items (For more information, see Annexure II). As a result, all the items in the data are considered for further analysis.

4.3 Reliability Statistics

The goal of reliability analysis is to evaluate each variable (DV and IVs) under consideration for dependability using Cronbach's Alpha. The internal consistency or average correlation of items in a survey instrument is measured by Cronbach's Alpha. Cronbach's Alpha is a value between 0 and 1. A larger range score denotes a more reliable creation of the scale. According to Revelle and Condon (2019), an alpha value greater than 0.7 is considered to be favorable. The below table shows the reliability statistics of sample data with a 200 sample size. Here, one can see that Cronbach's alpha ranged from 0.607 to 0.965, which indicates good internal consistency for our scale with this specific sample.

Table 09: Reliability Statistics

Variables	Cronbach's alpha (α)
GJD	0.654
GRS	0.826
GTD	0.817
GPA	0.841
GRM	0.851
EP	0.873
FP	0.844
SP	0.826
LEM	0.872
MC	0.607
PI	0.650
EE	0.681
Overall	0.965

4.4 Harman's single factor analysis (Common biased method)

One of the most popular methods for analysing common bias is Harman's single-factor test. According to this test, if the sample has a significant amount of common method variance, either one factor will be revealed by the previous analysis or one factor will explain the bulk of the variance in the variables (Aguirre-Urreta and Hu, 2019). In alignment with this, Eichhorn (2014) states that the presence of the common method bias is for sure if the newly introduced common latent factor explains more than 50% of the variance.

Based on the results gained, it can be highlighted that when all the items were forced to form a single factor, the factor analysis was able to extract a variance of 30.716% (For more information, see Annexure II). Therefore, it can be affirmed that there is no common bias, and the instrument can be used for further analysis.

4.5 Confirmatory Factor Analysis (CFA)

Structural Equation Modeling (SEM) is a confirmatory method that provides a comprehensive means for validating the measurement model of latent constructs. The validating

procedure is called Confirmatory Factor Analysis (CFA). The CFA method has the ability to assess the unidimensionality, validity, and reliability of a latent construct. The researcher needs to perform CFA for all latent constructs involved in the study before modeling their inter-relationship in a structural model (SEM). However, the unidimensionality assessment should be made first prior to assessing validity and reliability.

Table 10: Acceptable Model fit Indicator

Model Fit Indicator	
CMIN/DF	< 3 is very good, and between 3 and 5 is acceptable
CFI	> 0.9/ between 0-1 acceptable (higher values indicate better fit)
GFI	> 0.9/ between 0-1 acceptable (higher values indicate better fit)
RMSEA	< 0.08
AVE	The estimates of AVE should be greater than the squared correlation estimate
Standardized loadings	> 0.5
Modification indices and Unidemensionality	For ensuring the items having cross-loadings on other items are being removed

4.6.1 Zero Order CFA

The Zero Order CFA is conducted with a view to evaluate the relation of the constructs with its respective statements (Arora and Mittal, 2020).

Green Job Description

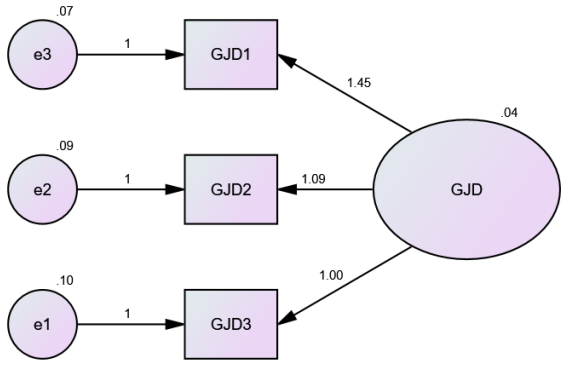

Figure 2: Zero Order SEM model of GJD

The latent variable of GJD is gauged in the current study using three factors, as outlined in Figure 2. The attached variable loading, or standardized estimates, showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, an error term was also added to the respective items.

The unstandardized regression coefficient, as showcased in the below table, reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit while maintaining the other independent variables constant. In addition to this, figure 1 also accentuates the error variance. The degree to which variance is not comprehended by the observed variable is represented by error variance. For instance, the zero-order CFA of GJD depicts that e1 is 0.10, which means that in determining the latent variable of GJD, 10% of the variance remains unexplained by GDJ3.

Moreover,lower variance represents lower error, which is a good indicator. Table 11 reflects that the value of R2 is 0.745. Thus, it illustrates that when all of the independent constructs are considered together, 74.5% of the variation in the independent variable is explained.

Table 11: Unstandardized Regression Coefficients of GJD

			Estimate R2 = 0.745	**S.E.**	**C.R.**	**P**	**Label**
GJD3	<---	GJD	1.000				
GJD2	<---	GJD	1.091	.216	5.043	***	
GJD1	<---	GJD	1.453	.315	4.610	***	

Table 12: Standardized Regression Weights and Model Fit Indices of GJD

			Estimate	**Model Fit indicator**	
GJD1	<---	GJD	.745	CMIN/DF	-
GJD2	<---	GJD	.599	CFI	1.000
GJD3	<---	GJD	.530	GFI	1.000
				RMSEA	0.368
				AVE	0.398

The beta value, or standardized regression weight, measures the intensity to which every predictor, i.e., the independent variable, influences the criterion, i.e., the dependent variable. For measuring the value of the beta, the standard deviation was utilised. As showcased in Table 12, GJD1 and GJD2 have acquired factor loadings of 0.745 and 0.599, respectively. This outlines these two independent variables as the best indicators of GJD. The model fit indices of CFI, GFI, and AVE all reflect that they are at acceptable levels, and hence, the model is a good fit for GJD.

Furthermore, it can also be seen from Tables 11 and 12, along with Figure 2, that all factor loadings are greater than the benchmark value of 0.5, as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices to ensure the items with cross-loadings on other items were being removed, as conveyed by Segars (1997). Hence, the unidimensionality of the items used to assess the GJD was attained.

Green Recruitment and Selection (GRS)

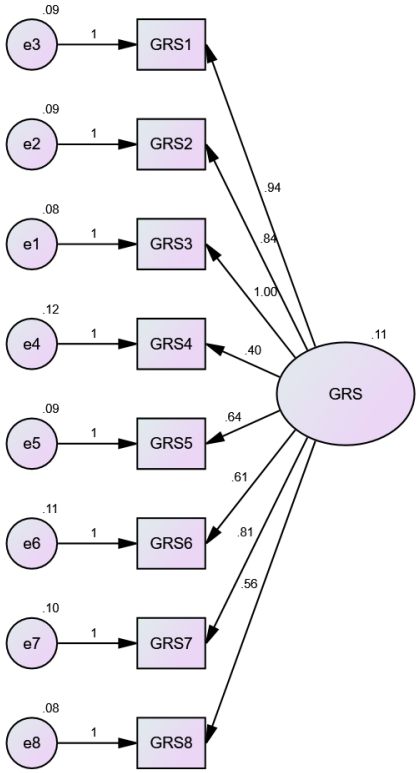

Figure 3: the Zero Order CFA of GRS

The latent variable of GRS is gauged in the current study using eight factors as outlined in the figure 3. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 3 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of GRS depicts

that e3 is 0.09, which means that in determining the latent variable of GRS, 9% of the variance remains unexplained by GRS3.

Moreover, lower variance represents lower error which is a good indicator. Table 13 reflects that the value of R2 is 0.767. Hence, it showcases that in the independent variable, 76.7% of the variance is outlined by all the independent constructs taken together.

Table 13: Unstandardized Regression Coefficients of GRS

			Estimate R2 = 0.767	S.E.	C.R.	P	Label
GRS3	<---	GRS	1.000				
GRS2	<---	GRS	.837	.093	9.024	***	
GRS1	<---	GRS	.942	.098	9.620	***	
GRS4	<---	GRS	.398	.085	4.683	***	
GRS5	<---	GRS	.642	.082	7.841	***	
GRS6	<---	GRS	.608	.088	6.891	***	
GRS7	<---	GRS	.813	.093	8.767	***	
GRS8	<---	GRS	.555	.076	7.350	***	

Table 14: Standardized Regression Weights and Model Fit Indices of GRS

			Estimate	Model Fit indicator	
GRS3	<---	GRS	.767	CMIN/DF	2.04
GRS2	<---	GRS	.676	CFI	0.953
GRS1	<---	GRS	.720	GFI	0.944
GRS4	<---	GRS	.357	RMSEA	0.072
GRS5	<---	GRS	.590	AVE	0.381
GRS6	<---	GRS	.520		
GRS7	<---	GRS	.657		
GRS8	<---	GRS	.554		

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 14, GRS3 and GRS1 have acquired the factor loadings of 0.767 and 0.720 respectively. This outlines

these two independent variables are best indicators of GRS. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for GRS.

Furthermore, it can also be seen from Table 13 and 14 along with Figure 3 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess GRS was attained.

Green Training and Development (GTD)

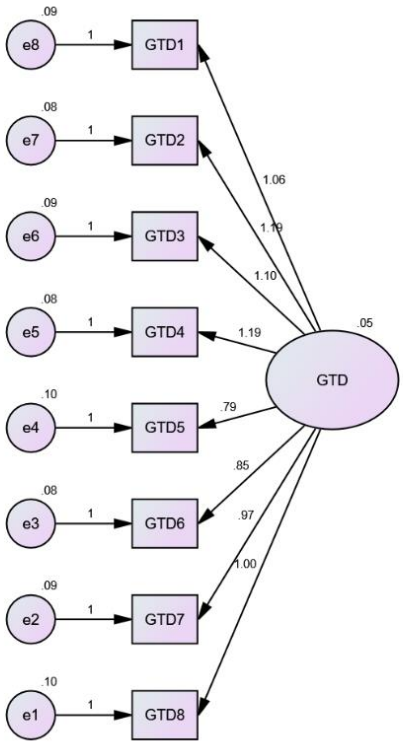

Figure 4: Zero Order CFA of GTD

The latent variable of GTD is gauged in the current study using eight factors as outlined in the figure 4. The attached variable loading or standardized estimates showcases the degree to which

each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 4 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of GTD depicts that e8 is 0.09, which means that in determining the latent variable of GTD, 9% of the variance remains unexplained by GTD1.

Moreover, lower variance represents lower error which is a good indicator. Table 15 reflects that the value of R2 is 0.571. Hence, it showcases that in the independent variable, 57.1% of the variance is outlined by all the independent constructs taken together.

Table 15: Unstandardized Regression Coefficients of GTD

			Estimate R2 = .571	S.E.	C.R.	P	Label
GTD8	<---	GTD	1.000				
GTD7	<---	GTD	.973	.157	6.183	***	
GTD6	<---	GTD	.846	.141	5.985	***	
GTD5	<---	GTD	.790	.147	5.377	***	
GTD4	<---	GTD	1.193	.172	6.956	***	
GTD3	<---	GTD	1.100	.166	6.612	***	
GTD2	<---	GTD	1.193	.172	6.956	***	
GTD1	<---	GTD	1.059	.164	6.450	***	

Table 16: Standardized Regression Weights and Model Fit Indices of GTD

			Estimate	Model Fit indicator	
GTD8	<---	GTD	.571	CMIN/DF	0.574
GTD7	<---	GTD	.573	CFI	1.000
GTD6	<---	GTD	.548	GFI	0.986
GTD5	<---	GTD	.475	RMSEA	0.000
GTD4	<---	GTD	.687	AVE	0.368

			Estimate Model Fit indicator
GTD3	<---	GTD	.633
GTD2	<---	GTD	.687
GTD1	<---	GTD	.610

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 16, GTD2 and GTD4 have acquired the factor loadings of 0.687 each respectively. This outlines these two independent variables are best indicators of GTD. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for GTD.

Furthermore, it can also be seen from Table 15 and 16 along with Figure 4 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess GTD was attained.

Green Performance Assessment (GPA)

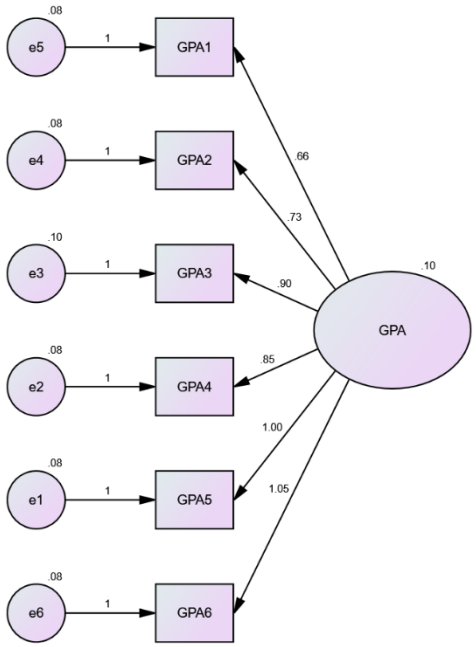

Figure 5: Zero Order CFA of GPA

The latent variable of GPA is gauged in the current study using six factors as outlined in the figure 5. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 5 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of GPA depicts that e5 is 0.08, which means that in determining the latent variable of GPA, 8% of the variance remains unexplained by GPA1.

Moreover, lower variance represents lower error which is a good indicator. Table 17 reflects that the value of R2 is 0.744. Hence, it showcases that in the independent variable, 74.4% of the variance is outlined by all the independent constructs taken together.

Table 17: Unstandardized Regression Coefficients of GPA

			Estimate R2= 0.744	S.E.	C.R.	P	Label
GPA5	<---	GPA	1.000				
GPA4	<---	GPA	.854	.094	9.038	***	
GPA3	<---	GPA	.900	.102	8.799	***	
GPA2	<---	GPA	.725	.088	8.197	***	
GPA1	<---	GPA	.663	.085	7.784	***	
GPA6	<---	GPA	1.049	.105	9.968	***	

Table 18: Standardized Regression Weights and Model Fit Indices of GPA

			Estimate	Model Fit indicator	
GPA5	<---	GPA	.744	CMIN/DF	0.186
GPA4	<---	GPA	.692	CFI	1.000
GPA3	<---	GPA	.673	GFI	0.997
GPA2	<---	GPA	.627	RMSEA	0.000
GPA1	<---	GPA	.595	AVE	0.471
GPA6	<---	GPA	.769		

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 18, GPA5 and GPA6 have acquired the factor loadings of 0.744 and 0.769 respectively. This outlines these two independent variables are best indicators of GPA. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for GPA.

Furthermore, it can also be seen from Table 17 and 18 along with Figure 5 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014).

Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess GPA was attained.

Green Reward Management (GRM)

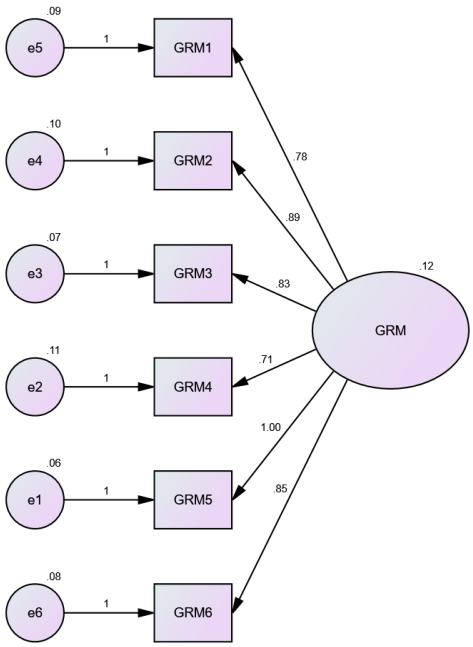

Figure 6: Zero Order CFA of GRM

The latent variable of GRM is gauged in the current study using six factors as outlined in the figure 6. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 6 also accentuates the error variance. Error variance channelises the degree to which variance would

not be comprehended by the observed variable. For instance, the Zero Order CFA of GRM depicts that e5 is 0.09, which means that in determining the latent variable of GRM, 9% of the variance remains unexplained by GRM1.

Moreover, lower variance represents lower error which is a good indicator. Table 19 reflects that the value of R2 is 0.82. Hence, it showcases that in the independent variable, 82.0% of the variance is outlined by all the independent constructs taken together.

Table 19: Unstandardized Regression Coefficients of GRM

			Estimate R2 = 0.82	S.E.	C.R.	P	Label
GRM5	<---	GRM	1.000				
GRM4	<---	GRM	.710	.087	8.168	***	
GRM3	<---	GRM	.826	.078	10.626	***	
GRM2	<---	GRM	.887	.089	9.978	***	
GRM1	<---	GRM	.778	.081	9.574	***	
GRM6	<---	GRM	.845	.083	10.175	***	

Table 20: Standardized Regression Weights and Model Fit Indices of GRM

			Estimate	Model Fit indicator	
GRM5	<---	GRM	.820	CMIN/DF	0.764
GRM4	<---	GRM	.582	CFI	1.000
GRM3	<---	GRM	.732	GFI	0.989
GRM2	<---	GRM	.693	RMSEA	0.000
GRM1	<---	GRM	.669	AVE	0.495
GRM6	<---	GRM	.705		

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 20, GRM5 and GRM3 have acquired the factor loadings of 0.820 and 0.732 respectively. This outlines these two independent variables are best indicators of GRM. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for GRM.

Furthermore, it can also be seen from Table 19 and 20 along with Figure 6 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess GRM was attained.

Environmental Performance (EP)

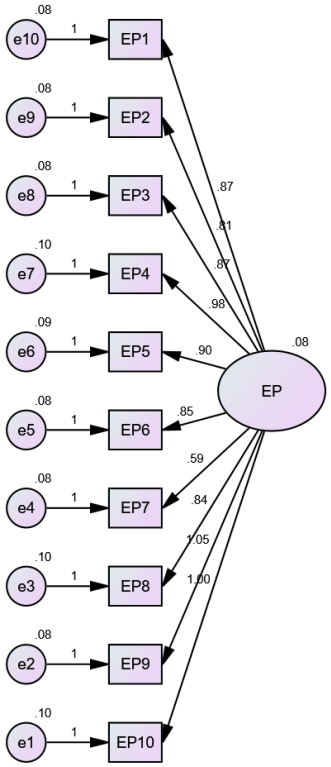

Figure 7: Zero Order CFA of EP

The latent variable of GRM is gauged in the current study using ten factors as outlined in the figure 7. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 7 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of EP depicts that e10 is 0.08, which means that in determining the latent variable of EP, 8% of the variance remains unexplained by EP1.

Moreover, lower variance represents lower error which is a good indicator. Table 21 reflects that the value of R2 is 0.733. Hence, it showcases that in the independent variable, 73.3% of the variance is outlined by all the independent constructs taken together.

Table 21: Unstandardized Regression Coefficients of EP

			Estimate R2 = 0.733	S.E.	C.R.	P	Label
EP10	<---	EP	1.000				
EP9	<---	EP	1.054	.118	8.906	***	
EP8	<---	EP	.843	.113	7.454	***	
EP7	<---	EP	.591	.092	6.390	***	
EP6	<---	EP	.848	.107	7.928	***	
EP5	<---	EP	.896	.113	7.968	***	
EP4	<---	EP	.979	.121	8.087	***	
EP3	<---	EP	.869	.107	8.100	***	
EP2	<---	EP	.811	.105	7.760	***	
EP1	<---	EP	.869	.107	8.100	***	

Table 22: Standardized Regression Weights and Model Fit Indices of EP

			Estimate	Model Fit indicator	
EP10	<---	EP	.668	CMIN/DF	0.847
EP9	<---	EP	.733	CFI	1.000
EP8	<---	EP	.596	GFI	0.967
EP7	<---	EP	.503	RMSEA	0.000
EP6	<---	EP	.639	AVE	0.409
EP5	<---	EP	.643		
EP4	<---	EP	.654		
EP3	<---	EP	.655		

			Estimate	Model Fit indicator
EP2	<---	EP	.624	
EP1	<---	EP	.655	

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 22, EP10 and EP9 have acquired the factor loadings of 0.668 and 0.733 respectively. This outlines these two independent variables are best indicators of EP. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for EP.

Furthermore, it can also be seen from Table 21 and 22 along with Figure 7 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess EP was attained.

Financial (Economic) Performance (FP)

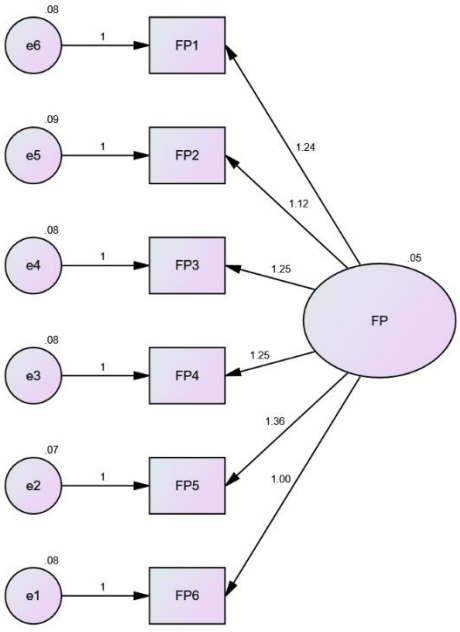

Figure 8: Zero Order CFA of FP

The latent variable of FP is gauged in the current study using six factors as outlined in the figure 8. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 8 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of FP depicts that e6 is 0.08, which means that in determining the latent variable of FP, 8% of the variance remains unexplained by FP1.

Moreover, lower variance represents lower error which is a good indicator. Table 23 reflects that the value of R2 is 0.742. Hence, it showcases that in the independent variable, 74.2% of the variance is outlined by all the independent constructs taken together.

Table 23: Unstandardized Regression Coefficients of FP

			Estimate R2 = 0.742	S.E.	C.R.	P	Label
FP6	<---	FP	1.000				
FP5	<---	FP	1.360	.167	8.125	***	
FP4	<---	FP	1.245	.158	7.874	***	
FP3	<---	FP	1.245	.158	7.874	***	
FP2	<---	FP	1.123	.152	7.402	***	
FP1	<---	FP	1.241	.160	7.776	***	

Table 24: Standardized Regression Weights and Model Fit Indices of FP

			Estimate	Model Fit indicator	
FP6	<---	FP	.624	CMIN/DF	0.246
FP5	<---	FP	.742	CFI	1.000
FP4	<---	FP	.709	GFI	0.996
FP3	<---	FP	.709	RMSEA	0.000
FP2	<---	FP	.651	AVE	0.476
FP1	<---	FP	.696		

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 24, FP3 and FP4 have acquired the factor loadings of 0.709 each respectively. This outlines these two independent variables are best indicators of FP. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for FP.

Furthermore, it can also be seen from Table 23 and 24 along with Figure 8 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess FP was attained.

Social Performance (SP)

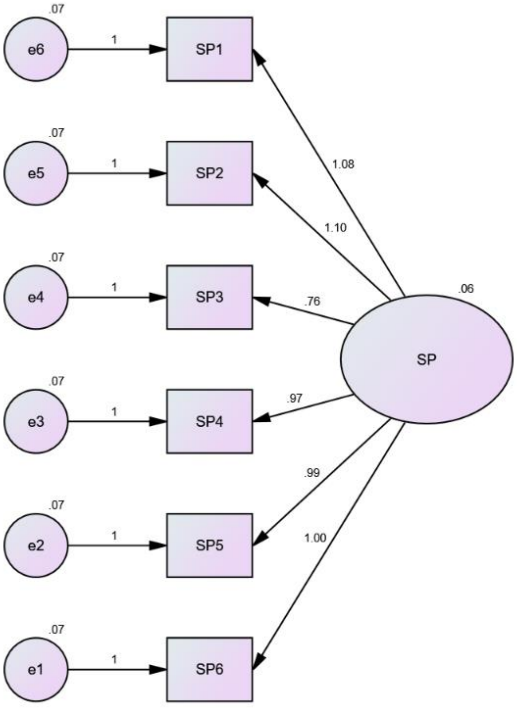

Figure 9: Zero Order CFA of SP

The latent variable of SP is gauged in the current study using six factors as outlined in the figure 9. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 9 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of SP depicts that e6 is 0.07, which means that in determining the latent variable of SP, 7% of the variance remains unexplained by SP1.

Moreover, lower variance represents lower error which is a good indicator. Table 25 reflects that the value of R2 is 0.713. Hence, it showcases that in the independent variable, 71.3% of the variance is outlined by all the independent constructs taken together.

Table 25: Unstandardized Regression Coefficients of SP

			Estimate R2 = 0.713	S.E.	C.R.	P	Label
SP6	<---	SP	1.000				
SP5	<---	SP	.988	.125	7.915	***	
SP4	<---	SP	.973	.124	7.816	***	
SP3	<---	SP	.759	.112	6.789	***	
SP2	<---	SP	1.102	.133	8.261	***	
SP1	<---	SP	1.079	.133	8.131	***	

Table 26: Standardized Regression Weights and Model Fit Indices of SP

			Estimate	Model Fit indicator	
SP6	<---	SP	.669	CMIN/DF	0.156
SP5	<---	SP	.675	CFI	1.000
SP4	<---	SP	.664	GFI	0.998
SP3	<---	SP	.562	RMSEA	0.000
SP2	<---	SP	.713	AVE	0.442
SP1	<---	SP	.699		

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 26, SP2 and SP1 have acquired the factor loadings of 0.713 and 0.699 respectively. This outlines these two independent variables are best indicators of SP. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for SP.

Furthermore, it can also be seen from Table 25 and 26 along with Figure 9 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-

loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess SP was attained.

Leadership Emphasis (LEM)

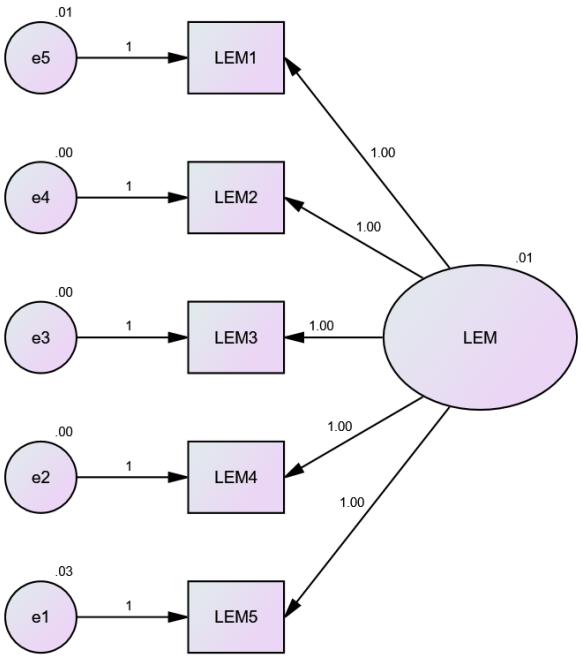

Figure 10: Zero Order CFA of LEM

The latent variable of LEM is gauged in the current study using five factors as outlined in the figure 10. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 10 also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of LEM depicts

that e5 is 0.01, which means that in determining the latent variable of LEM, 1% of the variance remains unexplained by LEM1.

Moreover, lower variance represents lower error which is a good indicator. Table 27 reflects that the value of R2 is 0.866. Hence, it showcases that in the independent variable, 86.6% of the variance is outlined by all the independent constructs taken together.

Table 27: Unstandardized Regression Coefficients of LEM

			Estimate R2 = 0.866	S.E.	C.R.	P	Label
LEM5	<---	LEM	1.000				
LEM4	<---	LEM	1.001	.114	8.775	***	
LEM3	<---	LEM	1.001	.114	8.775	***	
LEM2	<---	LEM	1.001	.114	8.775	***	
LEM1	<---	LEM	1.000	.122	8.231	***	

Table 28: Standardized Regression Weights and Model Fit Indices of LEM

			Estimate	Model Fit indicator	
LEM5	<---	LEM	.578	CMIN/DF	0.001
LEM4	<---	LEM	.866	CFI	1.000
LEM3	<---	LEM	.866	GFI	1.000
LEM2	<---	LEM	.866	RMSEA	0.000
LEM1	<---	LEM	.775	AVE	0.637

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 28, LEM4, LEM3 and LEM2 have acquired the factor loadings of 0.866 each respectively. This outlines these two independent variables are best indicators of LEM. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for LEM.

Furthermore, it can also be seen from Table 27 and 28 along with Figure 10 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014).

Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess LEM was attained.

Message Credibility (MC)

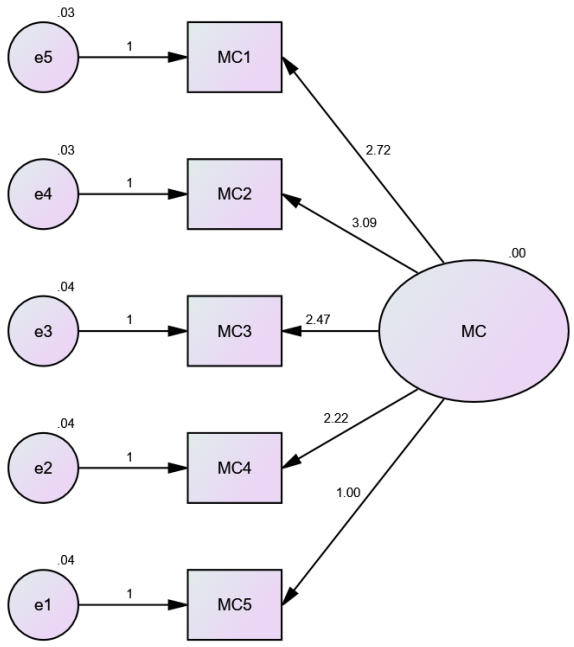

Figure 11: Zero Order CFA of MC

The latent variable of MC is gauged in the current study using five factors as outlined in the figure 11. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 11 also accentuates the error variance. Error variance channelises the degree to which variance would

not be comprehended by the observed variable. For instance, the Zero Order CFA of MC depicts that e5 is 0.03, which means that in determining the latent variable of MC, 3% of the variance remains unexplained by MC1.

Moreover, lower variance represents lower error which is a good indicator. Table 29 reflects that the value of R2 is 0.642 Hence, it showcases that in the independent variable, 64.2% of the variance is outlined by all the independent constructs taken together.

Table 29: Unstandardized Regression Coefficients of MC

			Estimate R2 = 0.642	S.E.	C.R.	P	Label
MC5	<---	MC	1.000				
MC4	<---	MC	2.220	.961	2.310	.021	
MC3	<---	MC	2.469	1.050	2.351	.019	
MC2	<---	MC	3.086	1.286	2.400	.016	
MC1	<---	MC	2.716	1.136	2.390	.017	

Table 30: Standardized Regression Weights and Model Fit Indices of MC

			Estimate	Model Fit indicator	
MC5	<---	MC	.218	CMIN/DF	1.618
MC4	<---	MC	.462	CFI	0.967
MC3	<---	MC	.513	GFI	0.984
MC2	<---	MC	.642	RMSEA	0.056
MC1	<---	MC	.594	AVE	0.258

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 30, MC2 and MC1 have acquired the factor loadings of 0.642 and 0.594 respectively. This outlines these two independent variables are best indicators of MC. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for MC.

Furthermore, it can also be seen from Table 29 and 30 along with Figure 11 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess MC was attained.

Peer Involvement (PI)

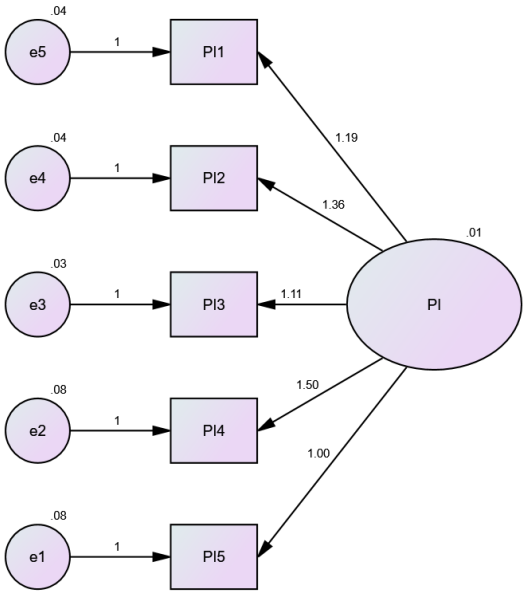

Figure 12: Zero Order CFA of PI

The latent variable of PI is gauged in the current study using five factors as outlined in the figure 12. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 12

also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of PI depicts that e5 is 0.04, which means that in determining the latent variable of PI, 4% of the variance remains unexplained by PI1.

Moreover, lower variance represents lower error which is a good indicator. Table 31 reflects that the value of R2 is 0.637. Hence, it showcases that in the independent variable, 63.7% of the variance is outlined by all the independent constructs taken together.

Table 31: Unstandardized Regression Coefficients of PI

			Estimate R2 = 0.637	S.E.	C.R.	P	Label
PI5	<---	PI	1.000				
PI4	<---	PI	1.504	.396	3.796	***	
PI3	<---	PI	1.115	.285	3.909	***	
PI2	<---	PI	1.355	.338	4.005	***	
PI1	<---	PI	1.186	.302	3.927	***	

Table 32: Standardized Regression Weights and Model Fit Indices of PI

			Estimate	Model indicator	Fit
PI5	<---	PI	.374	CMIN/DF	2.54
PI4	<---	PI	.524	CFI	0.942
PI3	<---	PI	.574	GFI	0.973
PI2	<---	PI	.637	RMSEA	0.088
PI1	<---	PI	.584	AVE	0.298

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 32, PI2 and PI1 have acquired the factor loadings of 0.637 and 0.584 respectively. This outlines these two independent variables are best indicators of PI. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for PI.

Furthermore, it can also be seen from Table 31 and 32 along with Figure 12 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess PI was attained.

Employee Empowerment (EE)

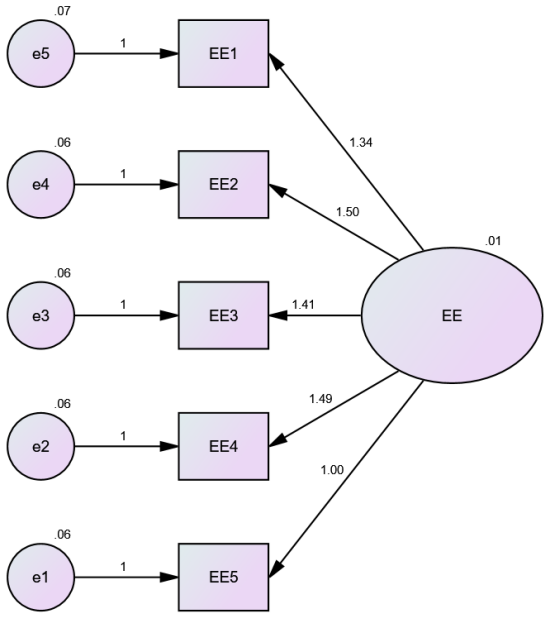

Figure 13: Zero Order CFA of EE

The latent variable of EE is gauged in the current study using five factors as outlined in the figure 13. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the respective items.

The Unstandardized Regression Coefficient as showcased in the below table reflects the degree to which the dependent variable alters when the researcher alters the independent variable by one unit, by maintaining the other independent variables constant. In addition to this, figure 13

also accentuates the error variance. Error variance channelises the degree to which variance would not be comprehended by the observed variable. For instance, the Zero Order CFA of EE depicts that e5 is 0.07, which means that in determining the latent variable of EE, 7% of the variance remains unexplained by EE1.

Moreover, lower variance represents lower error which is a good indicator. Table 33 reflects that the value of R2 is 0.613. Hence, it showcases that in the independent variable, 61.3% of the variance is outlined by all the independent constructs taken together.

Table 33: Unstandardized Regression Coefficients of EE

			Estimate R2 = 0.613	S.E.	C.R.	P	Label
EE5	<---	EE	1.000				
EE4	<---	EE	1.493	.339	4.409	***	
EE3	<---	EE	1.414	.326	4.334	***	
EE2	<---	EE	1.503	.337	4.455	***	
EE1	<---	EE	1.341	.316	4.245	***	

Table 34: Standardized Regression Weights and Model Fit Indices of EE

			Estimate	Model Fit indicator	
EE5	<---	EE	.432	CMIN/DF	2.54
EE4	<---	EE	.592	CFI	0.942
EE3	<---	EE	.564	GFI	0.973
EE2	<---	EE	.613	RMSEA	0.088
EE1	<---	EE	.535	AVE	0.303

The beta value or standardized regression weight measures the intensity to which every predictor i.e. the independent variable influences the criterion i.e. the dependent variable. For measuring the value of the beta, the Standard Deviation was utilised. As showcased in the table 34, EE2 and EE4 have acquired the factor loadings of 0.613 and 0.594 respectively. This outlines these two independent variables are best indicators of EE. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit for EE.

Furthermore, it can also be seen from Table 33 and 34 along with Figure 13 that all factor loadings are greater than the benchmark value of 0.5 as illustrated by Hair et al. (2014). Subsequently, the study also checked the modification indices for ensuring the items having cross-loadings on other items are being removed as conveyed by Segars (1997). Hence, unidimensionality of the items used to assess EE was attained.

4.5.2 First Order CFA:

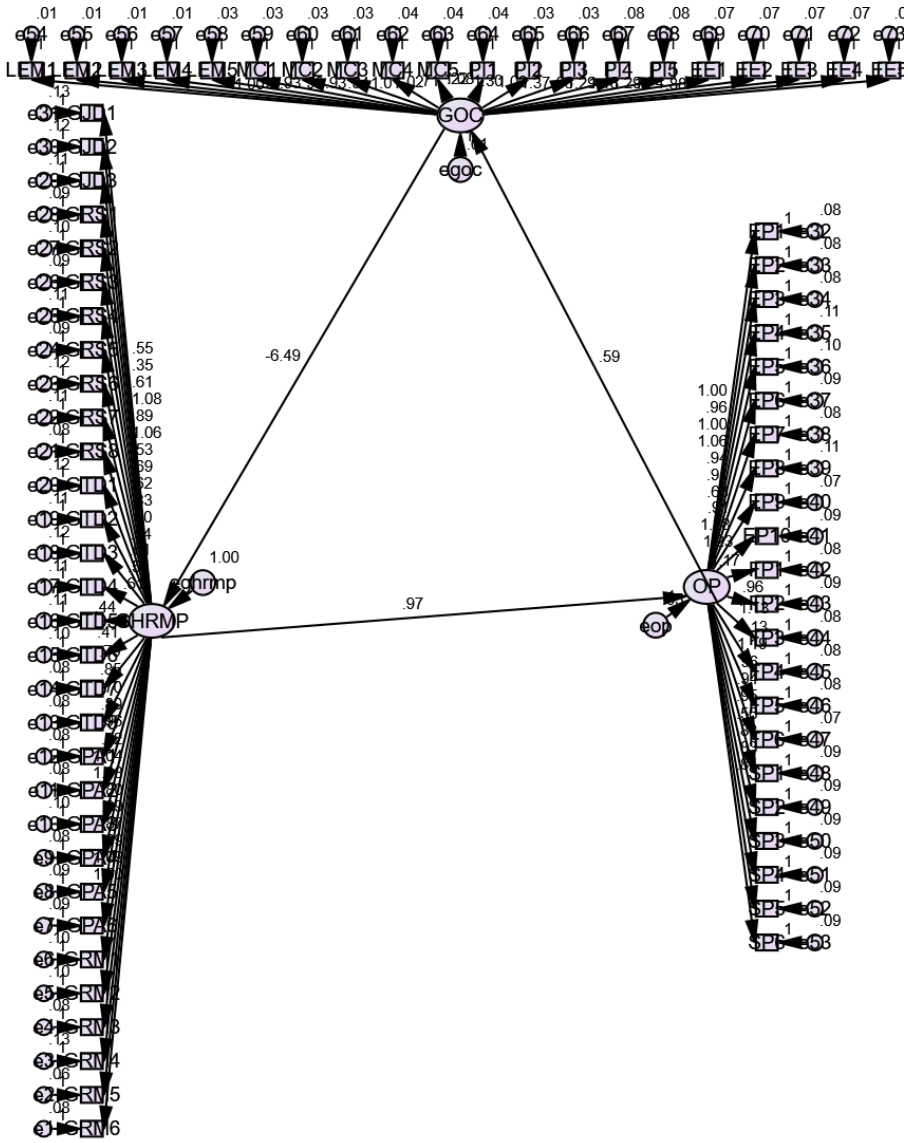

Figure 14: Preliminary Model

Figure 14 depicts the SEM route diagram for the relationships between the variables of GHRMP, GOC, and OP. While representing the first order constructs, summary constructs as described by Garver and Mentzer (1999) were employed to achieve simplicity and solve identification and the variables to size ratio problems.

The Model Fit Indices showcase the gained values and the desired scores which depicts the fitness of a model. A model is considered good fit for conducting further analysis if it complies with majority of the model fit criteria as stated by Shi et al. (2019).

Table 35: Model Fit Indices

	Model fit
Chi – Square	3212.46
Degrees of Freedom	2553
CMIN/DF	1.258
CFI	0.894
RMSEA	0.036
NFI	0.636

4.5.3 Second Order CFA:

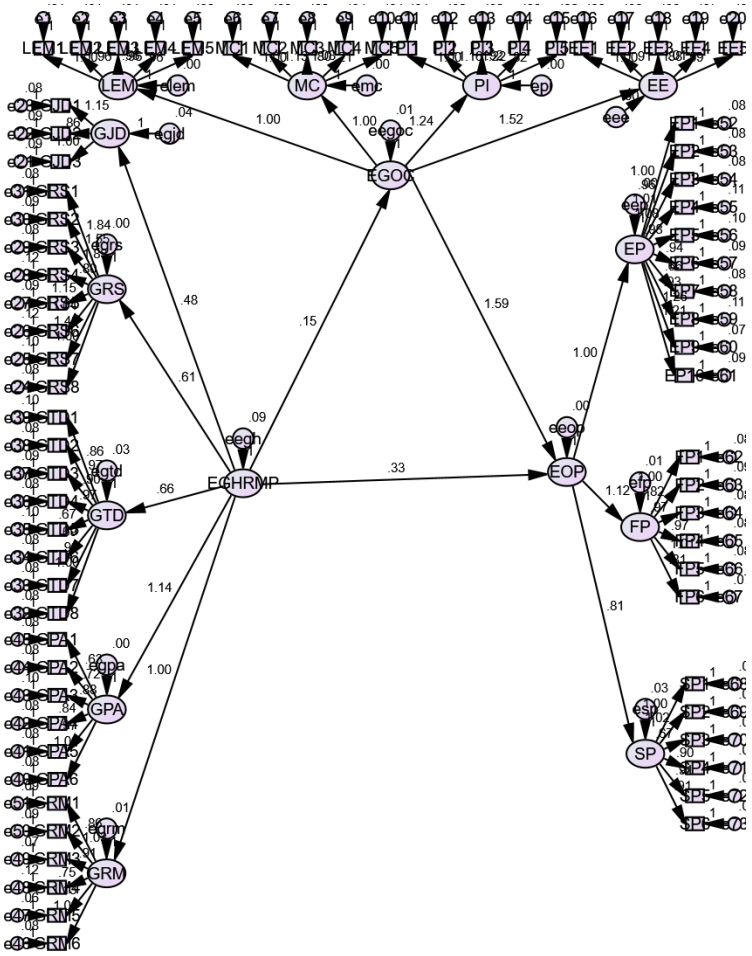

Figure 15: Preliminary Model

From the above figure, it can be observed that the latent variable of GHRMP is measured in the current study using five sub-variables of GJS, GRS, GTD, GPA and GRM. Further, latent variable of GOC is measured in the current study using four sub-variables of LEM, MC, PI and EE. Finally, latent variable of OP is measured in the current study using three sub-variables of EP, FP and SP respectively. The attached variable loading or standardized estimates showcases the degree to which each item of the variable is associated with the latent variable. As the items were unable to represent the latent variable entirely, thereby, an error term was also added to the

respective items. The model fit indices of CFI, GFI and AVE all reflect that they are at acceptable levels and hence, the model is good fit.

Table 36: Model fit indices

	Model fit
Chi – Square	2896.902
Degrees of Freedom	2540
CMIN/DF	1.141
CFI	0.942
RMSEA	0.027
NFI	0.672

The table above shows that the chi square value was 2896.902 DF was 2540 and the CMIN/DF was 1.141 indicating a good fit model. The CFI was 0.942 which is close to 0.9 and RMSEA was 0.027 indicating a good fit. However, the values of NFI were close to 0.9 indicating a good fit.

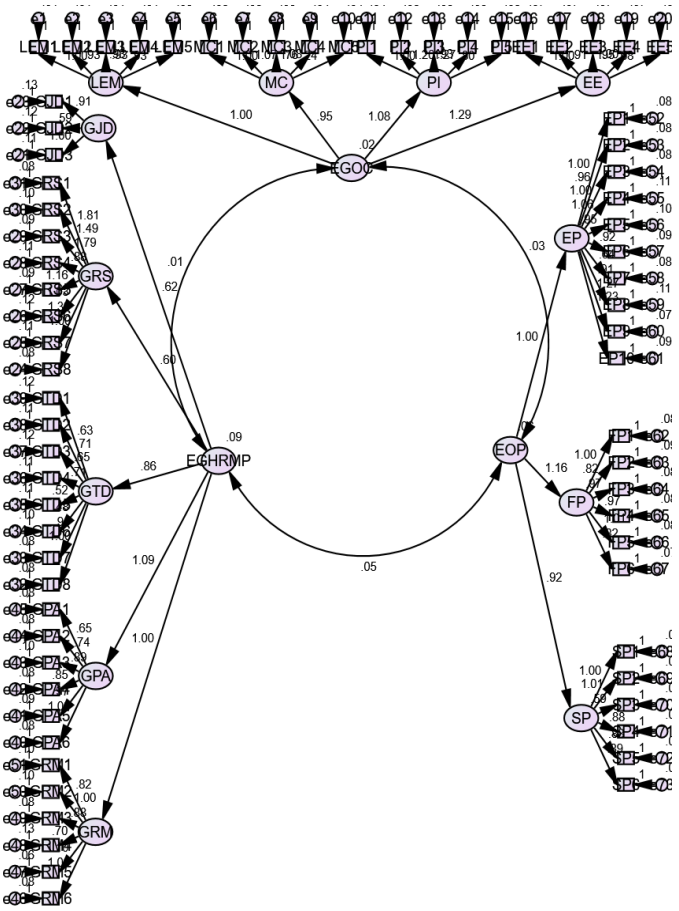

Figure 16: Path Model

Table 37: Model fit indices

	Model fit
Chi – Square	3195.058
Degrees of Freedom	2552
CMIN/DF	1.252
CFI	0.896
RMSEA	0.036
NFI	0.638

From the above table, it can be highlighted that Chi-square value acquired is 3195.058; df = 2552. The CMIN/Df value acquired is 1.252 that is close to 2.0 benchmark value; CFI value acquired is 0.896 which is close to 0.9 benchmark value; RMSEA value is 0.036 which is not close to even benchmark value of 0.10 and finally, NFI value gained is 0.638 which is close to 0.90 benchmark

4.6 Convergent Validity:

Convergent validity means how well the indicators or a set of measured items explain the latent variable. Composite reliability is a measure of the internal consistency of a scale. CR of 0.7 or higher suggests good reliability, according to Hair et al. (2014). AVE is the total of all squared standardized factor loadings divided by the number of items for each latent construct. According to Hair et al. (2014), AVE should be greater than 0.5 The formulae for the calculations are:

AVE = sum (square of loadings)/ number of statements

CR = Square (sum of loadings) /[Square (sum of loadings)+[sum(1-square of loadings)]

Table 38: Standardized Regression Weights: (Group number 1 - Default model)

			Factor loading (FL)	Item reliability (IR)	Delta	AVE	Sum of FL	Sum of Delta	CR
LEM	<---	EGOC	.919	0.872	0.002				
MC	<---	EGOC	.953	0.607	0.001				
PI	<---	EGOC	1.052	0.650	-0.002				
EE	<---	EGOC	.948	0.681	0.004	0.939	3.872	0.005	0.984
EP	<---	EOP	1.013	0.873	-0.002				
FP	<---	EOP	.963	0.844	0.006				
SP	<---	EOP	.746	0.826	0.032	0.836	2.722	0.036	0.938
GRM	<---	EGHRMP	.971	0.654	0.005				
GPA	<---	EGHRMP	1.008	0.826	-0.002				
GTD	<---	EGHRMP	.766	0.817	0.026				
GRS	<---	EGHRMP	.978	0.841	0.001				
GJD	<---	EGHRMP	.599	0.851	0.036	0.772	4.322	0.066	0.942

4.7 Discriminant Validity:

"Discriminant validity is the extent to which a construct is truly distinct from another constructs. (Hair et al., 2014, p. 619). Discriminant validity thus inspects the uniqueness of the construct. It means that the items measuring a construct should measure only that particular construct and should be different from items of another construct. Discriminant validity can be estimated in the following ways:

1. To compare the AVE values for any two constructs with the square of correlation estimates between these two constructs. The estimates of AVE should be greater than the squared correlation estimate (Hair et al., 2014). This also means, to compare the square root of AVE for each construct with correlations between constructs. The estimates of the square root of AVE should be greater than the correlation estimate (Fornell and Larcker, 1981).

2. To compare the fit of the two-construct model with the fit of the one-construct model (Hair et al., 2014) (If the model has three constructs, then the fit of one construct model, two-construct model, and three-construct model need to be compared). Here first, the model

fit is estimated by considering two constructs as separate and distinct. Then, the model fit is estimated by considering two constructs as one. If the fit of the two-construct (as obtained from theory) model is found to be significantly better than the fit of one construct model, then discriminant validity is supported.

Table 39 showcases that the all the Average Variance Extracted (AVE) values are higher than the corresponding Squared Interconstruct Correlation (SIC) estimates. This accentuates that the indicators have more in common with the construct they are associated with than they do with other constructs. Hence, CFA model demonstrates Discriminant Validity.

Table 39: Discriminant Validity

		Squared Interconstruct Correlation (SIC)		
Factors	AVE	GHRMP	GOC	OP
GHRMP	0.939	0.542	0.241	
GOC	0.772	0.542		0.588
OP	0.836	0.241	0.588	

The model fit indices depicted through the Table 40 illustrates that the model is a good fit since the indicators of CMIN/DF, CFI, and GFI indices are at acceptable levels representing an absolute fit.

Table 40: Model Fit

Model Fit Indicator	
CMIN/DF	1.141
CFI	.942
GFI	.679
RMSEA	.027

4.8 Multicollinearity

In the case of multiple regression analysis, the term “multicollinearity” is used for illustrating the prevalence of linear relationship among the independent variables of the study. Close and

perfect linear combinations between two variables is indicated by “collinearity”. Thus, the condition of multicollinearity is said to exist when regression model consists of numerous independent variables that are not significantly associated with the dependent variable but also one another (Young, 2018). Due to multicollinearity, adding more variables to a regression analysis occasionally fails to provide a comprehensive understanding of the model. The conclusion of the study is altered by the existence of multicollinearity, which raises the standard errors of each coefficient in the model. Some of the major research variables become statistically insignificant due to multicollinearity (Shrestha, 2020). Thus, in simple terms, it becomes critical to test whether there exists multicollinearity because it may increase the tendency of variance among the regression coefficients which makes the results gained unreliable. There are three distinct methods of detecting multicollinearity within any regression model. These include:

a) Correlation Coefficients – Here the Pearson’s Correlation method is used to evaluate existence of a strong relationship between the items or independent variables. If the correlation value acquired between the paired variables is close to 0.8 then, collinearity is likely to exists (Chittora et al., 2022).

b) Variance Inflation Factor (VIF) – The second method is VIF which uses the correlation value for further outlining the magnitude and intensity of the association. The correlation leads the standard error of predictor coefficients to rise and, as a result, the variance of predictor coefficients is inflated (Daoud, 2017).

c) Eigenvalue Method – The variance of a linear combination of variables is denoted by the mathematical concept known as eigenvalue. Since the sum of the eigenvalues (λ) must equal the number of independent variables, excessively low eigenvalues (close to 0.05) are

an indicator of multicollinearity because they cause estimations of the regression coefficient to shift significantly when there are only modest changes in the data (Shrestha, 2020).

The current study has strategically employed the first method of analyzing correlation within and between variables (For more information, see Annexure II).

Green Human Resource Management Practices (GHRMP)

Green Job Description (GJD)

Multicollinearity had been ruled out since the correlation coefficient was less than 0.8. The correlation coefficients for GJD1 and GJD3 were higher and lower, respectively.

Green Recruitment and Selection (GRS)

Multicollinearity had been ruled out since the correlation coefficient was less than 0.8. The correlation coefficients for GSR3 and GSR4 were higher and lower, respectively.

Green Training and Development (GTD)

Multicollinearity had been ruled out since the correlation coefficient was less than 0.8. GTD4 had a greater correlation coefficient and GTD5 had a lower correlation coefficient.

Green Performance Assessment (GPA)

Since the correlation value was less than 0.8, multicollinearity was excluded, the correlation coefficient for GPA6 was greater and the correlation coefficient for GPA1 was lower.

Green Reward Management (GRM)

Multicollinearity had been ruled out since the correlation coefficient was less than 0.8. The correlation coefficients for GRM5 and GRM1 were higher and lower, respectively..

Organisational Performance (OP)

Environmental Performance (EP)

Correlation coefficient for EP9 was greater and EP7 was lower, the multicollinearity was excluded since the correlation value was less than 0.8.

Financial (Economic) Performance (FP)

Since the correlation coefficient was less than 0.8, the multicollinearity was excluded FP5 had a greater correlation coefficient.

Social Performance (SP)

Multicollinearity had been ruled out since the correlation coefficient was less than 0.8. The correlation coefficients for SP2 and SP3 were higher and lower, respectively.

Green Organisational Culture (GOC)

Leadership Emphasis (LE)

Multicollinearity was excluded due to a correlation coefficient less than 0.8, with LEM2 having a higher correlation coefficient and LEM5 having a lower correlation coefficient.

Message Credibility (MC)

Because the correlation coefficient was less than 0.8, multicollinearity was excluded. MC1 showed a higher correlation coefficient, while MC5 had a lower correlation.

Peer Involvement (PI)

The correlation value was less than 0.8, and multicollinearity was excluded. The correlation coefficient for PI2 was greater, and the correlation coefficient for PI5 was lower.

Employee Empowerment (EE)

The correlation coefficient for EE4 was higher and the correlation coefficient for EE5 was lower; the multicollinearity was rejected since the correlation value was less than 0.8.

4.9 Correlation Analysis Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC) and Organisational Performance (OP)

Correlation refers to the intensity or degree to which two variables are associated with one another. The positive sign of a correlation coefficient depicts that both the variables move in the

same direction while a negative sign of a correlation coefficient depicts that both the variables move in the opposite direction (Chatterjee, 2021).

Table 41: Conventional approach to interpret correlation coefficient

Absolute Magnitude of the observed correlation coefficient	**Interpretation**
0.00 – 0.10	Negligible correlation
0.10 – 0.39	Weak correlation
0.40 – 0.69	Moderate correlation
0.70 – 0.89	Strong correlation
0.90 – 1.00	Very Strong Correlation

Source: Schober et al. (2018, p. 1765)

Table 42: Correlation

		GHRMP1	OP1	GOC1
GHRMP1	Pearson Correlation	1	.736**	.491**
	Sig. (2-tailed)		.000	.000
	N	200	200	200
OP1	Pearson Correlation	.736**	1	.767**
	Sig. (2-tailed)	.000		.000
	N	200	200	200
GOC1	Pearson Correlation	.491**	.767**	1
	Sig. (2-tailed)	.000	.000	
	N	200	200	200

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

The correlation coefficient of Green Human Resource Management Practices (GHRMP) shares a strong correlation with the variable of Organisational Performance (OP) ($r = 0.736$, $p < 0.01$) and moderate correlation with the variable of Green Organisational Culture (GOC) ($r = 0.491$, $p < 0.01$). Further, Organisational Performance (OP) shares a strong correlation with the variable of Green Organisational Culture (GOC) ($r = 0.767$, $p < 0.01$). Here, too, it can be stated that as the absolute value of the Pearson correlation coefficient is less than 0.8, it depicts that there is no prevalence of collinearity.

4.10 Common Method Bias using Common Latent Factor:

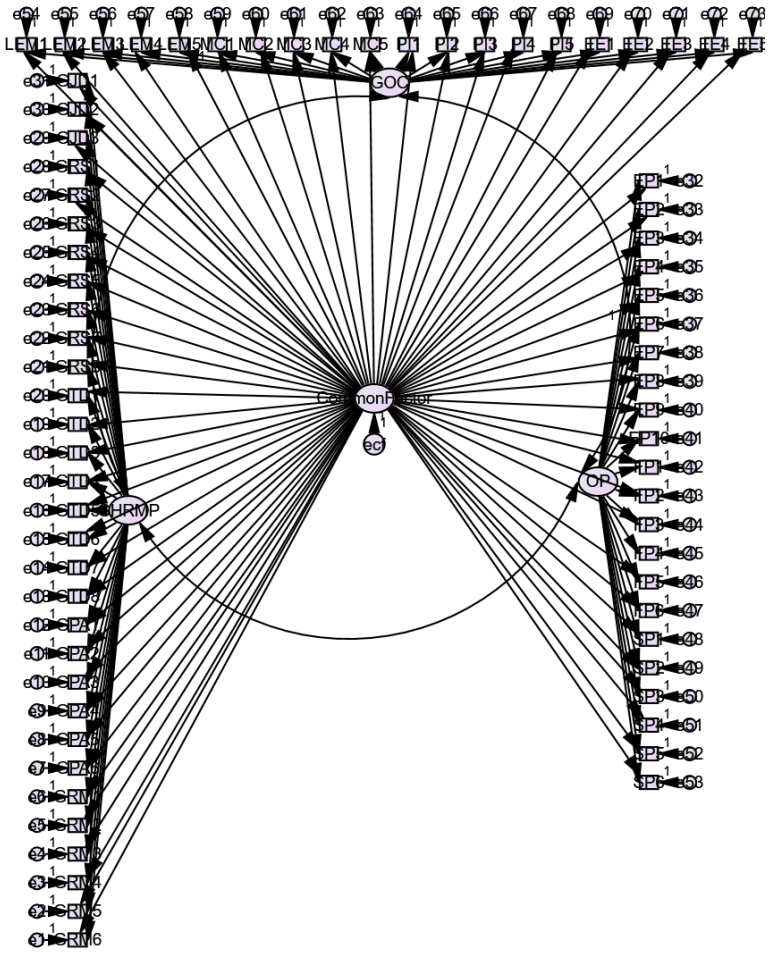

Figure 17: Path Model

Table 43: Standardized Regression weights with and without Common Latent Factor

			Without CLF	With CLF	Difference
GRM	<---	GHRMP	0.988	1.023	-0.035
GPA	<---	GHRMP	1.003	0.99	0.013
GTD	<---	GHRMP	0.89	0.998	-0.108
GRS	<---	GHRMP	0.991	0.974	0.017
GJD	<---	GHRMP	0.774	0.946	-0.172
SP	<---	OP	0.004	-0.497	-0.497
FP	<---	OP	-0.742	-0.930	-1.88
EP	<---	OP	2.001	1.806	0.195
EE	<---	GOC	-0.131	-0.300	0.169
PI	<---	GOC	-0.297	1.324	-1.621
MC	<---	GOC	-0.76	0.88	-1.64
LEM	<---	GOC	0.001	0.967	-0.966

There is no common method bias if the difference between the two factor loadings is less than 0.2. The factor loadings are also assessed with and without a common factor (Liang et al., 2007; Richardson et al., 2009; Chin et al., 2012). The regression weight with and without the common latent variable is shown in table. is less than their cutoff value of 0.2 is the greatest difference, which is 0.195. Figure above shows Common Latent Factor technique to check for Common Method Bias. This shows that there is no common method bias.

Since the measurement models are now validated and checked for common method bias the models can now be utilised for data analysis using SEM.

4.11 Testing of Hypotheses

Regression analysis is a useful statistical method for determining how two or more relevant variables are related to one another. Regression analysis can take many various shapes, but they are always focused on how one or more independent variables affect a dependent variable (Montgomery et al., 2021). Regression analysis is used in the current study to show how independent factors affected the dependent variable. Hypothesis testing in linear regression analysis typically focuses on determining the significance of the regression coefficients and whether there is a statistically significant relationship between the independent variables and the dependent variable. The p-values associated with each coefficient are frequently examined during the interpreting process. If the p-value is less than the predetermined significance level (usually 0.05), the null hypothesis is rejected, implying that at least one independent variable has a statistically significant effect on the dependent variable.

To understand variations, hypothesis testing was performed for the overall hypothesis as well as component wise for different demographic categories of respondents using linear regression.

While performing component wise analysis for different demographic categories, the dataset was first split into subsets based on ownership, organisation type, investment size, and region using the split file option in SPSS. This allows the researcher to run separate regression analyses for each group, which can be useful when there are different factors at play within the data. By examining the results of each group separately, researchers can gain a deeper understanding of how variables may interact or differ across different subsets of the data. Then the relationships between variables studied in the research model are tested for significance.

H1: There is a significant relationship between GHRMP and GOC in manufacturing organisations.

The following table reflects p values indicating the statistical significance and model fit indicator of the relationship between GHRMP and GOC in manufacturing organisations.

Table 44: The relationship between GHRMP and GOC in manufacturing organisations.

			Estimate	S.E.	C.R.	P
GJD	<---	GOC	-.768	.041	-18.671	***
GRS	<---	GOC	.169	.023	7.253	***
GTD	<---	GOC	.145	.024	6.161	***
GPA	<---	GOC	.315	.031	10.053	***
GRM	<---	GOC	.280	.029	9.644	***

Table 45: Model Fit

Model Fit Indicator	
CMIN/DF	2.098
CFI	.719
GFI	.627
RMSEA	.074

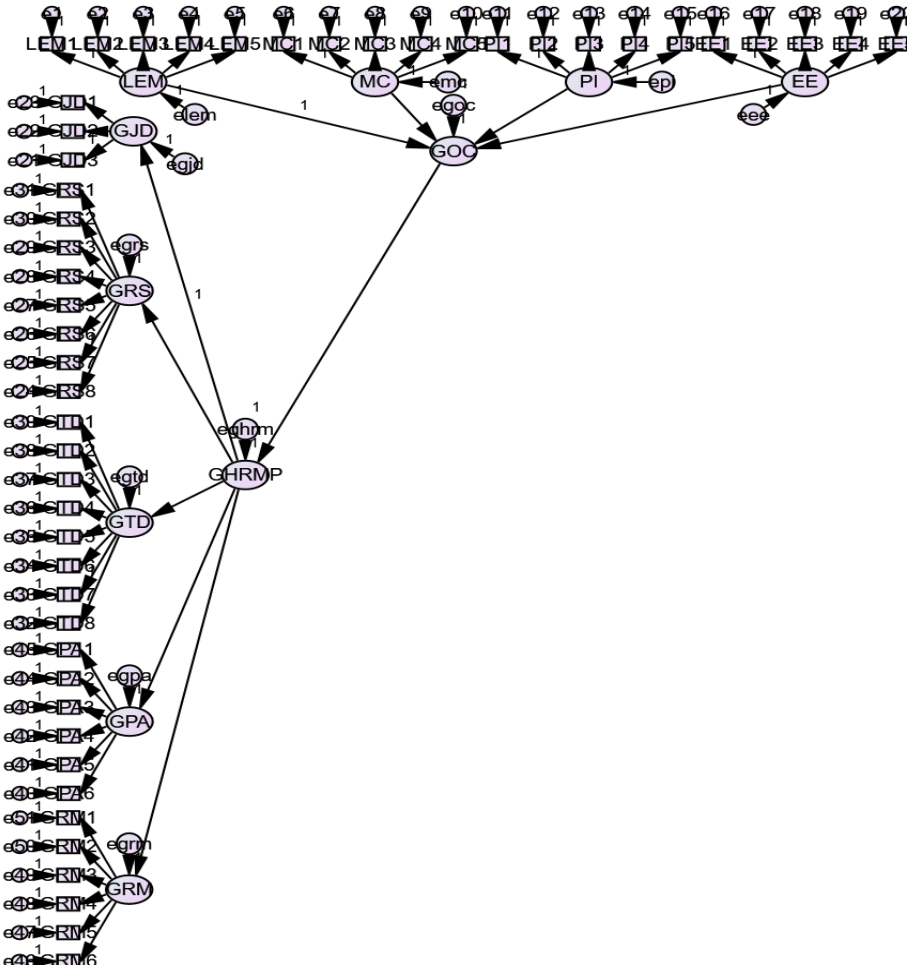

Figure 18: Path Model

The model was a moderate fitting model. From the path model, the p value between the GJD, GRS, GTD, GPA, GRM and GOC was 0.000<0.05. Since the p value was less than 0.05, we can conclude that, there is a significant relationship between GJD, GRS, GTD, GPA, GRM components of GHRMP and GOC. Hence, accepted the hypothesis H1.

H1a: There is a significant relationship between individual GHRMP and GOC in manufacturing organisations by ownership.

The following table reflects p values indicating the statistical significance of the relationship between GHRMP, GOC and OP in manufacturing organisations classified by their ownership.

Table 46: The relationship between individual GHRMP, GOC and OP in manufacturing organisations classified by their ownership.

	GOC		OP	
	Purely Indian	Global Participants	Purely Indian	Global Participants
GHRMP	Significant (.000)	Significant (.036)	Significant (.000)	Significant (.001)
GOC	-	-	Significant (.006)	Significant (.000)
GJD	Significant (.000)	Significant (.003)	Significant (.045)	Significant (.000)
GRS	Significant (.009)	Significant (.004)	Not Significant (.111)	Significant (.001)
GTD	Significant (.021)	Significant (.003)	Significant (.000)	Significant (.000)
GRM	Significant (.032)	Significant (.000)	Significant (.000)	Significant (.033)
GPA	Significant (.001)	Not Significant (.677)	Significant (.021)	Significant (.000)
LEM	-	-	Significant (.000)	Significant (.000)
MC	-	-	Not Significant (.062)	Not Significant (.341)
PI	-	-	Not Significant (.631)	Significant (.000)
EE	-	-	Not Significant (.996)	Significant (.000)

Since the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in purely Indian manufacturing organisations is significant. Also, the relationships between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and GOC, are significant. The observed relationship between GHRMP and GOC in globally participating manufacturing organisations is also significant. In the case of the relationships between components of GHRMP and GOC, all are significant except for GPA.

H1b: There is a significant relationship between individual GHRMP and GOC in manufacturing organisations by organisation type.

The table below shows p values indicating the statistical significance of the relationship between GHRMP, GOC and OP in manufacturing organisations classified by the type of organisation.

Table 47: The relationship between individual GHRMP, GOC and OP in manfacturing organisations classified by their organisation type.

	GOC		OP	
	Polluting	Non-Polluting	Polluting	Non-Polluting
GHRMP	Significant (.031)	Significant (.000)	Significant (.000)	Significant (.000)
GOC	-	-	Significant (.000)	Significant (.011)
GJD	Significant (.000)	Not Significant (.336)	Not Significant (.851)	Not Significant (.132)
GRS	Not Significant (.600)	Not Significant (.061)	Significant (.000)	Not Significant (.199)
GTD	Significant (.094)	Significant (.000)	Significant (.011)	Significant (.000)
GRM	Significant (.000)	Significant (.000)	Significant (.000)	Not Significant (.250)
GPA	Significant (.000)	Significant (.000)	Significant (.001)	Significant (.005)
LEM	-	-	Significant (.010)	Significant (.000)
MC	-	-	Not Significant (.251)	Significant (.009)
PI	-	-	Not Significant (.335)	Significant (.008)
EE	-	-	Not Significant (.775)	Significant (.004)

Since the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in polluting manufacturing organisations is significant. Also, the relationship between components of GHRMP, i.e., GJD, GTD, GRM, GPA, and GOC, is significant, but GRS is not significant. The observed relationship between GHRMP and GOC in non-polluting manufacturing organisations is also found to be significant.The relationship between GTD, GRM, GPA, and GOC, is significant, but GJD and GRS are not.

H1c: There is a significant relationship between individual GHRMP and GOC in manufacturing organisations by investment size.

The table below reflects p values indicating the statistical significance of the relationship between GHRMP, GOC and OP in manufacturing organisations classified by their investment size.

Table 48: The relationship between individual GHRMP, GOC and OP in manufacturing organisations classified by their investment size.

	GOC			OP		
	5 Crores - 75 Crores (Small)	75 Crores - 250Crores (Medium)	Above 250 Crores (Large)	5 Crores - 75 Crores (Small)	75 Crores - 250Crores (Medium)	Above 250 Crores (Large)
GHRMP	Significant (.001)	Significant (.000)	Not Significant (.604)	Significant (.000)	Significant (.000)	Significant (.000)
GOC	-	-	-	Significant (.006)	Not Significant (.604)	Significant (.000)
GJD	Significant (.000)	Significant (.000)	Not Significant (.446)	Significant (.000)	Significant (.000)	Not Significant (.607)
GRS	Significant (.000)	Significant (.000)	Significant (.007)	Not Significant (.058)	Significant (.000)	Not Significant (.266)
GTD	Significant (.000)	Significant (.000)	Significant (.009)	Significant (.000)	Significant (.000)	Significant (.000)
GRM	Significant (.000)	Significant (.000)	.300	Significant (.030)	Significant (.000)	Significant (.000)
GPA	Significant (.000)	Significant (.000)	Significant (.000)	Significant (.004)	Significant (.000)	Significant (.000)
LEM	-	-	-	Significant (.000)	Significant (.027)	Not Significant (.260)
MC	-	-	-	Significant (.000)	Significant (.008)	Significant (.001)
PI	-	-	-	.028	Significant (.000)	Significant (.000)
EE	-	-	-	Significant (.000)	Not Significant (.712)	Not Significant (.490)

Since the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in small manufacturing organisations is significant. Also, the relationship between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and GOC, is significant. The observed relationship between GHRMP and GOC in medium manufacturing organisations is significant too. Also, the relationship between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and GOC, is significant. Since the p-value is greater than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in large manufacturing organisations is not significant. Also, the relationship between components of GHRMP, i.e., GRS, GTD, GRM, GPA, and GOC, is significant except for GJD.

H1d: There is a significant relationship between individual GHRMP and GOC in manufacturing organisations by region.

The table below displays p values indicating the statistical significance of the relationship between GHRMP, GOC and OP in manufacturing organisations classified by their region.

Table 49: The relationship between individual GHRMP, GOC and OP in manufacturing organisations classified by their region.

	GOC					OP				
	West India	South India	Central India	North India	East India	West India	South India	Central India	North India	East India
GHRMP	Significant (.005)	Not Significant (.509)	Not Significant (.958)	Significant (.000)	Significant (.001)	Significant (.000)	Significant (.006)	Significant (.000)	Significant (.000)	Not Significant (.080)
GOC	-	-	-	-	-	Not Significant (.404)	Significant (.006)	Significant (.000)	Significant (.000)	Significant (.036)
GJD	Not Significant (.077)	Not Significant (.914)	Not Significant (.932)	Significant (.000)	Not Significant (.089)	Not Significant (.401)	Not Significant (.626)	Not Significant (.211)	Significant (.000)	Not Significant (.550)
GRS	Significant (.006)	Not Significant (.369)	Significant (.002)	Significant (.000)	Significant (.000)	Significant (.042)	Not Significant (.165)	Not Significant (.681)	Significant (.000)	Not Significant (.455)
GTD	Not Significant (.096)	Not Significant (.175)	Not Significant (.719)	Significant (.000)	Significant (.037)	Significant (.006)	Significant (.012)	Not Significant (.197)	Significant (.000)	Not Significant (.733)
GRM	Not Significant (.274)	Not Significant (.714)	Not Significant (.200)	Significant (.000)	Not Significant (.821)	Significant (.000)	Significant (.012)	Significant (.000)	Significant (.000)	Not Significant (.198)
GPA	Not Significant (.100)	Not Significant (.256)	Significant (.005)	Significant (.000)	Significant (.006)	Significant (.025)	Significant (.045)	Significant (.000)	Significant (.000)	Not Significant (.143)
LEM	-	-	-	-	-	Not Significant (.281)	Not Significant (.477)	Not Significant (.124)	Significant (.000)	Significant (.003)
MC	-	-	-	-	-	Not Significant (.057)	Significant (.006)	Not Significant (.367)	Significant (.000)	Not Significant (.732)
PI	-	-	-	-	-	Significant (.009)	Significant (.001)	Significant (.001)	Significant (.000)	Not Significant (.513)
EE	-	-	-	-	-	Significant (.012)	Not Significant (.912)	Significant (.000)	Significant (.000)	Not Significant (.775)

Since the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in manufacturing organisations in west India is significant. Also, in the relationship between components of GHRMP, i.e., GJD, GRS, GTD, GRM, and GPA, only GRS is significant with GOC. Since the p-value is greater than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and GOC in manufacturing organisations from south India is not significant. Also, the relationship between all the components of GHRMP, i.e., GJD, GRS, GTD, GRM, and GPA, is not significant with GOC. The observed relationship between GHRMP and GOC in manufacturing organisations in central India is not significant. There is no significant relationship between components of GHRMP, i.e., GJD, GTD, GRM, and GOC; only GRS and GPA are significant. The observed relationship between GHRMP and GOC in manufacturing organisations from north India is significant. Also, the relationship between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and GOC, are significant. The observed relationship between GHRMP and GOC in manufacturing organisations in east India is significant. The relationship between components of GHRMP, i.e., GTD, GRS, and GPA are significant with GOC but not with GJD and GRM.

H2: There is a significant relationship between GOC and OP in manufacturing organisations.

H2a: There is a significant relationship between GOC and EP in manufacturing organisations.

H2b: There is a significant relationship between GOC and FP in manufacturing organisations.

H2c: There is a significant relationship between GOC and SP in manufacturing organisations.

The following table reflects p values indicating the statistical significance and model fit indicator of the relationship between GOC and OP in manufacturing organisations.

Table 50: The relationship between GOC and OP in manufacturing organisations.

			Estimate	S.E.	C.R.	P
EP	<---	GOC	.374	.080	4.658	***
FP	<---	GOC	.217	.023	9.320	***
SP	<---	GOC	.125	.023	5.463	***
LEM	<---	OP	.210	.038	5.474	***
MC	<---	OP	.226	.047	4.800	***
PI	<---	OP	.311	.054	5.740	***
EE	<---	OP	.079	.023	3.409	***

Table 51: Model Fit

Model Fit Indicator	
CMIN/DF	2.411
CFI	.713
GFI	.754
RMSEA	.084

The model was a moderate fitting model. From the path model, the p value between the GOC and OP was 0.000<0.05. Since the p value was less than 0.05, we can conclude that, there is a significant relationship between LEM, MC, PI, EE components of GOC and EP, FP, SP components of OP. Hence, accepted the hypothesis H2, H2a, H2b and H2c.

H2d: There is a significant relationship between individual GOC and OP in manufacturing organisations by ownership.

Table 43 shows that the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GOC and OP in purely Indian manufacturing organisations is significant. In the case of the relationship between components of GOC, i.e., LEM, MC, EE, and PI, only LEM is significant with OP. The observed relationship

between GOC and OP in globally participating manufacturing organisations is also significant. However, MC is not significant, but LEM, EE, and PI are significant with OP.

H2e: There is a significant relationship between individual GOC and OP in manufacturing organisations by organisation type.

As per table 44, the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GOC and OP in polluting manufacturing organisations is significant. In the case of the relationship between components of GOC, i.e., LEM, MC, EE, and PI, only LEM is not significant with OP. The observed relationship between GOC and OP in non-polluting manufacturing organisations is also significant. In the case of the relationship between components of GOC, i.e., LEM, MC, EE, and PI, all are significant with OP.

H2f: There is a significant relationship between individual GOC and OP in manufacturing organisations by investment size.

The p-value is less than the commonly chosen significance level of 0.05 seen in the Table 45, it indicates that the observed relationship between GOC and OP in small manufacturing organisations is significant. In the case of the relationship between components of GOC, i.e., LEM, MC, EE, and PI, all are significant with OP. The p-value was higher than the generally used significance level of 0.05, indicating that the association between GOC and OP in medium manufacturing organisations is not significant. The relationship between components of GOC, i.e., LEM, MC, and PI, are significant with OP but not with EE. The observed relationship between GOC and OP in large manufacturing organisations is also significant and the relationship between components of GOC, i.e., LEM, MC, and PI, are significant with OP but not with EE.

H2g: There is a significant relationship between individual GOC and OP in manufacturing organisations by region.

Table 46 indicate the p-value was higher than the generally used significance level of 0.05, indicating that the association between GOC and OP in medium manufacturing organisations is not significant. Also, the relationship between components of GOC, i.e., LEM and MC, is not significant with OP, but EE and PI are significant. The observed relationship between GOC and OP in manufacturing organisations in south India is significant as well. The relationship between components of GOC, i.e., LEM and EE, are not significant with OP, but MC and PI are significant. There exists a significant relationship between GOC and OP in manufacturing organisations in central India. While, the relationship between components of GOC, i.e., LEM and MC, are not significant with OP, but EE and PI are significant. There exists a significant relationship between GHRMP and OP in manufacturing organisations in north India. Also, the relationship between all components of GOC, i.e., LEM, MC, PI, EE, and OP, are significant. In east India, the observed relationship between GOC and OP in manufacturing organisations is significant. Also, the relationship between components of GOC, i.e., MC, PI, and EE, are not significant with OP, but LEM is significant.

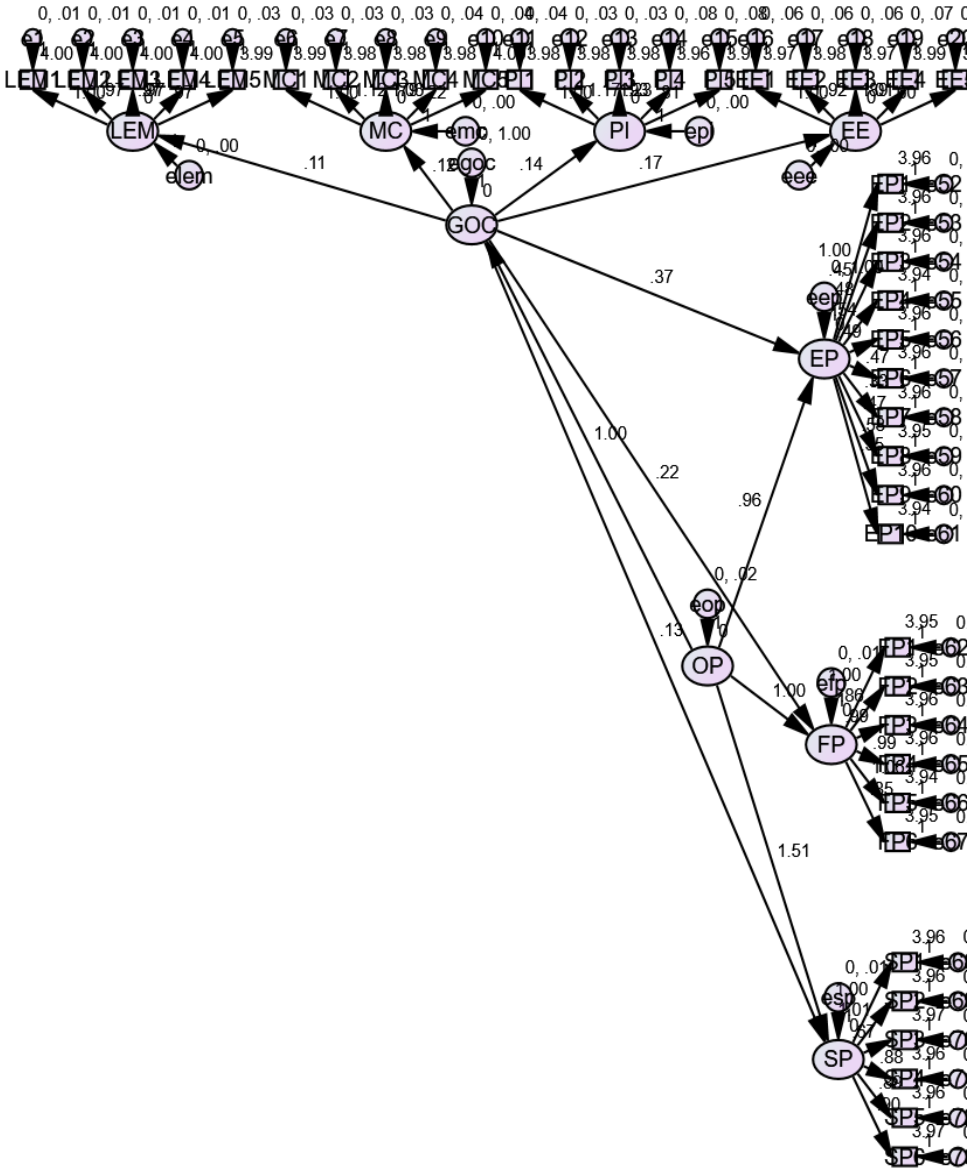

Figure 19: Path Model

H3: There is a significant relationship between GHRMP and OP in manufacturing organisations.

H3a: There is a significant relationship between GHRMP and EP in manufacturing organisations.

H3b: There is a significant relationship between GHRMP and FP in manufacturing organisations.

H3c: There is a significant relationship between GHRMP and SP in manufacturing organisations.

The following table shows p values indicating the statistical significance and model fit indicator of the relationship between GOC and OP in manufacturing organisations.

Table 52: The relationship between GHRMP and OP in manufacturing organisations.

			Estimate	S.E.	C.R.	P
EP	<---	GHRMP	1.978	.618	3.202	.001
FP	<---	GHRMP	1.318	.266	4.954	***
SP	<---	GHRMP	.965	.220	4.391	***
OP	<---	GJD	1.935	.647	2.992	.003
OP	<---	GRS	4.436	1.728	2.567	.010
OP	<---	GTD	2.605	.828	3.146	.002
OP	<---	GPA	-10.319	.861	-11.981	***
OP	<---	GRM	3.156	1.265	2.495	.013

Table 53: Model Fit

Model Fit Indicator	
CMIN/DF	1.297
CFI	.905
GFI	.729
RMSEA	.039

The model was a moderate fitting model. From the path model, the p value between the GHRMP and OP was 0.000<0.05. Since the p value was less than 0.05, we can conclude that, there is a significant relationship between GJD, GRS, GTD, GPA, GRM components of GHRMP and EP, FP, SP components OP. Hence, accepted the hypothesis H3, H3a, H3b and H3c.

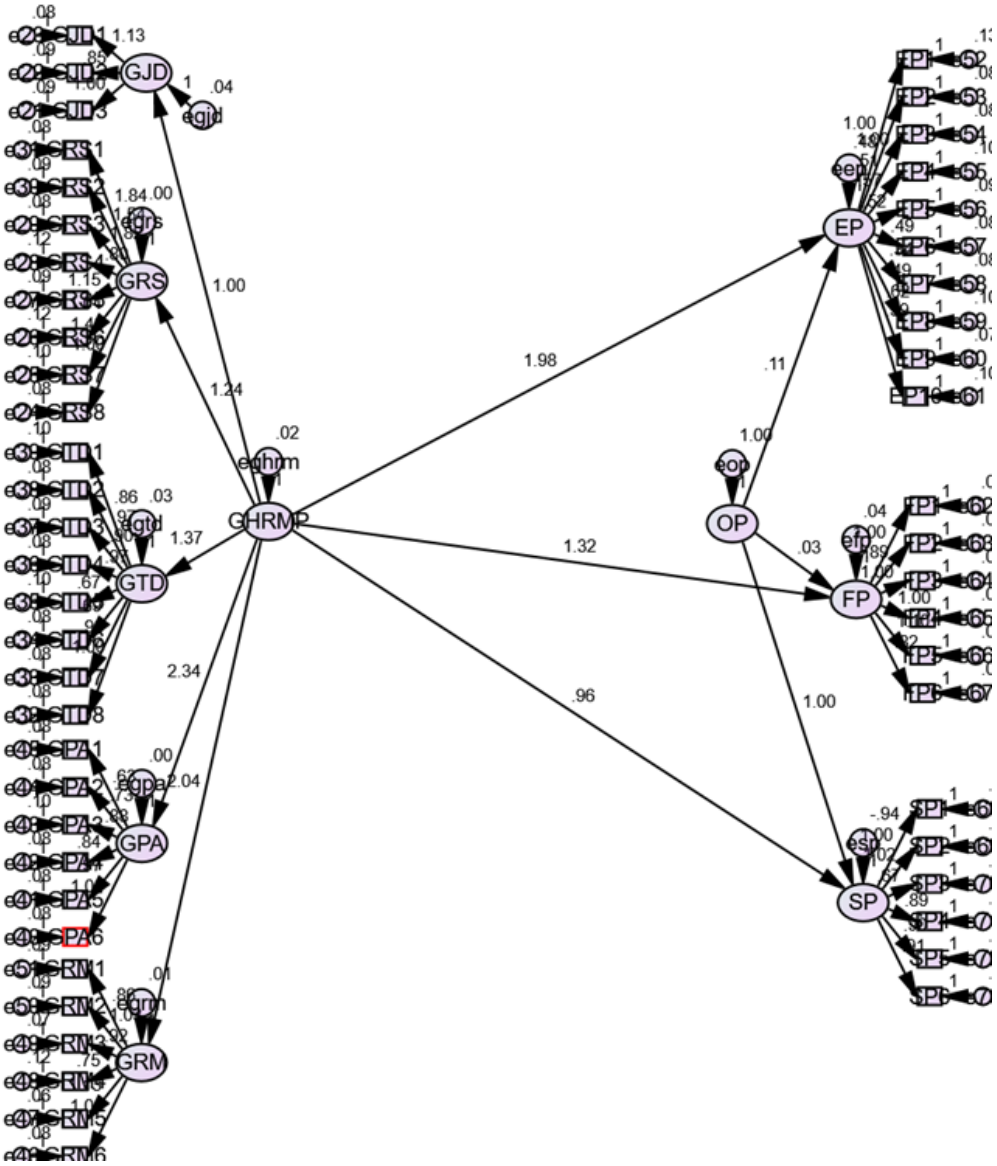

Figure 20: Path Model

H3d: There is a significant relationship between individual GHRMP and OP in manufacturing organisations by ownership.

Table 43 shows a significant relationship between GHRMP and OP in global manufacturing organisations. All components of GHRMP, including GJD, GRS, GTD, GRS, GRM, GPA, and GOC, are significant. In purely Indian manufacturing organisations, the relationship is also significant, but GRS is not on the list of components.

H3e: There is a significant relationship between individual GHRMP and OP in manufacturing organisations by organisation type.

Table 44 indicates that there is a significant relationship between GHRMP and OP in polluting manufacturing since the p-value is less than the commonly chosen significance level of 0.05. In the case of the relationship between components of GHRMP and OP, all are significant except GJD. In manufacturing organisations that are non-polluting, there is a significant link between GHRMP and OP. Wherein GJD, GRS, and GRM are not significant components of GHRMP on OP.

H3f: There is a significant relationship between individual GHRMP and OP in manufacturing organisations by investment size.

Since the p-value is less than the commonly chosen significance level of 0.05, it indicates that the observed relationship between GHRMP and OP in small manufacturing organisations is significant as can be seen in Table 45. The relationship between components of GHRMP and OP, GJD, GTD, GRM, and GPA are significant, but GRS is not. The observed relationship between GHRMP and OP in medium manufacturing organisations is found to be significant too. Likewise, the relationship between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and OP, is also significant. There exists a significant relationship between GHRMP and OP in large manufacturing organisations as well. In the case of the relationship between components of GHRMP and OP, GTD, GRM, and GPA are significant, but GJD and GRS are not significant with OP.

H3g: There is a significant relationship between individual GHRMP and OP in manufacturing organisations by region.

Table 46 shows that the p-value is less than the commonly chosen significance level of 0.05; therefore, the relationship between GHRMP and OP in manufacturing organisations in west India is significant. But in the relationship between components of GHRMP and OP, GRS, GTD, GRM, and GPA are significant, but GJD is not significant with OP.The relationship between GHRMP and OP in manufacturing organisations from south India is significant. But in the case of the relationship between components of GHRMP and OP, GRS and GTD are not significant with OP, but GJD, GRM, and GPA are significant.There is a significant relationship between GHRMP and OP in central Indian manufacturing organisations. However, when it comes to the correlation between the GHRMP's components and OP, GPA and GRM are significant whereas GJD, GRS, and GTD are not. In north India, the relationship between GHRMP and OP in manufacturing organisations is significant. Also, the relationship between all components of GOC, i.e., LEM, MC, PI, EE, and OP, are significant. It can be seen that the relationship between GHRMP and OP in manufacturing organisations in east India is not significant as well as the components of GHRMP.

H4: GOC significantly mediates the relationship between GHRMP and OP in manufacturing organisations.

The study assessed the mediating role of GOC on the relationship between GHRMP and OP using Hayes Process Output. The results revealed a significant indirect effect of impact of GHRMP on OP (b= 0.181, t = 10.996), supporting H4. Furthermore, the direct effect of GHRMP on OP in presence of the mediator GPC was also found significant (b = 0.682, $p < 0.001$). Hence, GOC partially mediated the relationship between GHRMP and OP (For more information, see Annexure II). Mediation analysis summary is presented in Table 51.

Table 54: Mediation Analysis Summary

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t-Statistics	Conclusion
				Lower Bound	Upper Bound		
OP<--- GOC<--- GHRMP	.863 (.000)	.682 (.000)	.181 (.000)	.080	.273	10.996	Partial Mediation

Final Conceptual Model

The following proposed conceptual model used in this study has been validated and can be used as a basis for further research. This study has proven its efficacy, laying the foundation for its practical application.

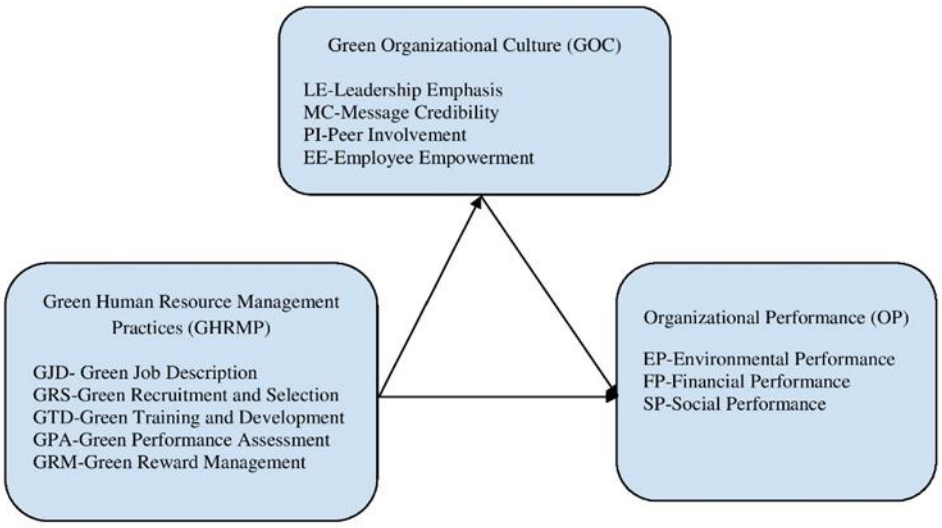

Figure 21: Final Conceptual Model

Chapter 5: Findings, Discussion and Implications

5.1 Discussion of findings

The results of the study undertaken to investigate the relationships between GHRMP, GOC, and OP have been presented in the previous. In this chapter, the findings are discussed with reference to the existing literature and their contribution to the academic literature. The implications for industry and other stakeholders are also discussed, providing insights into how the findings can be applied in practical settings. Also, recommendations for future research are suggested to further explore and expand upon the current study's findings.

RQ1: What is the relationship between GHRMP and GOC in Manufacturing Organisations?

This study found that GHRMP and GOC have a significant relationship in manufacturing organisations. The HR Department, through GHRMP, supports an integrated strategy for creating a sustainable society through GOC. The findings of the present study are in line with Mehta and Mehta (2017), who revealed that GHRM helps in the development of a competent GOC for a better living. This finding is also consistent with the beliefs of Margaretha and Saragih (2013), who suggested that GHRM, as a comprehensive project, supports environmentally friendly business operations. Managers must therefore focus on developing a new organisational culture using Green HR practices and there exist a relationship between GHRMP and GOC in Manufacturing organisations. Singh and Nath (2020) conducted a study with approximately 372 responders who were end-users representing different IT professions, stated GHRMP gives rise to organisational commitment which in turn significantly impacts GOC.

Recent study conducted by Al-Swidi et al. (2021), demonstrated link between GOC, GHRM, green attitude, and green worker engagement. Findings of Hadjri et al. (2019), revealed

all GHRMP have a significant impact on GOC except GPA in healthcare sector, partially supporting the present study's finding.

To provide more insights on this relationship, component wise analysis was done to understand variations based on ownership (purely Indian and global participants), organisation type (polluting and non-polluting), investment size (small, medium and large), and region (north, south, central, east and west India) of these manufacturing organisations.

The relationship between GHRMP and GOC in Indian manufacturing organisations is significant, with all components aligning with GOC values. It can be seen that Indian organisations foster a positive work environment by encouraging employees to implement environmentally friendly initiatives (Luthra et al., 2011). However, the relationship between GHRMP and GOC in globally participating organisations is significant, except for GPA, may be due to cultural differences and the emphasis on individual performance in a collective culture like India (Ramamoorthy, 2007). This is because the Indian workforce may not align with global performance criteria, and the emphasis on teamwork and collaboration may not be as prominent in a collective culture (Malik et al., 2021).

The relationship between GHRMP and GOC in polluting manufacturing organisations is significant. Also, the relationship between components of GHRMP, i.e., GJD, GTD, GRM, GPA, and GOC, is significant, but GRS is not significant. These organisations recruiting processes may not prioritise people with a strong environmental perspective or experience (Renwick, Redman, and Maguire, 2013). The lack of attention to sustainability in recruiting and selection may hamper the formation of a GOC (Fawehinmi, Yusliza, and Farooq, 2022).

The link between GHRMP and GOC in non-polluting industrial organisations is also significant. There is a direct link between GHRMP components, namely GTD, GRM, GPA, and

GOC, but not between GJD, GRS, and GOC. The success of GJD and GRS may vary depending on the specific industry and the level of commitment from top management to implementing sustainable practices (Faisal, 2023).

In small manufacturing organisations, there is a significant relationship between GHRMP and GOC. In addition, a significant relationship exists across all the components of the GHRMP, namely GJD, GRS, GTD, GRM, GPA, and GOC. In medium sized manufacturing organisations, there is a significant relationship between GHRMP and GOC. Also, a significant relationship exists across all the constituents of the GHRMP, namely GJD, GRS, GTD, GRM, GPA, and GOC. GHRMP ensures effective job description, recruitment, training, reward, and performance assessment of employees, while GOC establishes a cohesive and collaborative work environment Al-Alawneh, Othman, and Zaid, 2023). The alignment between these two factors enables small and medium manufacturing organisations to achieve a higher OP. GHRMP and GOC play crucial roles in shaping the overall success of these organisations (Yue et al., 2023).

On the other hand, the association between GHRMP and GOC is not statistically significant for large manufacturing organisations. Additionally, there is a significant link between the GHRMP's constituent parts—GRS, GTD, GRM, GPA, and GOC—aside from GJD. Large manufacturing organisations are more focused on enhancing OP than on fostering GOC. Regarding GJD, the emphasis in these organisations may be more on traditional job descriptions than environmental considerations, and a lack of awareness and understanding of the benefits of GJD may hinder their adoption and impact on GOC (Mishra, 2017).

The relationship between GHRMP and GOC in manufacturing organisations in west India is significant, with GRS being the only significant component with GOC. According to Nasruddin (2015), GRS helps attract and hire employees who are passionate about sustainability. By hiring

individuals with sustainability-related skills and experience, manufacturing organisations in west India can create a workforce that is dedicated to implementing environmentally friendly practices. This, in turn, fosters a green culture within the organisation and promotes a sustainable mindset among employees (Luu, 2018). Organisations in west India may place much more emphasis on GRS to promote GOC than GJD, GTD, GRM, and GPA.

In manufacturing organisations from south India, the relationship between GHRMP and GOC is not significant also all the components being not significant, suggesting a disconnect between the implementation of environmentally-friendly practices and overall organisational values and beliefs. It is crucial for these organisations to bridge this gap to create a holistic approach towards sustainability and foster a green mindset among employees through GRS, GPA, GJD, GTD, and GRM. The lack of awareness and understanding of GHRMP among employees and management can hinder the development of a green culture (Halim, Ahmad and Ramayah, 2021) within manufacturing organisations in south India.

The relationship between GHRMP and GOC in manufacturing organisations in central India is not significant, and there is no significant relationship between GJD, GTD, GRM, and GOC components. Only GRS and GPA are significant. This lack of relationship between GHRMP and GOC in manufacturing organisations in central India suggests a disconnect between the implementation of environmentally friendly practices and the overall organisational values and beliefs. It is crucial for these organisations to bridge this gap in order to create a holistic approach towards sustainability and foster a green mindset among employees not only through GRS and GPA but also through GJD, GTD, and GRM as well (Ansari, Farrukh and Raza, 2021). The relationship between GHRMP and GOC in manufacturing organisations in north India is significant, with all components. The manufacturing sector is committed to GHRMP and GOC due to critical environmental and social issues (Khan et al., 2021), in areas like Delhi, Agra, and Jaipur.

These challenges are causing health problems for residents, prompting industrial firms to implement GHRMP to ensure employee well-being and society's well-being by increasing SP (Yu, and Zhu, 2022).

The relationship between GHRMP and GOC in manufacturing organisations in east India is significant, with components like GTD, GRS, and GPA being significant with GOC but not with GJD and GRM. GRM implementation may not directly impact OP, as traditional job descriptions are more important than environmental considerations. A lack of awareness about GJD benefits may hinder its adoption and impact on OP in this region.

GHRM, characterized by the integration of sustainable practices into HRM processes, has gained remarkable prominence. The human resources department of an organisation wields the potential to foster a comprehensive approach that champions a culture of sustainable practices. Notably, contemporary corporate entities are leveraging environmental initiatives not only to attain competitive advantages but also to effectively monitor ecological consequences. This distinct revelation underscores the strategic link between GHRMP and GOC within ISO 14001 certified Manufacturing organisations. Also, is important to mention that this research is remarkably distinct from the previous research, as that it focused on ISO 14001 certified manufacturing organisations.

RQ2: What is the relationship between GOC and OP in Manufacturing Organisations?

Previous researchers have not paid much attention to GOC and very few studies can be found in the previous literature (Pham et al., 2020; Kucukoglu and Pınar, 2016). The present study investigated link between GOC and OP, found a significant relationship between EP, FP and SP components of OP and GOC.

Firstly, GOC's positive and significant relationship with EP signifies that a strong green culture within an organisation can substantially enhance its commitment to environmental sustainability. It encourages employees at all levels to adopt sustainable practices, reducing the company's ecological footprint. This cultural shift often results in reduced energy consumption, less waste generation, and better resource conservation. Employees who feel empowered to contribute to environmental goals are more likely to innovate and develop eco-friendly solutions. As a result, the organisation becomes more environmentally responsible, actively contributing to the preservation of planet and addressing pressing environmental challenges.

Secondly, the study's results indicate that GOC similarly influences FP positively. A GOC often translates into cost-effective measures, efficient resource utilization, and eco-innovation, all of which supports financial outcomes through reduced expenses and enhanced market competitiveness. A green culture enhances company's reputation, attracting environmentally conscious customers and investors. This increased goodwill can boost sales and shareholder confidence, potentially increasing profits. GOC aligns financial success with eco-friendly values, making it a strategy that benefits both the planet and the bottom line.

Lastly, the positive correlation between GOC and SP highlights that organisations with a green culture tend to engage more actively in socially responsible practices, fostering positive relationships with stakeholders, employees, and communities. Overall, GOC plays a pivotal role in shaping an organisation's holistic performance, benefiting not only the environment but also its financial stability and social impact. Imran, Arshad, and Ismail (2021), studied how the GOC affects OP in Malaysian manufacturing firms, the findings of the study were in line with present study stated that GOC was found to be a major determinant OP.

Jabbour (2011), examined the level of greening human resource management techniques, organisational culture, training, and cooperation in Brazilian businesses. The researcher conducted a survey of 94 Brazilian enterprises that have ISO 14001 accreditation. This finding aligns with the present study's finding, which suggest existence of a positive and significant relationship between GOC and OP. Non incorporation green aspects within the organisational culture may lead to negative OP (Jabbour, 2011). In the present study, four aspects of GOC, namely "LE, MC, PI, and EE," are discussed. The study results are similar to those of Srinivasan and Kurey (2014), who suggest that LE and MC have an impact on OP. Also, the study findings are consistent with Pellegrini et al. (2018), who found that employee engagement and reciprocal engagement in sustainability programs are examples of how PI enhances OP. On the other hand, Daily et al. (2012) stated that EE refers to the degree of independence that employees have in making successful judgments about needs and circumstances that go beyond foundational norms impacting OP. Ecological empowerment raises workers environmental consciousness, and HR-led activities like monitoring and assessment encourage management and staff to significantly impact the OP.

While addressing this research question, results depicted that GOC has a significant positive impact on OP in manufacturing organisations. Thus, by implementing a GOC, OP can be improved to a great extent. The results of the study unquestionably indicate that cultivating a GOC has a notably positive impact on the OP of manufacturing companies, which is in line with the research question. OP encompasses quality and productivity can be used to assess the effectiveness of a company's strategic objectives. This finding of the present study is novel as it focused on ISO 14001 certified manufacturing organisations and defined OP as per TBL approach theory.

More detailed information on this relationship was obtained by conducting a component wise analysis of these manufacturing organisations to identify differences in ownership (Purely Indian and global participants), the type of organisation (polluting and non-polluting), the size of

the investment (small, medium, and large), and the location (north, south, central, east, and west India) and the study revealed significant variations as presented below.

The relationship between GOC and OP in Indian manufacturing organisations is significant, but when tested for components, only LEM is found to be significant with OP. This may be due to the increasing recognition of sustainable practices and the Indian government's initiatives to promote green practices (Luthra et al., 2011). Leadership plays a crucial role in shaping an organisations culture and values and prioritising green practices that positively impact overall performance (Muisyo, and Qin, 2021). In globally participating manufacturing organisations, the relationship between GHRMP and GOC is significant, except for GPA, as cultural differences and values may not align with global performance criteria. Also, individual performance may not be as prominent in a collective culture like India, where teamwork and collaboration are highly valued (Chatterjee, 2022).

The relationship between GOC and OP in manufacturing organisations is significant. In the case of the relationship between GOC components, namely LEM, MC, EE, and PI, only LEM is not significant with OP. The focus of these organisations may be primarily on production and not on ethical leadership or sustainable practices. Tarkang and Ozturen, (2019) stated that the absence of ethical leadership and sustainable practices might result in lower EP, FP, and SP, further limiting overall OP. Whereas the relationship between GOC and OP in non-polluting manufacturing organisations is also significant. In the case of the relationship between components of GOC, i.e., LEM, MC, EE, and PI, all are significant with OP. This is because in non-polluting manufacturing, there is a strong GOC that promotes LEM and MC through sustainability practices. Encourages EE and PI to participate in environmentally friendly initiatives supporting overall performance and success.

The study reveals a significant relationship between GOC and OP in small manufacturing organisations. Components of GOC, such as LEM, MC, EE, and PI, are all significant with OP. However, the relationship between GOC and OP in medium sized manufacturing organisations is not significant. The relationship between components of GOC, i.e., LEM, MC, and PI, are significant with OP but not with EE. The hierarchical structure of these companies may limit EE and autonomy, impacting GOC and further diminishing any potential impact on OP (Flagstad, 2023). These organisations are more focused on creating GOC than OP. Likewise, there is a significant relationship between GOC and OP in large manufacturing organisations, with components like LEM, MC, and PI showing significant correlations with OP but not with EE. However, it has been observed that EE can have a positive impact on smaller manufacturing organisations. This may be due to the more direct and hands-on nature of operations in these companies, allowing for greater employee involvement and decision-making in sustainability initiatives (Casey and Sieber, 2016).

The relationship between GOC and OP in manufacturing organisations in West India is not significant, and the components of GOC, such as LEM and MC, are not significant with OP. However, EE and PI are significant. The lack of emphasis on MC may lead to a disconnect between the organisation's communication efforts and its actual performance, potentially impacting its reputation and OP (Cronin et al., 2011). The focus of these organisations may be primarily on production and not on ethical leadership or sustainable practices. The absence of ethical leadership and sustainable practices can result in decreased EP, FP and SP, further hindering overall OP.

The study reveals a significant relationship between GOC and OP in manufacturing organisations in south India. While components of GOC, such as LEM and EE, do not significantly impact OP, MC and PI are. The success of manufacturing organisations in this region is primarily driven by MC and PI and not by LEM and EE. These organisations rely more on MC and PI than

LEM. The hierarchical structure prevalent in these organisations may limit the influence and impact of individual leaders on overall performance (Flagstad, 2023).

The relationship between GOC and OP in manufacturing organisations in central India is significant, with components like LEM and MC not significantly affecting OP. However, EE and PI are significant. The relationship between GOC and OP in manufacturing organisations in central India is significant, with components like LEM and MC not significantly affecting OP. However, EE and PI are significant. The lack of emphasis on MC may cause a disconnect between communication efforts and performance, potentially impacting reputation and OP (Cronin et al., 2011). The focus on production may lead to decreased EP, FP, and SP, further hindering overall OP. The relationship between GHRMP and OP in manufacturing organisations in north India is significant, with all components of GOC being significant. By implementing GJD, GRS, GTD, GRM, and GPA, these firms want to contribute to a cleaner, better, and healthier environment that affects EP and FP. Likewise, initiatives from the government and laws supporting green initiatives have prompted organisations in north India to prioritise green practices and enhance GOC through improved LEM, MC, PI, and EP.

The study reveals a significant relationship between GOC and OP in manufacturing organisations in East India. However, the relationship between components of GOC, such as MC, PI, and EE, is not significant with OP. The focus is mainly on LEM, which may lead to a disconnect between communication efforts and performance, potentially impacting reputation and OP (Cronin et al., 2011). The absence of EE and PI may hinder employees' unique perspectives, stifling innovation and creativity, and causing employees to feel undervalued (Černe, Batistič, and Kenda, R. (2018).

RQ3: What is the relationship between GHRMP and OP in Manufacturing Organisations?

This study is concerned with understanding whether the adoption of GHRMP plays a positive role in enhancing OP in Manufacturing firms. The current study results indicate that the relationship between EP, FP and SP components of OP and GHRMP is significant. Firstly, the integration of GHRMP is associated with enhanced EP, as it encourages sustainable resource management, reduced energy consumption, and proactive measures for environmental conservation.

Secondly, GHRMP positively influences FP, likely due to cost-saving measures through resource efficiency and improved corporate reputation, attracting eco-conscious consumers and investors. By integrating sustainability principles into recruitment, training, and development processes, companies can build a workforce that is well-equipped to reduce environmental impacts.

Moreover, GHRM fosters a green corporate culture where employees are encouraged to participate in eco-friendly initiatives. This cultural shift can lead to reduced carbon emissions, lower waste generation, and improved resource conservation. As a result, the organisation becomes more environmentally responsible and better equipped to address the pressing challenges of climate change and resource scarcity, ultimately contributing to a healthier planet.

Lastly, GHRMP contributes to SP by fostering a GOC, which, in turn, leads to employee engagement, social responsibility initiatives, and positive relationships with stakeholders.

A similar result was obtained by El Dessouky and Alquaiti (2020), wherein the researchers investigated the effect of GHRMP on OP in private drilling firm in Bahrain, portrayed that GHRMP and OP have a significant positive link. Research conducted by Salih (2020), investigated the influence of GHRMP on OP in HEIs in the Duhok governorate of Kurdistan, GHRM methods

(green hiring and selection, green incentive administration, green grading rubric, green learning and support, and green career progression) shown significant association with OP serving as the dependent factor supporting this study.

Rashid and Alam (2020), recognized the effect of GHRMP on OP. The findings stated that GRS had a beneficial influence on OP. Similarly, GRM and green engagement had been found to positively impact company success. GPA, on the other hand, documented negative results, and green awards had no effect on OP. The research finding was not in line with the research results of the present study. Therefore, a contrasting viewpoint was observed in the context of GPA, GRM, and OP.

The study results coincide with the study results of Obaid (2015) who examined GHRM aspects such as “green recruiting, green training and support, and green education” on company performance concluding study result similar to the present study.

Thus, it can be concluded that in the present context, the subject of GHRM is gaining immense prominence. It is observed that HRM which involves the incorporation of sustainable development into HRM is becoming increasingly important. A company's human resource department can have an impact on enabling a holistic approach to empower a culture of sustainable practices. Currently, it is seen that corporate organisations use environmental programs, which act as a means to generate competitive benefits while also assisting in the monitoring of environmental repercussions.

Present study can be considered unique as the previous studies have majorly focused on GRHMP diverse impact on sustainability goals, EP and FP. However, limited evidence was available on how OP as a whole is affected or predicted due to GHRMP practices

A component wise analysis of these manufacturing organisations was conducted to obtain more detailed information on this relationship. The analysis identified differences in ownership (Indian and foreign participants), the type of organisation (polluting and non-polluting), the size of the investment (small, medium, and large), and the location (north, south, central, east, and west India). The study revealed significant variations, which are presented below.

The relationship between GHRMP and OP in Indian manufacturing organisations is significant. Also, GJD, GTD, GRM, and GPA are significant. However, GRS is not. The recruitment and selection process in these organisations may not be effectively aligned with the specific needs and requirements of the organisation. Additionally, other factors such as Training and Development, Performance Assessment, Reward Management have a more significant impact on OP in these manufacturing organisations (Amjad et al., 2021).

In globally participating manufacturing organisations, the relationships between GHRMP and its components are significant with OP. These components are based on green metrics, contributing to the overall OP. GHRMP can increase an organisation's reputation by showcasing commitment to environmental sustainability and responsible business practices, attracting environmentally conscious customers, gaining media attention, and potentially increasing market share (Joshi et al., 2023). Therefore, global manufacturing organisations in India should prioritise integrating GHRMP into their business strategy for sustainable growth.

The relationship between GHRMP and OP in polluting manufacturing organisations is significant, with all components of GHRMP being significant except for GJD. This is because the focus of GJD is primarily on promoting sustainability and fostering GOC rather than directly impacting overall OP (Bertels et al., 2010). In non-polluting manufacturing organisations, the relationship is significant, but GJD, GRS, and GRM are not significant, as they focus more on

employee training and development and on incentivising employee performance than on job descriptions or the hiring process to improve the OP (Alam et al., 2023).

The relationship between GHRMP and OP in small manufacturing organisations is significant, with components such as GJD, GTD, GRM, and GPA being significant. However, GRS is not as significant, as small organisations may lack the resources or expertise to effectively implement and maintain GRS processes. GRS in these organisations is more focused on fostering GOC than directly impacting OP. In medium sized manufacturing organisations, GHRMP and GOC play crucial roles in overall success. Also, the relationship between all components of GHRMP, i.e., GJD, GRS, GTD, GRM, GPA, and OP, is significant.

The observed relationship between GHRMP and OP in large manufacturing organisations is significant. In large manufacturing organisations, the relationship between components of GHRMP and OP, GTD, GRM, and GPA is significant, but GJD and GRS are not significant with OP. The job description and recruitment and selection processes in these organisations may not be effectively aligned with the specific needs and requirements of the organisation.

The relationship between GHRMP and OP in manufacturing organisations in west India is significant, with GRS, GTD, GRM, and GPA being significant components. However, GJD is not significant with OP, this is because manufacturing organisations in west India have been increasingly adopting GHRMP to foster OP while doing so, they may not have focused much on GJD. The relationship between GHRMP and OP in manufacturing organisations in south India is significant, with a focus on job descriptions, performance assessment, and incentivizing rather than hiring or training to improve OP.

The relationship between GHRMP and OP in manufacturing organisations in central India is significant, but GRM and GPA are more significant than GJD, GRS, and GTD. In these

organisations, more attention is given to GRM and GPA than effective GJD, GRS, and GTD. The study found a significant relationship between GHRMP and OP in manufacturing organisations in north India, with all components of GHRMP being significant. However, the relationship between GHRMP and OP in manufacturing organisations in east India was not significant. This suggests that the manufacturing sector in east India may not prioritize environmental sustainability as much as in other regions, and their focus may be more on cost-cutting and efficiency.

The research outcomes affirmed the substantial relationship between GHRMP and OP, further validating the research's third hypothesis. This leads to the conclusion that a significant linkage exists between GHRMP and OP within ISO 14001 certified manufacturing organisations. Thus, this is the novel finding gained by the current research particularly applicable to all large manufacturing firms.

RQ4: Does GOC has a mediating effect on the relationship between GHRMP and OP in Manufacturing Organisations?

The focus of this research question was on the mediating role of GOC in the relationship between GHRMP and OP. The study thoroughly examined the prevalence and significance of this interplay using a process matrix and established that GOC indeed acts a mediator in shaping the connection between GHRMP and OP within the chosen ISO 14001 certified manufacturing firms in India. It can be highlighted that the distinction between OC and GOC is the key attribute for enhancing the effectiveness of GHRMP for the viable enhancement of OP.

The study result is consistent with statement of Hassan (2016), that perceived OP does increase through the adoption of GHRMP. Also, GOC plays an important as it shapes the values, behaviours, beliefs and actions of the employees through relevant practices mediating the association between GHRMP and OP (Amini et al., 2018).

Present study results coincide with idea of Li et al., (2019), that mere adoption of GHRM practices will not help the firm in minimizing the impact of organisational activities on the environment. Instead, it requires that top management also reflects these ideologies in their behaviour, attitude and values. It is often found that the values, beliefs and norms held by the top management mirror the extent to which employees at the middle level will reciprocate a given idea or practice. Hence GOC is necessary for the success of both GHRMP and OP.

The present study outcome contrasts with Roscoe et al. (2019) who investigated the link between GHRMP, GOC facilitators, and a company's environmental practices. The results implied that pro-environment HRM activities such as recruiting, coaching, assessment, and incentives aid in the creation of GOC facilitators. LE, MC, PI, and EE are essential accelerators of the GOC. According to the report, GOC enhancers favourably moderate the association between GHRM activities and environmental effectiveness.

GOC is concerned with idea that employees are thinking and behaving in a manner that allows firms to minimize the negative impact on the environment that is caused due to their profit-seeking activities and maximise the profit impact of their organisational activities (Roscoe et al., 2019). In this regard, when organisations are aiming at enhancing their positive impact on the environment, it is critical that the values, beliefs and norms of the organisation are in alignment with these initiatives. Previous literature (Liu and Lin, 2020; Yasaka, 2020; Chang, 2015), highlighted the association of GOC with other variables like green product innovation performance and Corporate Social Responsibility and Green Transformational Leadership for better OP.

This distinct finding, exclusive to this research, highlights that the presence of GOC is pivotal for ensuring the efficacy of GHRMP in elevating OP. It underscores the need for organisations, particularly those adhering to ISO 14001 certification and similar manufacturing

entities, to prioritize the establishment of GOC. Without GOC, a firm's efforts to achieve better OP through GHRMP will fail. Hence, it becomes crucial for the organisations to primarily establish a viable GOC that can help them attain the success of GHRMP on OP.

This foundation is essential to not only unleash the full potential of GHRMP but also to effectively translate them into improved OP. Ultimately, this study comprehensively addresses all research questions, underscoring its contribution to the understanding of critical dynamics within the manufacturing sector.

5.2 Implications

This research contributes to a better understanding of the relationship between GHRMP, GOC, and OP in ISO14001 certified manufacturing organisations in India, which will benefit academic, research, and business sectors.

According to the study's findings, there is a significant relationship between GHRMP, GOC, and OP in all ISO 14001 organisations assessed. As a result, ISO 14001 can be a reliable indicator of a company's dedication to environmental management. The study found that organisations with ISO 14001 certification are more likely to implement effective green policies and practices. These organisations demonstrated better compliance with environmental regulations, social norms, and profitability.

5.2.1 Research/Academic Implications

Using the Triple Bottom Line (TBL) theory as a base, the study hypothesised that GHRMP (i.e., "GJD; GRS; GTD; GPA and GRM") on OP. within the manufacturing industry. The study's outcomes firmly established a notably positive impact of GHRMP on GOC and OP within the manufacturing context whereas HRM practices were previously revealed to play an eminent role

in enhancing the employee's performance (Hassan, 2016); satisfaction (Mira et al., 2019); behaviour (Bos-Nehles et al., 2017); engagement (Sivapragasam and Raya, 2018); organisational citizenship behaviour (Newman et al., 2016) and so on.

One of the major contributions is the theoretical shift from the traditional Resource-Based View (RBV) framework to the Triple Bottom Line (TBL) framework, which highlights the interconnectedness of economic, social, and environmental factors specific to ISO14001 certified organisations. The RBV framework primarily focuses on the firm's internal resources and capabilities as the main source of competitive advantage. However, the TBL framework goes beyond this by emphasising the importance of considering not only economic factors but also social and environmental aspects in business decision-making. This shift in perspective allows ISO 14001 certified organisations to holistically evaluate their impact on society and the environment while still maintaining their economic viability.

Earlier studies predominantly examined the varied impacts of GHRMP on sustainability objectives, environmental performance, and financial outcomes. However, the scarcity of evidence pertaining to the broader influence of GHRMP practices on overall OP (EP, FP and SP) makes this finding particularly innovative in the area of manufacturing firms.

Driven by the growing imperative for environmental sustainability in manufacturing practices, a number of scholars strategically realigned their focus towards understanding how GHRMP contribute to overall organisational outcomes within the manufacturing sector. In accordance with this, the findings of the current study are instrumental in highlighting that the different GHRMP play an eminent role in enhancing OP on three grounds i.e., social, environmental and financial. These finding make an essential contribution to the literature.

The present study investigated link between GOC and OP, found a significant relationship between EP, FP and SP components of OP and GOC. Firstly, GOC's positive and significant relationship with EP signifies that a strong green culture within an organisation can substantially enhance its commitment to environmental sustainability. Secondly, the study's results indicate that GOC similarly influences FP positively. A GOC often translates into cost-effective measures, efficient resource utilization, and eco-innovation, all of which supports financial outcomes through reduced expenses and enhanced market competitiveness.

Lastly, the positive correlation between GOC and Social Performance highlights that organisations with a green culture tend to engage more actively in socially responsible practices, fostering positive relationships with stakeholders, employees, and communities. Overall, GOC plays a pivotal role in shaping an organisation's holistic performance, benefiting not only the environment but also its financial stability and social impact. This a distinct contribution to the literature as none of the previous researchers have investigated this linkage.

Here, it is critical to understand that GHRMP will allow the firm to enjoy higher benefits in terms of better performance on the above grounds only when they are supported by the prevalence of GOC. Based on this, the study found that there was a lack of research done to comprehend the impact of GHRMP on OP through the mediating role of GOC that is built through the above-discussed attributes. As a result, it can be stated that the current study strategically contributes to the existing research displayed limited evidence on these constructs, particularly in the case of manufacturing firms in India that are ISO 14001 certified.

5.2.2 Managerial Implications

The study practically contributes to the policy makers, top management and HRM professionals by outlining how OP in terms of social, financial and environmental aspects can be

enhanced. It depicts that the HRM must give priority to the green agenda of the firm beginning from the recruitment stage itself. In accordance with this, all HRMP must be thoroughly revised and transitioned to the “GJD; GRS; GTD; GPA and GRM”.

Policy makers and Government officials can refer to findings of this study to promote and incentivise GHRMP. Which can be instrumental in advancing environmental and social objectives. By supporting and regulating such practices, they can foster sustainable competitiveness and address environmental challenges more effectively.

As ISO 14001 is considered as a reliable indicator of a company's dedication to environmental management, The top management can insist the organisation to adopt and implement this standard. By doing so, organisations will be able to reduce their environmental impact and enhance their OP. The government can also provide support and incentives organisations to comply with ISO 14001, further driving the adoption of GHRMP across various sectors.

For HR managers, this study provides actionable guidance on integrating green practices into HRM. It emphasises the critical role of HR in promoting sustainability within an organisation. HR managers should prioritise green initiatives throughout the employee lifecycle, including recruitment, job descriptions, training, development, and reward systems. They should also foster GOC by emphasising leadership commitment, message credibility, peer involvement, and employee empowerment. This study underscores that a well-structured GHRM strategy can be a powerful tool for fostering GOC and OP, particularly in the context of manufacturing companies that play a vital role in addressing environmental challenges and resource scarcity.

The study lends credence to the hypothesis that a GHRM framework may be a special source of sustainable competitiveness, especially through GOC that support EP, FP and SP. It can

be seen promoting employee engagement in organisation by top management is highly essential, because all the initiatives of the organisation will be successful when there is a high dedication level from the employees.

The findings of the study indicate that a strong green culture within an organisation can substantially enhance overall OP through leadership commitment, message credibility, peer involvement, and employee empowerment. This suggests that organisations that prioritise and promote green practices are more likely to actively engage in initiatives that benefit the environment and society also. So it is of eminent importance that top management actively support and encourage the development of a green culture within their organisation. By providing leadership and resources, top management can ensure that employees are empowered to make sustainable choices and contribute to the overall success of the organisation.

The study's findings demonstrate the practicality of the proposed conceptual model and provide valuable insights for its application in business-world scenarios. The significant relationships established in the study confirm the model's effectiveness and reliability.

The proposed conceptual can serve as a roadmap for manufacturing companies to implement GHRMP and GOC to foster OP. Since natural resources are in scarce and environmental issues are alarming, adoption of GHRMP can be of great importance for alleviating environmental challenges. Therefore, practitioners may develop and strengthen green-oriented human resources and use GHRM as a strategy to achieve corporate sustainability by utilising this model of GHRM in manufacturing sectors.

Some significant implications for a component-wise analysis of these manufacturing organisations based on ownership (purely Indian and global participants), the type of organisation

(polluting and non-polluting), the size of the investment (small, medium, and large), and the location (north, south, east, west and central India) are:

The study reveals that Indian manufacturing organisations prioritise LEM over other components of GOC, focusing on MC, EE, and PI to enhance performance and adopt a GOC. Managers may encourage employee participation in green initiatives and create peer involvement opportunities. Ensuring the credibility of green initiative messages is crucial for employee acceptance and commitment. Transparent communication and consistent messaging are essential for building a culture aligned with environmental sustainability goals. The recruitment and selection process in these organisations may not be effectively aligned with the specific needs and requirements of the organisation which takes a toll on OP. The management of these organisations may realign the recruitment and selection processes with sustainability to reap higher benefits.

Based on the findings of the research, global manufacturing organisations operating in diverse cultures, such as India, shall adapt their performance management systems to regional requirements. Managers shall understand the importance of cultural peculiarities and individual accomplishments in the Indian labour market. Organisations can modify incentive programs and leadership styles to promote a work climate that values individual contributions. Managers shall also be aware of differences in cooperation and teamwork emphasis and may need to modify communication strategies and organisational structures accordingly.

It has been revealed that polluting organisations often overlook individuals with strong environmental perspectives or experience during recruitment and selection, highlighting the need for strategic adjustments. To foster a GOC, organisations may reevaluate talent acquisition practices and incorporate sustainability-oriented criteria into the hiring process. This will increase

the likelihood of attracting and retaining employees who align with sustainability principles, promoting the successful establishment and maintenance of a GOC.

As per the study, there is no association between GJD, GSR, and GOC in non-polluting manufacturing organisations where the success of GJD and GRS practices heavily depends on top management commitment. On the basis of this relationship, managers and leaders shall recognize the importance of sector-specific strategies and actively promote sustainability initiatives. Organisational leaders may prioritise a strong commitment to sustainability and foster a culture that integrates green practices throughout employment stages to ensure the success of GJD and GRS initiatives. These organisations shall also focus on GJD, GRS, and GRM, as they are not significant with the OP. In these organisations, the primary focus is on GJD for GHRM implementation but in case of pollution organisation much attention is not to GJD. So, the management of these polluting organisation should pay attention to GJD to improve OP.

There is no association between GHRMP and GOC in large organisations, these manufacturing organisations are more focused on enhancing OP than on fostering GOC. In order to cultivate a culture that is in line with green principles, the management of these large manufacturing organisations may need to reassess and possibly rebalance their strategic priorities.

The emphasis placed by medium sized manufacturing organisations on OP via GOC is not significant. This may be due to their hierarchical structure, which restricts autonomy and negatively affects GOC. This implies that in order to encourage more autonomy, structural changes and a managerial revision of the GOC emphasis are required. For long-lasting performance gains, strategies that recognize hierarchical restrictions and strike a balance between GOC and OP may be essential. It's also critical to balance company goals and make sure that a green culture doesn't take precedence over the necessity of improving overall performance.

In manufacturing organisations from south India, the relationship between GHRMP and GOC is not significant also all the components being not significant, suggesting a disconnect between the implementation of environmentally-friendly practices and overall organisational values and beliefs. It is crucial for these organisations to bridge this gap to create a holistic approach towards sustainability and foster a green mindset among employees through GRS, GPA, GJD, GTD, and GRM. the lack of awareness and understanding of GHRMP among employees and management can hinder the development of a green culture within manufacturing organisations.

The study found no significant correlation between GHRMP and OP in east Indian manufacturing organisations. This suggests that a one-size-fits-all approach to GHRMP may not be effective in this region. Managers and researchers should explore region-specific dynamics, industry characteristics, and organisational contexts to tailor GHRMP to the unique circumstances. Future research could explore factors that mediate or moderate the relationship between GHRM practices and OP, providing actionable insights for practitioners to enhance sustainability practices in East Indian manufacturing organisations.

5.3 Conclusion

By presenting ways to improve OP in terms of social, economic, and environmental factors, this research directly supports top management and HRM specialists. It shows that the HR Department must priorities the company's green agenda beginning with the hiring process. This highlights the need for a full revision of entire HRMP, into “GJD”, “GRS”, “GTD”, “GPA” and “GRM.”

The findings clearly suggest that, in addition to the implementation of GHRMP, the organisational setting must also communicate the same message, and as a result, “LEM”, “MC,

PI," and "EE" should be attained. The study supports the idea that a GHRM framework can be a unique source of sustainable competitiveness, particularly if its constituent elements have substantial experience with sustainability both internally and externally. GHRM theories are primarily concerned with the causal processes through which internal resources or practices, including a green corporate climate and culture, promote financial success, EP and SP.

The scarcity of natural resources and the recent emergence of environmental concerns, GHRM can play a crucial role in minimising environmental difficulties. Hence, practitioners may build, develop and apply GHRM as a strategy to achieve corporate sustainability. The conceptual model presented in this study illustrates the effect of adopting GHRM on OP and is intended to serve as a guide for manufacturing firms.

5.4 Limitations

The study has some limitations that highlight challenges and potential areas for future research:

1. The study primarily focused on the relationships between GHRMP, GOC, and OP in ISO 14001 certified Indian manufacturing organisations. Therefore, the results of the present study may not be applicable to other industries or organisations that are not ISO 14001 certified.

2. The study collects primary data from 200 HR professionals at various organisational levels via a quantitative research approach. A qualitative approach may yield more detailed results.

3. The cross-sectional design of the study limits its ability to capture the long-term effects of GHRMP and GOC on OP.

5.5 Recommendations for future research

Future research may incorporate qualitative methodologies, such as in-depth interviews and focus groups, to better understand GHRMP and GOC in manufacturing organisations. This will provide valuable insights on the impact of GHRMP on GOC and its effects on OP.

The manufacturing sector includes a wide range of subsectors, each with their own distinct operational features. Contextualizing GHRMP within each of these manufacturing sectors, such as polluting and non-polluting, Indian and foreign, medium, small, and large, and location, offers a promising direction for future research. Further study may explore how GHRMP is customized to address the unique needs and challenges of each sub-sector. Future research may offer new perspectives that can improve how these methods are used and how effective they are. Also, GHRMP is tailored to the particular requirements of various production niches.

Another valuable direction for future research may be adopting a longitudinal approach. While the existing research adopts a cross-sectional approach, exploring the effects of GHRMP and GOC on OP over an extended period may yield comprehensive insights. Longitudinal studies may capture the dynamic nature of GHRMP adoption and its subsequent impact on GOC and OP. This approach would offer a distinct understanding of how the effects of GHRMP unfold over time, allowing researchers to observe not only immediate changes but also long-term implications for OP within the manufacturing sector.

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ANNEXURE I

RESEARCH INSTRUMENT

The Follow-up Letter

Survey on "The Relationship Between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP) in ISO 14001 Certified Manufacturing Organisations Across India"

Instructions for completing the Questionnaire

Dear Respondents,

This Survey is designed to study the relationship between Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC), and Organisational Performance (OP) in ISO 14001 certified manufacturing organisations across India. Ideally, this questionnaire needs to be filled by Human Resource (HR) professionals working these organisations, who are aware of the organisation and who are capable of representing the views of the organisation appropriately through a questionnaire. Kindly note that there are no wrong or right answers and that they are only indicative of what generally happens in an organisation. The researcher assures you that the identity of the organisations will not be revealed without specific and exclusive permission for the same. Following compilation, each response will be reviewed in the context of the study's objectives and published as appropriate.

Your responses will be completely *ANONYMOUS* and *CONFIDENTIAL* and will be used only for *RESEARCH PURPOSES*.

Thank you in advance for your kind co-operation.

Mr. Sandesh Deelip Tari

Research Scholar, Goa Business School,

Measures

The study's questionnaire is a modified version of one that was previously validated for use in surveys by other researchers and was then validated once more for this investigation. The survey is divided into two portions. General information on the organisations and respondents is provided in the first section. In the other section, 73 items are used to assess each of the three constructs: Organisational Performance (OP), Green Organisational culture (GOC), and Green Human Resource Management Practices (GHRMP) on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree).

Section A: Background Information

Organisation Name (optional)**:** **…….....**	**ISO 14001 Certification:** Yes ( ) No ( )
Respondents Name (optional)**:** **……**	**Gender** (optional)**:** Male ( ) Female( )
Position in the Organisation: **……**…….	
Years worked in the present position: A. ( ) 5 years& below B. ( ) 5-10 C. ( ) 10-15 D. ( ) 15-20 E. ( ) 20& above	
Educational Qualification: A. ( ) Bachelors B. ( ) Masters C. ( ) Doctoral D. ( ) Technical E. ( ) others	
Nature of the Organisation: A. ( ) Chemicals & Pharmaceuticals B. ( ) Plastics, rubber & leather products C. ( ) Textiles D. ( ) Metal & Machinery Products E. ( ) Electronic/Electrical products F. ( ) Food and beverage	

G. ( )Wearing apparel H. ( ) Others (Please specify)…… ……				
Main product manufactured: ……				
Year of the establishment: ……..				
Ownership of the organisation:	A. ( ) Indian owned	B. ( ) Foreign owned	C. ( ) Jointly foreign / Indian owned	
Head offices Address / location: ……...				
Size of the investment	Less than 5 Crores	5 Crores to 75 Crores	75 Crores to 250 Crores	Above 250 Crores
Number the employees	Full Time:		Contract:	

Section B: Green Human Resource Management Practices (GHRMP), Green Organisational Culture (GOC) and Organisational Performance (OP) Measurement Scale

INSTRUCTION: Select the correct OPTION which best answers each question and tick as appropriate.

Sr. No:	Green Human Resource Management Practices (GHRMP)	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
	Green Job Description (GJD)					
1	The organisation uses teamwork in designing jobs for managing environmental issues.					
2	The organisation includes/incorporates environmental responsibility in the job description					
3	The organisation designs and implements new jobs and positions to focus exclusively on environmental management.					
	Green Recruitment and Selection (GRS)					
4	The organisation prefers to hire employees who have environmental knowledge and awareness.					
5	The organisation reflects environmental policies/strategies/values in employment policies.					
6	The organisation incorporates environmental performance history as an employment criterion. (i.e. employee's commitment towards working in the environment at the workplace)					
7	The organisation recruits volunteers and participates in environmental management initiatives.					

8	The organisation transfers the employer's concerns about greening through recruitment efforts.					
9	The organisation considers the environmental interest and concern of the volunteers as a selection criterion.					
10	The organisation selects employees who comply with environmental principles in their daily lives.					
11	The organisation focuses on environmental questions in all the selection steps. (Concerns about the environment and how to apply environmental principles).					
	Green Training and Development (GTD)					
12	Environmental training is considered as an important investment in our organisation.					
13	Environmental training is a priority in our organisation.					
14	The organisation implements a systematic training program to provide all employees with the skills and knowledge needed in all aspects of environmental management.					
15	The organisation undertakes environmental training needs of employees.					
16	The organisation carries out a career path to train future green managers (managers to support the organisation in the pursuit of sustainability/Environmental initiatives)					
17	The organisation creates right context for transferring environmental experiences in the organisation.					
18	The organisation creates right conditions for the implementation of environmental knowledge learned in the job.					

19	The organisation creates right structure for recording the tacit knowledge and experiences gained in any job environment.					
	Green Performance Assessment (GPA)					
20	The organisation utilizes environmental management information systems.					
21	The organisation combines the objectives of the organisation's environmental management and organisation's performance assessment system.					
22	The organisation sets green targets, goals and responsibilities for managers and employees.					
23	The organisation integrates green criteria into employee performance appraisals or assessments.					
24	There are dis-benefits for non-compliance or failing to meet environment management goals in the performance management system.					
25	The organisation informs staff of their weaknesses after assessment.					
	Green Reward Management (GRM)					
26	The organisation provides financial rewards for the good environmental performance of employees and teams.					
27	The organisation provides non-financial rewards such as paying benefits, leave, career promotion, etc., to employees and teams for their good environmental performance.					
28	The organisation awards environmental innovative and creative practices and suggestions					
29	The HR department communicate good performance and environmental superiority of employees at the higher organisation level.					

30	The organisation implements environmental ideas received from employees in the organisation.					
31	The organisation provide rewards for learning green skills.					

Sr. No:	Organisational Performance (OP)	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
	Environmental Performance (EP)					
1	The organisation manufacture products that have a less environmentally harmful impact than in previous years or than its competitors.					
2	The organisation manufactures products with less environmentally damaging inputs than in previous years or than its competitors.					
3	The organisation chooses raw materials from sources that are remediated or replenished.					
4	The organisation reduces environmental impacts of production processes or eliminated environmentally damaging processes.					
5	The organisation eliminates or reduces operations in environmentally sensitive locations.					
6	The organisation attempts to reduce likelihood of environmental accidents through process improvements.					
7	The organisation reduces waste by streamlining processes.					
8	The Organisation uses waste as inputs for own processes.					
9	The organisation disposes waste responsibly.					
10	The organisation handles or store toxic waste responsibly.					

	Financial (Economic) Performance (FP)					
11	The organisation works with government officials to protect the Organisation's interests.					
12	The organisation reduces costs of inputs for same level of outputs.					
13	The organisation reduces cost for waste management for same level of outputs.					
14	The organisation differentiates the process or product based on the marketing efforts of the process/product's environmental performance.					
15	The organisation earns revenue by selling waste from manufacturing/production activities.					
16	The organisation creates spin-off technologies that could be profitably applied to other areas of the business.					
	Social Performance (SP)					
17	The organisation considers interest of stakeholders in investment decisions by creating a formal dialogue.					
18	The organisation communicates its environmental impacts and risks to the general public.					
19	The organisation focuses on employee or community health and safety.					
20	The organisation protects the claims and rights of indigenous people or local community.					
21	The organisation shows concern for the visual aspects of the firm's facilities and operations.					
22	The organisation recognizes and acts on the need to fund local community initiatives.					

Sr. No	Green Organisational Culture (GOC)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Leadership Emphasis (LE)					
1	The leaders encourage employees to learn green information.					
2	The managers communicate green policy with the employees.					
3	The leaders help the employees who face various problems while adopting green practices.					
4	The managers "walk the talk" on environmental issues and review the green operations for progress.					
5	When evaluating the employees, managers emphasize on the importance of going green.					
	Message Credibility (MC)					
6	The information about environmental knowledge is delivered by respected sources.					
7	It is easy to understand how to apply those green operations.					
8	It is unnecessary to have too many experiences of using green practices.					
9	Employees find that communications appeal to them personally about green practices.					
10	The organisation has already applied some related green knowledge.					
	Peer Involvement (PI)					
11	It is easy for the employees to share green knowledge with their colleagues.					
12	The organisation has a strong network of peers for guidance while facing environmental issues.					

13	The organisation has a group discussion about green topic routinely.					
14	The employees are encouraged to exchange environmental issues with another department.					
15	Like members of a sports team, peers hold one another accountable.					
	Employee Empowerment (EE)					
16	The employees clearly know how green operations fit with their daily job.					
17	The employees feel a shared sense of responsibility for the work they do.					
18	The employees are free to make decisions regarding environmental issues.					
19	The employees have significant autonomy in deciding how to handle green issues in practices.					
20	The employees have a voice for green violations.					

ANNEXURE II

DATA ANALYSIS AND TESTING OF HYPOTHESIS

1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GJD1	200	1	5	3.96	.393
GJD2	200	1	5	3.97	.367
GJD3	200	1	5	3.96	.380
GRS1	200	1	5	3.93	.438
GRS2	200	1	5	3.93	.414
GRS3	200	1	5	3.93	.436
GRS4	200	1	5	3.96	.373
GRS5	200	1	5	3.94	.364
GRS6	200	1	5	3.94	.391
GRS7	200	1	5	3.93	.414
GRS8	200	1	5	3.94	.335
GTD1	200	1	5	3.96	.380
GTD2	200	1	5	3.96	.380
GTD3	200	1	5	3.96	.380
GTD4	200	1	5	3.96	.380
GTD5	200	1	5	3.94	.364
GTD6	200	1	5	3.96	.338
GTD7	200	1	5	3.95	.372
GTD8	200	1	5	3.94	.384
GPA1	200	1	5	3.95	.358
GPA2	200	1	5	3.95	.372
GPA3	200	1	5	3.92	.430
GPA4	200	1	5	3.94	.396
GPA5	200	1	5	3.93	.431
GPA6	200	1	5	3.93	.438
GRM1	200	1	5	3.94	.396
GRM2	200	1	5	3.92	.436
GRM3	200	1	5	3.95	.385
GRM4	200	1	5	3.94	.416
GRM5	200	1	5	3.94	.416
GRM6	200	1	5	3.94	.409
EP1	200	1	5	3.96	.373
EP2	200	1	5	3.96	.366
EP3	200	1	5	3.96	.373
EP4	200	1	5	3.94	.421
EP5	200	1	5	3.95	.392
EP6	200	1	5	3.96	.373
EP7	200	1	5	3.96	.330
EP8	200	1	5	3.95	.398

EP9	200	1	5	3.95	.405
EP10	200	1	5	3.94	.421
FP1	200	1	5	3.95	.398
FP2	200	1	5	3.95	.385
FP3	200	1	5	3.95	.392
FP4	200	1	5	3.95	.392
FP5	200	1	5	3.94	.409
FP6	200	1	5	3.95	.358
SP1	200	1	5	3.95	.379
SP2	200	1	5	3.95	.379
SP3	200	1	5	3.97	.331
SP4	200	1	5	3.96	.359
SP5	200	1	5	3.96	.359
SP6	200	1	5	3.96	.367
LEM1	200	1	5	3.97	.316
LEM2	200	1	5	3.97	.308
LEM3	200	1	5	3.96	.323
LEM4	200	1	5	3.97	.331
LEM5	200	1	5	3.96	.330
MC1	200	1	5	3.97	.299
MC2	200	2	5	3.98	.223
MC3	200	1	5	3.96	.298
MC4	200	2	5	3.98	.223
MC5	200	2	5	3.99	.213
PI1	200	2	5	3.97	.234
PI2	200	2	5	3.98	.245
PI3	200	2	5	3.98	.223
PI4	200	1	5	3.96	.330
PI5	200	1	5	3.97	.308
EE1	200	1	5	3.95	.337
EE2	200	1	5	3.98	.308
EE3	200	1	5	3.95	.337
EE4	200	1	5	3.98	.339
EE5	200	1	5	3.98	.316
Valid N (listwise)	200				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ownership	200	1	2	1.26	.440
Region	200	1	13	2.85	1.594
Organisation Type	200	1	2	1.46	.499
Investment Size	200	2	4	3.44	.818
Valid N (listwise)	200				

2. Harman's single factor analysis (Common biased method)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	22.422	30.716	30.716	22.422	30.716	30.716
2	7.242	9.920	40.636			
3	3.208	4.395	45.030			
4	2.241	3.070	48.100			
5	1.656	2.268	50.369			
6	1.247	1.708	52.077			
7	.937	1.284	53.361			
8	.902	1.236	54.597			
9	.883	1.210	55.806			
10	.844	1.156	56.962			
11	.818	1.121	58.083			
12	.812	1.113	59.196			
13	.795	1.088	60.284			
14	.783	1.073	61.357			
15	.781	1.070	62.427			
16	.731	1.002	63.429			
17	.719	.984	64.414			
18	.715	.980	65.393			
19	.713	.976	66.369			
20	.700	.959	67.329			
21	.687	.942	68.271			
22	.687	.941	69.212			
23	.684	.936	70.148			
24	.669	.916	71.064			
25	.661	.905	71.969			
26	.649	.889	72.858			
27	.644	.883	73.741			
28	.638	.874	74.615			
29	.625	.856	75.471			
30	.620	.850	76.321			
31	.612	.838	77.159			
32	.594	.813	77.973			
33	.588	.806	78.778			
34	.583	.798	79.577			
35	.559	.766	80.342			
36	.549	.753	81.095			
37	.547	.749	81.844			
38	.541	.741	82.585			
39	.528	.724	83.309			
40	.519	.711	84.020			
41	.508	.696	84.716			
42	.504	.690	85.406			
43	.493	.676	86.082			
44	.480	.658	86.740			

45	.473	.648	87.388			
46	.464	.635	88.024			
47	.463	.634	88.658			
48	.455	.623	89.281			
49	.442	.606	89.887			
50	.438	.601	90.488			
51	.427	.584	91.072			
52	.412	.565	91.636			
53	.410	.561	92.198			
54	.401	.550	92.747			
55	.398	.545	93.292			
56	.380	.520	93.813			
57	.369	.505	94.318			
58	.364	.498	94.816			
59	.353	.483	95.299			
60	.351	.480	95.780			
61	.346	.474	96.254			
62	.335	.459	96.713			
63	.327	.448	97.160			
64	.314	.430	97.590			
65	.305	.417	98.008			
66	.300	.411	98.419			
67	.289	.396	98.814			
68	.276	.379	99.193			
69	.254	.348	99.541			
70	.190	.260	99.802			
71	.083	.114	99.915			
72	.035	.047	99.963			
73	.027	.037	100.000			

Extraction Method: Principal Component Analysis.

3. Multicollinearity

Green Job Description (GJD)		GJD1	GJD2	GJD3
GJD1	Pearson Correlation	1	.446**	.395**
	Sig. (2-tailed)		.000	.000
	N	200	200	200
GJD2	Pearson Correlation	.446**	1	.317**
	Sig. (2-tailed)	.000		.000
	N	200	200	200
GJD3	Pearson Correlation	.395**	.317**	1
	Sig. (2-tailed)	.000	.000	
	N	200	200	200

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

Green Recruitment and Selection (GRS)		GRS 1	GRS 2	GRS 3	GRS 4	GRS 5	GRS 6	GRS 7	GRS8
GRS1	Pearson Correlation	1	.531**	.579**	.230**	.387**	.302**	.475**	.386**
	Sig. (2-tailed)		.000	.000	.001	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GRS2	Pearson Correlation	.531**	1	.557**	.146*	.343**	.288**	.444**	.372**
	Sig. (2-tailed)	.000		.000	.040	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GRS3	Pearson Correlation	.579**	.557**	1	.229**	.417**	.359**	.501**	.418**
	Sig. (2-tailed)	.000	.000		.001	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GRS4	Pearson Correlation	.230**	.146*	.229**	1	.354**	.364**	.178*	.263**
	Sig. (2-tailed)	.001	.040	.001		.000	.000	.012	.000
	N	200	200	200	200	200	200	200	200
GRS5	Pearson Correlation	.387**	.343**	.417**	.354**	1	.438**	.409**	.345**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200	200	200
GRS6	Pearson Correlation	.302**	.288**	.359**	.364**	.438**	1	.381**	.322**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200	200	200
GRS7	Pearson Correlation	.475**	.444**	.501**	.178*	.409**	.381**	1	.336**
	Sig. (2-tailed)	.000	.000	.000	.012	.000	.000		.000
	N	200	200	200	200	200	200	200	200
GRS8	Pearson Correlation	.386**	.372**	.418**	.263**	.345**	.322**	.336**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200	200	200

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

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

Green Training and Development (GTD)		GTD 1	GTD 2	GTD 3	GTD 4	GTD 5	GTD 6	GTD 7	GTD8
GTD1	Pearson Correlation	1	.444**	.374**	.444**	.276**	.342**	.343**	.296**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200

GTD2	Pearson Correlation	.444**	1	.444**	.478**	.313**	.381**	.379**	.365**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GTD3	Pearson Correlation	.374**	.444**	1	.444**	.313**	.342**	.343**	.365**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GTD4	Pearson Correlation	.444**	.478**	.444**	1	.313**	.381**	.379**	.365**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200
GTD5	Pearson Correlation	.276**	.313**	.313**	.313**	1	.270**	.239**	.336**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.001	.000
	N	200	200	200	200	200	200	200	200
GTD6	Pearson Correlation	.342**	.381**	.342**	.381**	.270**	1	.306**	.294**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200	200	200
GTD7	Pearson Correlation	.343**	.379**	.343**	.379**	.239**	.306**	1	.437**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000		.000
	N	200	200	200	200	200	200	200	200
GTD8	Pearson Correlation	.296**	.365**	.365**	.365**	.336**	.294**	.437**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200	200	200

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

Green Performance Assessment (GPA)		GPA1	GPA2	GPA3	GPA4	GPA5	GPA6
GPA1	Pearson Correlation	1	.397**	.399**	.404**	.433**	.460**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200
GPA2	Pearson Correlation	.397**	1	.415**	.457**	.448**	.474**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200
GPA3	Pearson Correlation	.399**	.415**	1	.473**	.512**	.507**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200
GPA4	Pearson Correlation	.404**	.457**	.473**	1	.504**	.527**
	Sig. (2-tailed)	.000	.000	.000		.000	.000

	N	200	200	200	200	200	200
GPA5	Pearson Correlation	.433**	.448**	.512**	.504**	1	.588**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200
GPA6	Pearson Correlation	.460**	.474**	.507**	.527**	.588**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200

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

Green Reward Management (GRM)		GRM1	GRM2	GRM3	GRM4	GRM5	GRM6
GRM1	Pearson Correlation	1	.468**	.474**	.376**	.559**	.474**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200
GRM2	Pearson Correlation	.468**	1	.546**	.365**	.559**	.482**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200
GRM3	Pearson Correlation	.474**	.546**	1	.485**	.579**	.491**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200
GRM4	Pearson Correlation	.376**	.365**	.485**	1	.477**	.394**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200
GRM5	Pearson Correlation	.559**	.559**	.579**	.477**	1	.601**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200
GRM6	Pearson Correlation	.474**	.482**	.491**	.394**	.601**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200

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

Environmental Performance (EP)		EP1	EP2	EP3	EP4	EP5	EP6	EP7	EP8	EP9	EP10
EP1	Pearson Correlation	1	.429**	.458**	.401**	.400**	.422**	.314**	.393**	.487**	.433**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000

	N	200	200	200	200	200	200	200	200	200	200
EP2	Pearson Correlation	.429**	1	.429**	.374**	.371**	.392**	.318**	.364**	.462**	.439**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP3	Pearson Correlation	.458**	.429**	1	.401**	.400**	.422**	.314**	.393**	.487**	.433**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP4	Pearson Correlation	.401**	.374**	.401**	1	.471**	.433**	.344**	.402**	.485**	.433**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP5	Pearson Correlation	.400**	.371**	.400**	.471**	1	.469**	.374**	.436**	.431**	.379**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP6	Pearson Correlation	.422**	.392**	.422**	.433**	.469**	1	.354**	.427**	.421**	.369**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP7	Pearson Correlation	.314**	.318**	.314**	.344**	.374**	.354**	1	.329**	.325**	.308**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP8	Pearson Correlation	.393**	.364**	.393**	.402**	.436**	.427**	.329**	1	.392**	.342**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200	200	200	200	200
EP9	Pearson Correlation	.487**	.462**	.487**	.485**	.431**	.421**	.325**	.392**	1	.603**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200	200	200	200	200
EP10	Pearson Correlation	.433**	.439**	.433**	.433**	.379**	.369**	.308**	.342**	.603**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200	200	200	200	200

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

Financial Performance (FP)		FP1	FP2	FP3	FP4	FP5	FP6
FP1	Pearson Correlation	1	.443**	.501**	.501**	.507**	.441**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200
FP2	Pearson Correlation	.443**	1	.451**	.451**	.523**	.383**
	Sig. (2-tailed)	.000		.000	.000	.000	.000

	N	200	200	200	200	200	200
FP3	Pearson Correlation	.501**	.451**	1	.510**	.516**	.449**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200
FP4	Pearson Correlation	.501**	.451**	.510**	1	.516**	.449**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200
FP5	Pearson Correlation	.507**	.523**	.516**	.516**	1	.460**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200
FP6	Pearson Correlation	.441**	.383**	.449**	.449**	.460**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200

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

Social Performance (SP)		SP1	SP2	SP3	SP4	SP5	SP6
SP1	Pearson Correlation	1	.510**	.390**	.466**	.466**	.459**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200
SP2	Pearson Correlation	.510**	1	.390**	.466**	.466**	.495**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200
SP3	Pearson Correlation	.390**	.390**	1	.370**	.412**	.364**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200
SP4	Pearson Correlation	.466**	.466**	.370**	1	.455**	.447**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200
SP5	Pearson Correlation	.466**	.466**	.412**	.455**	1	.447**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200
SP6	Pearson Correlation	.459**	.495**	.364**	.447**	.447**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200

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

Leadership Emphasis (LEM)		LEM1	LEM2	LEM3	LEM4	LEM5
LEM 1	Pearson Correlation	1	.671**	.671**	.671**	.446**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	200	200	200	200	200
LEM 2	Pearson Correlation	.671**	1	.750**	.750**	.501**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	200	200	200	200	200
LEM 3	Pearson Correlation	.671**	.750**	1	.750**	.501**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	200	200	200	200	200
LEM 4	Pearson Correlation	.671**	.750**	.750**	1	.501**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	200	200	200	200	200
LEM 5	Pearson Correlation	.446**	.501**	.501**	.501**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	200	200	200	200	200

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

Message Credibility (MC)		MC1	MC2	MC3	MC4	MC5
MC1	Pearson Correlation	1	.418**	.312**	.206**	.110
	Sig. (2-tailed)		.000	.000	.003	.122
	N	200	200	200	200	200
MC2	Pearson Correlation	.418**	1	.294**	.294**	.104
	Sig. (2-tailed)	.000		.000	.000	.144
	N	200	200	200	200	200
MC3	Pearson Correlation	.312**	.294**	1	.294**	.104
	Sig. (2-tailed)	.000	.000		.000	.144
	N	200	200	200	200	200
MC4	Pearson Correlation	.206**	.294**	.294**	1	.210**
	Sig. (2-tailed)	.003	.000	.000		.003
	N	200	200	200	200	200
MC5	Pearson Correlation	.110	.104	.104	.210**	1
	Sig. (2-tailed)	.122	.144	.144	.003	
	N	200	200	200	200	200

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

Peer Involvement (PI)		PI1	PI2	PI3	PI4	PI5
PI1	Pearson Correlation	1	.343**	.375**	.313**	.201**
	Sig. (2-tailed)		.000	.000	.000	.004
	N	200	200	200	200	200
PI2	Pearson Correlation	.343**	1	.360**	.363**	.260**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	200	200	200	200	200
PI3	Pearson Correlation	.375**	.360**	1	.262**	.212**
	Sig. (2-tailed)	.000	.000		.000	.003
	N	200	200	200	200	200
PI4	Pearson Correlation	.313**	.363**	.262**	1	.188**
	Sig. (2-tailed)	.000	.000	.000		.008
	N	200	200	200	200	200
PI5	Pearson Correlation	.201**	.260**	.212**	.188**	1
	Sig. (2-tailed)	.004	.000	.003	.008	
	N	200	200	200	200	200

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

		EE1	EE2	EE3	EE4	EE5
EE1	Pearson Correlation	1	.320**	.413**	.260**	.169*
	Sig. (2-tailed)		.000	.000	.000	.017
	N	200	200	200	200	200
EE2	Pearson Correlation	.320**	1	.320**	.377**	.293**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	200	200	200	200	200
EE3	Pearson Correlation	.413**	.320**	1	.313**	.169*
	Sig. (2-tailed)	.000	.000		.000	.017
	N	200	200	200	200	200
EE4	Pearson Correlation	.260**	.377**	.313**	1	.343**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	200	200	200	200	200
EE5	Pearson Correlation	.169*	.293**	.169*	.343**	1
	Sig. (2-tailed)	.017	.000	.017	.000	
	N	200	200	200	200	200

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

4. Hayes Process Output

Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.2 *****************

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

****
Model : 4
Y : OP
X : GHRMP
M : GOC

Sample
Size: 200

****
OUTCOME VARIABLE:
GOC

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6116	.3741	.6545	118.3349	1.0000	198.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1092	.2289	4.8449	.0000	.6577	1.5607
GHRMP	.6633	.0610	10.8782	.0000	.5431	.7836

****
OUTCOME VARIABLE:
OP

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7923	.6277	.4232	166.0888	2.0000	197.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.1979	.1947	1.0163	.3107	-.1861	.5819
GHRMP	.6815	.0620	10.9958	.0000	.5593	.8037
GOC	.2728	.0571	4.7742	.0000	.1601	.3855

***************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.6815	.0620	10.9958	.0000	.5593	.8037

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
GOC	.1810	.0490	.0801	.2726

********** ANALYSIS NOTES AND ERRORS **********

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

------ END MATRIX -----

ANNEXURE III

RESEARCH PAPER PUBLICATIONS/ CONFERENCE PRESENTATIONS

RESEARCH PAPER PUBLICATIONS:

1. Tari, S. D., & Nirmala, R. (2023). Analyzing the effect of green human resource management to attain organizational sustainability. *International Journal of System Assurance Engineering and Management*, *14*(6), 2095-2119. **(Published)**

2. Tari, S. D., & Nirmala, R. (2024). Analyzing the role of green human resource management on environmental performance: the mediating role of green organizational culture on information technology sectors. *Int. J. of Innovation and Sustainable Development. IJISD-189760.* **(Under Review)**

3. Mekoth, N., Prabhudesai, R., & Tari, S. D. (2023). Implications of HR Managers' Green Attitude: A Study in the Hospitality Sector. *Journal of Organizational Effectiveness: People and Performance. JOEPP-05-2023-0219.* **(Under Review)**

CONFERENCE PRESENTATIONS:

1. Presented Paper ***"Green Human Resource Management Practices: A study of Goan Hospitality Sector"*** at 6th International Conference on Management, Accounting, Banking, Economics and Business Research for Sustainable Development held on 1st and 2nd March 2023 organised by Department of Commerce, School of Social Sciences and Humanities-B.S. Abdur Rahman Crescent Institute of Science & Technology Chennai-Tamil Nadu, India in association with Miles Education, NSE Academy and ISDC.

2. Presented Paper "***Implementation Level of Green Human Resource Management in Hospitality Sector: An Evidence from 5-Star Hotels registered in Goa."*** at National Seminar "On

the Changes and Challenges in the Indian Economy: The Post Pandemic Shift in the Service Sector" organised by Dnyanprassarak Mandal's College and Research Centre- Faculty of Commerce and Management in Association with Vishwakarama College of Arts, Commerce and Science, Pune- 12th and 13th May, 2022.

3. Presented Paper "***Green Attitude of Human Resource Managers, Green Human Resource Management Practices of Organizations and the moderating role of Top Management Support"*** at National Conference on Recent Innovations in Science & Engineering RISE – 2021 Organised by Sambhram Institute of Technology (SAIT) and International Association of Research and Developed Organization (IARDO).

4. Presented Paper ***"Enhancing Performance Through Green Human Resource Management Practices and Top Management Support: A Conceptual Framework"*** at International Conference on Recent Intelligent Technologies in Science, Engineering, Humanities and Management (ICRITSEHM 2021) @ 26th February 2021 organised by Cheran College of Engineering and International Association of Research and Developed Organization (IARDO).