DOKUZ EYLÜL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF BUSINESS ADMINISTRATION (ENGLISH)
BUSINESS ADMINISTRATION (ENGLISH) PROGRAM
MASTER'S THESIS

EFFECTS OF GREEN SUPPLY CHAIN MANAGEMENT PRACTISES ON JOB ATTITUDES AND JOB SATISFACTION

Seda KUTLU

Supervisor
Assoc.Prof. Dr. Banu DEMİREL

İZMİR- 2023

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APPROVAL PAGE

DECLARATION

I hereby declare that this master's thesis titled as **"Effects Of Green Supply Chain Management Practises On Job Attitudes And Job Satisfaction"** has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

../../2023

Seda KUTLU

ABSTRACT

Master's Thesis

Effects Of Green Supply Chain Management Practises On Job Attitudes And Job Satisfaction

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Green Supply Chain Management (GSCM) became very popular concept in last decades as environmental issues rose rapidly and started to effect each and every living creatures life. In the meantime, economical benefits of GSCM adaption also discovered. However it has been rarely studied outside of marketing and operational research. This study's purpose is extending the knowledge in GSCM by approaching it in individual level and investigating what impact it might have in professional lives of the employees. Survey data collected from 298 respondents in Turkey to assess degree of GSCM implementation, Job Satisfaction, Job Performance, experienced Meaningfulness of Work, Affective Commitment and Engagement. Structural model is analysed with using partial least squares structural equation model (PLS-SEM). Results suggested that GSCM practises have a positive influence on positive work-related outcomes through the mediating effect of meaningfulness of work.

Keywords: Green Supply Chain Management, Job Attitudes, Job Satisfaction, Job Performance, Meaningfulness of Work, Structural Equation Modelling

ÖZET

Yüksek Lisans Tezi

Yeşil Tedarik Zinciri Uygulamalarının İş Tutumlari ve İş Tatmini Üzerindeki Etkileri

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Çevresel sorunların hızlı artışı ve dünya üzerinde yaşayan tüm canlıları etkılemeye başlamasıyla birlikte Yeşil Tedarik Zinciri Yönetimi oldukça popüler hale gelmiştir. Bu süreçte Yeşil Tedarik Zinciri Yönetimi uygulamalarının ekonomik faydaları keşfedildi. Ancak pazarlama ve operasyonel çalışmaların haricinde araştırmalar nadiren gerçekleşmiştir. Bu araştırmanın amacı Yeşil Tedarik Zinciri alanındaki bilgileri, konuya bireysel düzeyde yaklaşarak çalışanların iş hayatına nasıl etkileri olabileceğini araştırarak genişletmektir. Türkiye' de 298 çalışandan elde edilen anket verileri ile katılımcıların organizasyonlarındaki Yeşil Tedarik Zinciri Yönetimi uygulamalarının adaptasyon düzeyi, çalışanların İş tatmini, İş Performansı, İşin Anlamlılığı, Duygusal Bağlılıkları ve İşe Adanmışlık seviyeleri ölçülmüştür. Veriler Kısmi En Küçük Kareler Yapısal Eşitlik Modellemesi yöntemi ile analiz edilmiştir. Sonuçlar Yeşil Tedarik Zinciri uygulamalarının algılanan İşin Anlamlılığı aracılığı ile çalışanların iş tutumlarını olumlu yönde etkilediğini göstermiştir.

Anahtar Kelimeler: Yeşil Tedarik Zinciri Yönetimi, İş Tutumları, İş Tatmini, İş Performansı, İşin Anlamlılığı, Yapısal Eşitlik Modeli

EFFECTS OF GREEN SUPPLY CHAIN MANAGEMENT PRACTISES ON JOB ATTITUDES AND JOB SATISFACTION

CONTENTS

APPROVAL PAGE	ii
DECLARATION	iii
ABSTRACT	iv
ÖZET	v
CONTENTS	vi
ABBREVIATIONS	ix
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICES	xii
INTRODUCTION	1

CHAPTER ONE3

GREEN SUPPLY CHAIN MANAGEMENT

1.1.DEFINITION	3
1.2.ASPECTS OF GSCM	6
1.2.1.Internal Environmental Management	9
1.2.2.ISO 14001 certification	11
1.2.3.External GSCM practices	13
1.2.4.Investment Recovery	15
1.2.5.Eco Design	16
1.3.GREEN SUPPLY CHAIN PRACTISES IN TURKEY	18
1.4.GREEN SUPPLY CHAIN PRACTISES IN THE WORLD	20

CHAPTER TWO
JOB ATTITUDES AND JOB SATISFACTION THEORIES

2.1.VALUES 22
2.2.JOB ATTITUDES 23
2.2.1.Definition of Job Attitudes 23
2.2.2.Job Satisfaction 25
2.2.2.1.Approaches and Models of Job Satisfaction 26
2.1.2.1.1. Job Charachteristics Theory 26
2.1.2.1.2. The Facet Model of Job Satisfaction 28
2.1.2.1.3. Herzberg's Motivator-Hygiene Theory of Job Satisfaction 30
2.2.3.Meaningfulness of Work 35
2.2.4.Engagement 37

CHAPTER THREE
METHODOLOGY AND FINDING

3.1.DESIGN OF THE STUDY 39
3.1.1. Objective of the study 39
3.1.2. Type of the study 40
3.2.MODEL OF THE STUDY 40
3.2.1. Variables of the Model 43
3.2.2. Hypotheses 44
3.3. METHODOLOGY 45
3.3.1. Questionnaire Design 45
3.3.2. Sampling 47
3.3.3.Data Analysis 47
3.3.3.1. Structural Equation Modelling (SEM) 48
3.3.3.1.1. Assumptions of Structural Equation Modeling 50
3.3.3.1.2. Structural Equation Modeling Steps 50
3.3.3.1.2.1. Model Specification 52

3.3.3.1.2.2. Model Identification 53
3.3.3.1.2.3. Model Estimation 54
3.3.3.1.3. Model Testing 54
3.3.4.Limitation of the Study 54
3.4. FINDING 55
3.4.1. Convergent Validity of the Scales 55
3.4.1.1. Cronbach's Alpha 55
3.4.1.2. Outer Loadings 56
3.4.1.3. Average Variance Extracted (AVE) 58
3.4.2. Discriminant Validity of the Scales 59
3.4.2.1. The Cross Loading Criteria 59
3.4.2.2. Fornell-Larcker Criterion 61
3.4.3. Structural Model Assessment 61
3.4.4. Mediation Analysis 63

CONCLUSION 65
REFERENCES 67
APPENDICIES

ABBREVIATIONS

AF	Affective Commitment
AVE	Average Variance Extracted
CFI	Comperative Fit Index
CFI	Comparative Fit Index
CSR	Coorporate Social Responsibility
ENG	Engagement
GFI	Goodness of Fit Index
GFI	Goodness of Fit Index
GSCM	Green Supply Chain Management
IWPQ	The Individual Work Performance Questionnaire
JP	Job Performance
JS	Job Satisfaction
MW	Meaningfulness of Work
PEOU	Perceived Ease of Use
PLS-SEM	Partial Least Squared Structural Equation Modelling
PU	Perceived Usefulness
REP	Reputation
RMR	Root Mean Square Residual
RMSEA	Root mean square error of approximation
RMSEA	Root Mean Square Error of Approximation
SCM	Supply Chain Management
SEM	Structural Equation Modelling
TAM	Technology Acceptance Model
TEPSIE	The Theoretical, Empirical And Policy Foundations For Building
TQM	Total Quality Management
UWES	Work Engagement Scale
WAMI	The Work and Meaning Inventory

LIST OF TABLES

Table 1: GSCM Definitions p.5
Table 2: Aspects of GSCM p.8
Table 3: Job Facets and Descriptions p.29
Table 5: Cronbach's Alpha p.56
Table 6: Outer Loadings p.57
Table 7: Average Variance Extracted (AVE) p.59
Table 8: Average Variance Extracted (AVE) After Indicator Removal p.59
Table 9: Cross Loadings p.60
Table 10: Fornell-Larcker Criterion p.61
Table 11: PLS-SEM Results p.62
Table 12: Indirect Effects p.64

LIST OF FIGURES

Figure 1: Components of Work Attitudes p.24
Figure 2: Job Charachteristics Model p.28
Figure 3: Research Model p.43
Figure 4: Overview of Relationships in SEM p.50
Figure 5: Structural Equation Modelling Steps p.51
Figure 6: Common SEM Diagram Symbols p.53
Figure 7: Outer Loadings - Graphical Output p.58
Figure 8: Graphical Output of PLS-SEM Results p.63

LIST OF APPENDICES

Appendix 1: Survey in English app p.1
Appendix 2: Survey in Turkish app p.5

INTRODUCTION

Supply Chain Management (SCM) is a critical business principle that focuses on fostering cooperation between inter- and intra-organizational business processes, thereby enhancing firm performance and providing a competitive edge (Singh et al., 2010). The primary goal of Supply Chain Management is to achieve profitable growth by aligning customer demand with inter- and intra-organizational activities of the firm (Chandra & Kumar, 2000). Svensson (2009) emphasized the significance of incorporating ethical considerations in SCM to foster enduring, sustainable relationships among members while simultaneously yielding positive impacts on society in whole. As environmental issues ascend, the incorporation of corporate social responsibility (CSR) has emerged as a critical aspect of Supply Chain Management (Chi, 2011 ; Spena & De Chiara, 2012). In the past 20 years, there has been a shift in the focus of operational optimization from individual facilities or organizations to the entire supply chain (Linton et al., 2007).

The results of empirical studies has demonstrated the effects of GSCM practices on various aspects of firms' performance, including economic, social, environmental, and operational. (Fang & Zhang, 2018; Geng et al., 2017; Vanalle et al., 2017). Certain studies have endeavoured to identify human resource management practices that facilitate Green Supply Chain practices and performance, while others have concentrated on the approaches for promoting GSCM among employees (Kura, 2016; Mukonza & Swarts, 2019; Nejati et al., 2017 ; Zaid et al., 2018). Despite the significant research conducted on GSCM practices, there has been relatively little investigation into the effects of their implementation on employee attitudes towards firms (Visamitanan & Assarut, 2021).

According to Job Characteristics Theory, one of the components which results to positive work-related outcomes is task significance. Employees experience the state of meaningfulness of work and feel satisfied and engaged about their jobs (Hackman & Oldham, 1975). In another perspective Job Facet Theory suggest that when job's requirement align with the employee's values, they tend to feel positive feelings towards their job and finally it affects performance and satisfaction of them (Locke,1969). This research model is based on these theories and investigates whether

GSCM implementation impacts employee's work attitudes through the state of Meaningfulness of Work. Another point of view in literature considers GSCM as one of the Corporate Social Responsibility practices within business processes. Therefore, past studies suggested GSCM practices may influence employees' attitudes towards their work and the organization they work for (Duthler & Dhanesh, 2018; Nazir & Islam, 2020; Srisuphaolarn, 2013; Visamitanan & Assarut, 2021).

This study aims to discuss GSCM in an uncovered perspective and discover it's impact in individual level.

CHAPTER ONE
GREEN SUPPLY CHAIN MANAGEMENT

1.1. DEFINITION

The world's sustainability is in imminent danger due to the increase in global warming and changing biodiversity. In response, researchers, academics, practitioners, and scientists from various fields have come together to suggest ways to preserve environmental sustainability. This increasing interest in GSCM is primarily due to the worsening environmental conditions, such as the depletion of raw material resources, overflowing waste sites, and rising pollution levels (Srivastava, 2007). Srivastava (2007) and Lu et al. (2007) suggest that GSCM has emerged as a response to environmental degradation and natural resource diminishment (Lu et al., 2007). GSCM is a concept that originates from the literature of both environmental management and supply chain management. Incorporating the "green" aspect into supply chain management entails examining the impact and connections between supply chain management and the natural environment. Like supply chain management, the scope of GSCM varies depending on the researcher's objective. The definition and extent of GSCM in the literature have encompassed green procurement, integrated green supply chains spanning from suppliers to customers through manufacturers, and reverse logistics (Zhu & Sarkis, 2004; Tseng et al., 2019). Büyüközkan and Vardaloğlu (2008) defines green supply chain as set of practises to integrate product development and strategies for producing environmentally friendly products/services. In this context, the practices referred to as green activities include green procurement, green production/material management, green distribution/marketing, and reverse logistics processes.

The term "green" refers to the act of taking actions while considering environmental or ecological factors. The supply chain, as a crucial aspect of operations management, has a distinguished influence on the environment in terms of emissions, pollution, health hazards for communities, and more. To minimize the environmental impact, organizations are now incorporating environmental concerns into their supply chain operations. This incorporation of environmental considerations into supply chain

management practices is known as "GSCM" (Sarkis, 2012). One of the earliest definitions has been done by Handfield et al. (1997) for GSCM as the application of environmental management principles involves implementing them throughout the entire customer order cycle, which includes various activities such as design, procurement, manufacturing and assembly, packaging, logistics, and distribution. Definition from Wee et al. (2011) for GSCM is incorporating environmental considerations into supply chain management involves integrating them throughout various stages such as product design, material sourcing and selection, manufacturing processes, delivering the final product to consumers, and managing the end-of-life of green products. Parmigiani et al. (2011) also considered business aspirations and defined GSCM as a way for companies to achieve their profit and market share goals is by reducing their environmental impacts and enhancing their ecological efficiency. Another definition from Narasimhan and Carter (1998:6) is as follows Environmental supply chain management pertains to the participation of the purchasing function in endeavors that promote the minimization of waste, the practice of recycling, the adoption of reusable materials, and the substitution of more eco-friendly alternatives. GSCM incorporates environmental considerations into Supply Chain Management, which involves various aspects such as product design, material procurement and selection, manufacturing processes, and transportation of the finished goods to the customers (Srivastava, 2007). In general, GSCM aims to minimize or eliminate the adverse effects on the environment, such as air, water, and land pollution, as well as waste generated from resource utilization (including energy, materials, and products) throughout the process of transforming raw materials into finished goods and product disposal (Hervani et al., 2005). During 90’s it was observed that a growing trend where customers were insisting on products that have minimal impact on the environment. They aimed to influence manufacturers by buying products that they believed were more environmentally friendly and supporting "green" representatives and programs. There was also legislation being drafted at various political levels that required reductions in the use of toxics, minimization of process emissions and waste, and extending the product life through recycling (Dambach & Allenby, 1995).

Table 1: GSCM Definitions

Source	Definition
Handfield et al. (1997)	Applying environmental management principles throughout the entire customer order cycle, which includes various activities such as design, procurement, manufacturing, assembly, packaging, logistics, and distribution.
Zhu et al. (2005)	A significant and innovative model for companies to attain their financial and market goals by reducing their environmental risks and impacts and simultaneously improving their ecological efficiency.
Sheu et al. (2005)	This refers to the integration of the supply chain for manufacturing products and the reverse logistics chain for used products.
Srivastava (2007)	The incorporation of environmental considerations into the management of the supply chain, which involves various stages such as product design, material procurement and selection, manufacturing processes, product delivery to customers, and end-of-life management of the product.
H'Mida and Lakhal (2007)	The process of tracking and enhancing the environmental sustainability of the supply chain throughout the entire life-cycle of a product.
Kim et al. (2011)	A group of techniques designed to influence, regulate, and encourage environmental performance by utilizing available human and material resources and redefining organizational roles and processes.
Lee and Klassen (2008)	The integration of environmental concerns into supply chain management activities and plans of a purchasing organization to enhance the environmental performance of its suppliers and customers.
Wee et al. (2011)	Incorporating environmental concerns into supply chain management, which includes designing products, selecting and sourcing materials, managing manufacturing processes, delivering products to customers, and managing end-of-life disposal of environmentally-friendly products.
Saadany et al. (2011)	The concept of greening involves minimizing energy and raw material consumption, reducing waste generation, and maximizing product recovery. It primarily focuses on the forward supply chain activities, such as production, purchasing, materials management,

	warehousing, inventory control, distribution, shipping, and transport logistics.
Lau (2011)	Incorporating environmental considerations into the management of closed-loop supply chains
Gnoni et al. (2011)	An approach that aims to integrate environmental issues into SCM procedure starting from product design, and continuing through material sourcing and selection, manufacturing processes, the final product delivery and end-of-life management.
Büyüközkan and Çifçi (2012)	A method for companies to attain their profit and market share goals while reducing their environmental impact and enhancing their ecological efficiency.
Andıç et al. (2012)	Reducing and ideally eliminating the adverse environmental impacts caused by the supply chain.

Source: Adapted from Ahi and Searcy (2013)

1.2. ASPECTS OF GSCM

Focusing on supply chains is a significant move towards promoting and enhancing sustainability because it covers the product's lifecycle from sourcing of raw materials to customer delivery (Linton et al., 2007). However, for sustainability efforts to be effective, it must encompass factors and activities beyond the typical supply chain management scope. Linton et al. (2007) defined those activities and factors as following; product design, manufacturing by-products, by-products created during product use, product lifespan extension, product end-of-life, and recovery processes at the end-of-life Another attempts to create a comprehensive tool for assessing GSCM practices was made by Geng et al. (2017). They conducted a review of previous studies and classified GSCM practices into five essential categories: environmental management, green procurement or supplier integration, customer cooperation, green design, and reverse logistics.

Cankaya and Sezen (2019) conducted a systematic review of GSCM assessment tools and developed a new tool consisting of eight practices, namely internal environmental management, green purchasing, environmental education, green marketing, green packaging, green manufacturing, green distribution, and

reverse logistics. However, their tool does not currently include a factor related to customer cooperation, despite covering a range of distinctive practices.

According to Rao and Holt (2005), the implementation of GSCM practices comprised of reverse logistics, product recovery and reuse, collaboration with suppliers and customers, and green purchasing and green design. Numerous studies examine GSCM practises considering following elements; green design, green manufacturing, and green purchasing (Kusi-Sarpong et al., 2016; Rostamzadeh et al., 2015; Tseng & Chiu, 2013). Zhu and Sarkis (2004) researched the literature and categorized GSCM as defined in Table 1 according to previous studies. Zhu et al. (2005) conducted a study on China's industries, including textile, automobile, power generation, chemical/petroleum, and electrical and electronic industries. They proposed four methods for implementing GSCM practices: (1) internal environmental management, where managers support environmental management and install environmental systems; (2) external GSCM, where companies request their suppliers to improve their environmental performance and collaborate with their customers; (3) eco-design, where companies redesign their products to reduce the use of raw materials and energy and make them recyclable and re-manufacturable; and (4) investment recovery, where companies sell excess inventory, scrap, and used materials to recover their capital.

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Table 2: Aspects of GSCM

Internal environmental management
Commitment of GSCM from senior managers
Support for GSCM from mid-level managers
Cross-functional cooperation for environmental improvements
Total quality environmental management
Environmental compliance and auditing programs
ISO 14001 certification
Environmental management systems exist
External GSCM practices
Providing design specification to suppliers that include environmental requirements for purchased item
Cooperation with suppliers for environmental objectives
Environmental audit for suppliers' internal management
Suppliers' ISO14000 certification
Second-tier supplier environmentally friendly practice evaluation
Cooperation with customer for eco-design
Cooperation with customers for cleaner production
Cooperation with customers for green packaging
Investment recovery
Investment recovery (sale) of excess inventories/materials
Sale of scrap and used materials
Sale of excess capital equipment
Eco-design
Design of products for reduced consumption of material/energy
Design of products for reuse, recycle, recovery of material, component parts
Design of products to avoid or reduce use of hazardous of products and/or their manufacturing process

Source: Adapted from Zhu and Sarkis (2004)

1.2.1. Internal Environmental Management

A company's internal environmental management refers to the establishment of its own policies and targets for environmental protection in order to ensure the preservation of the environment (Chan et al., 2012). Environmental management systems have emerged as a promising approach to dealing with environmental compliance challenges in a comprehensive manner (Savely et al., 2007). According to Matthews (2003) Environmental management systems are systems which aim to identify and address the environmental impacts of an entire organization or facility, with the goal of promoting ongoing improvement in environmental performance. Environmental management systems usually include policies, procedures, and auditing protocols designed to manage the operations that generate waste materials or emissions. Internal environmental management refers to the implementation of specific activities aimed at achieving the internal goals of a firm, which may be established by managers and CEOs or mandated by regulatory requirements (Rao, 2002). There is an observable increase in environmental regulations, governmental pressures, adherence to international certification standards such as ISO 14000, evolving customer expectations, and managers acknowledging pollution as waste (Porter, 1995/2014). Therefor companies are compelled to create environmental policies for their manufacturing facilities and supply chain partners that comply with regulations (Rondinelli & Vastag, 1996).

Internal environmental management involves activities such as the endorsement of environmental practices by upper-level and mid-level managers, collaboration between departments for environmental enhancements, and the establishment of an environmental management system (Zhu et al., 2005). An Environmental Management System typically involves four key steps: planning how to carry out a task that has an environmental impact, implementing the task according to the plan, periodically checking that the task is being done as intended, and making corrections as required. This process of planning, doing, checking, and acting is commonly used as a general framework for establishing and managing an Environmental Management System (Marcus & Willig, 1997). Moreover, studies have indicated that implementing an Environmental Management System is generally

linked with better reported environmental performance. (Savely et al., 2007). Common expectation is that the improved environmental management will result in enhanced performance (Dechant & Altman, 1994). Organizations can utilize their Environmental Management Systems (EMS) and the ISO14001 standard to manage the results of the modeling process and assist them in achieving their desired level of environmental performance (Despeisse et al., 2012). To ensure the effectiveness of an Environmental Management System, it must be involved in monitoring, tracking, summarizing, and reporting environmental information to internal and external stakeholders. Cross-functional activities should be integrated to include environmental training of personnel. Formal procedures must also be in place, and these specialized procedures and information should be available to people involved in new product development, recycling, and pollution prevention. The commitment of a company to an Environmental Management System will determine the success of the system and the extent of benefits gained from environmental initiatives. A firm with an Environmental Management System can utilize the system to enhance cross-functional cooperation and share resources and information to promote various environmental initiatives within the organization. The implementation of an integrated EMS can have a positive influence on the operational performance measures of a business, including quality, costs, and market position. This can result in better product outcomes, more informed equipment selection decisions, reduced waste during production, improved opportunities to sell products globally, and ultimately, a net benefit that exceeds any associated costs (Sroufe, 2009). To be certified for their environmental management systems, corporations need to create specific environmental policies that address the threats and opportunities they face. There is no single environmental policy that applies to all corporations or their various plants or sites. In many cases, corporations hire external professionals to develop comprehensive and well-documented environmental management strategies to mitigate legal risks (Rondinelli & Vastag, 1996).

Total quality environmental management (TQEM) and the effective use of environmental management information systems (EMIS) have become interdependent business practices. TQEM necessitates ongoing and accurate measurements to enhance continuous process improvement, while EMIS should align with business

objectives without creating additional administrative burdens. Companies that are successful in implementing effective TQEM programs will have a significant advantage in today's competitive business environment, potentially leading to their survival and growth (FitzGerald, 1994). In organizations that have implemented Total Quality Management (TQM), environmental responsibility and green practices have become integral to the pursuit of total quality. The fundamental principle of TQM is that defects in production cost more to fix after a product has been manufactured than if those defects had been prevented in the first place. When this same principle is applied to environmental issues, it means adopting a "pollution prevention" strategy rather than relying on "end-of-pipe" solutions. In other words, preventing pollution from occurring is less expensive than cleaning up after an environmental accident or removing pollutants at the end of the manufacturing process using end-of-pipe technologies. Quality companies strive for zero defects, while green quality companies also aim for zero emissions or, at the very least, continuous improvement towards that goal (Dechant & Altman, 1994).

1.2.2. ISO 14001 certification

The increasing availability of global environmental management standards, such as ISO 14000, may discourage multinational corporations from engaging in hazardous environmental practices, such as siting facilities that produce hazardous emissions in countries with weak environmental regulations (Porter, 1995/2014). Companies face the challenge of developing a sustainable supply chain that effectively balances multiple factors, which can sometimes be a complex task. To help guide companies in this effort, the International Organization for Standardisation (ISO), based in Geneva, has established globally recognized guidelines. The ISO has developed a series of standards, known as ISO 14000, which are focused on environmental issues. These standards have been created by the ISO/TC 207 Committee for Environmental Management and provide companies with the framework to establish an environmental management system and pursue third-party certification (Clemens & Douglas, 2006). The ISO 14001 standard mandates compliance with a set of requirements that constitute the environmental management

system. Over the last decade, there has been a growing focus on ISO 14001 as a standard for environmental management, with thousands of organizations now obtaining certification by implementing supply-chain sustainability practices. Nowadays, ISO 14001 is being implemented by companies of all sizes, including both manufacturing and service industries (Chiarini, 2012).

ISO 14001 certification assists and supports companies to decrease in environmental impacts, including emissions, waste, consumption, and other related factors (Qi et al., 2012); manage the supply chain operations using alike or equivalent principles and internal tools (Chien & Shih, 2007); implement a continuous improvement system to stay current with technological advancements as much as possible (Bowen et al., 2009). To obtain certification, organizations must implement the environmental management system through documented procedures and work instructions aimed at reducing environmental impacts and effects. The primary goal of the ISO 14001 standard is to promote continuous improvement in environmental performance (Poksinska et al., 2003 & Chiarini, 2012). When companies implement an ISO 14001 management system, they typically prioritize the environmental sustainability of their suppliers based on factors such as the environmental impacts of their plant processes or the impact of their products or services. Once these suppliers have been identified, they should be involved in the design of a plan to improve supply chain sustainability. Specifications and procedures are then created and discussed with the suppliers at the start of the contract, with ongoing communication and monitoring of their environmental performance over time (Darnall et al., 2008). While ISO 14001 does not require audits within supplier sites, conducting such audits can be a valuable tool for enhancing control over the supplier's environmental management system. Due to the flexibility of interpretation and implementation of ISO 14001, two companies that are both certified under the standard may still develop different approaches to improving supply-chain sustainability (Curkovic & Sroufe, 2011).

Certification for ISO 14001 is based on process standards. The ISO 14000 guidelines specify the requirements for certifying environmental management systems, which include policy, planning, implementation, and operation, checking and corrective action, and management review. Additionally, the guidelines provide direction for auditing, labeling, environmental performance, life-cycle assessment, and

product standards. Companies have the option to pursue certification for all of their manufacturing sites or they can decide to certify only selected facilities. Many of the environmental management standards at the national and international level primarily address how corporations put their environmental policies into action. While complying with local and national environmental regulations is a requirement, corporations have significant flexibility in crafting their environmental policies. (Rondinelli & Vastag, 1996). Arimura et al. (2011) discovered that ISO 14001 certification, which is an environmental management system certification, encourages the implementation of GSCM practices

1.2.3. External GSCM practices

Green initiatives cannot be considered solely from a company perspective, but rather from a supply chain perspective. This is because competition is no longer limited to individual companies, but extends to the entire supply chain (Christopher & Peck, 2003:83). In this sense external practises of GSCM arises. External GSCM (GSCM) practices refer to practices that involve collaboration with external stakeholders or partners, such as suppliers and customers (Zhu et al., 2013). The supply chain encompasses the various activities involved in the production and distribution of goods or services, from the initial sourcing of materials to the delivery of the final product to the end consumer. This involves the integration of both internal and external activities within the organization. In the same vein, GSCM can be considered from various angles, encompassing both the internal and external dimensions of the organization (Zhu et al., 2012).

The adoption of GSCM requires the involvement of multiple parties within the system. This is especially true for external GSCM activities such as specifying environmental requirements in design for suppliers, auditing suppliers' environmental management systems, collaborating with customers on eco-design, and managing product returns from customers (Sarkis et al., 2011). External GSCM practices involve operational collaborations between suppliers and customers (Zhu et al., 2012). To effectively implement GSCM and align it with corporate strategy, certain key factors must be present, including strong leadership, a supportive organizational culture,

collaboration with supply chain partners (such as suppliers, transporters, and customers), and adherence to relevant regulatory requirements (Dubey et al., 2017). The extent of integration plays a crucial role in determining the environmental performance since a higher level of supply chain integration leads to improved environmental performance (Vachon & Klassen, 2006). Zhu and Sarkis (2004) and Zhu et al. (2005) categorized the implementation of GSCM practices into two groups: internal and external. Internal GSCM practices include internal environmental management and eco-design, while external GSCM practices include green purchasing, customer cooperation, and investment recovery. Numerous companies acknowledge that developing partnerships with their stakeholders is one of the most efficient and economical approaches to addressing environmental issues and achieving environmental objectives as a part of GSCM practises (Dechant & Altman, 1994).

Green procurement refers to the integration of environmental considerations into the procurement process, including the sourcing of environmentally friendly materials, reducing waste generation, minimizing the use of hazardous materials, and other related initiatives that aim to reduce the environmental impact of the procurement process. Achieving GSCM requires the involvement and support of suppliers. In other words, collaboration with suppliers is key for successful GSCM (Dubey et al., 2013; Baines et al., 2012). Some companies use questionnaires or conduct visits to assess their suppliers' environmental performance. Others take a partnering and mentoring approach, which includes site visits, exchange of personnel, technical assistance etc. (Noci, 1997; Geffen & Rothenberg, 2000; Zsidisin & Siferd, 2001). Effective inter-organizational relationships are often crucial for managing internal and external coordination in GSCM and achieving performance outcomes. Partner coordination and resource sharing can be particularly beneficial for environmental and productivity improvements (Sarkis et al., 2011). Green purchasing, one of the external Green Supply Chain practises, aims to promote sustainable procurement practices that focus on the environment. Its main objective is to facilitate recycling, reuse, and resource reduction by purchasing products made from recycled materials, products that are easily recyclable, and products that are durable and have a long lifespan. By doing so, it minimizes waste generation and conserves natural resources, helping to achieve a sustainable future. Green purchasing and collaboration with suppliers can enhance

environmental performance in various ways, such as procuring packaging materials that are easily recyclable or reusable. Involving suppliers to product design phase and encourage them to propose alternative sources of materials in order to reduce population and waste is one key indicators of environmental performance of the companies (Carter & Carter, 1998). Purchasing and supplier relations, as an intermediary unit, typically has a significant role in disseminating green ideas and initiatives to other firms (Green et al., 1996). Krause et al. (2009) suggest that the environmental sustainability of a firm is limited by the sustainability of its suppliers.

Research has indicated that internal GSCM practices tend to be more commonly adopted than external GSCM practices, as the former is considered to be relatively simpler to implement. However proper internal cooperation is essential for external cooperation among organizations to be successful and provide significant performance improvements (Laari et al., 2018).

1.2.4. Investment Recovery

Investment recovery is a conventional business process that involves selling excess inventories or materials, as well as scrap or used materials. Investment recovery comprises sustainable practices that aim to recover value from resources that were previously considered as waste (Çankaya & Sezen, 2019). The aim of investment recovery is to obtain the maximum possible value from products that have reached the end of their useful life, as well as from surplus items (Ayres et al., 1997). Chan et al. (2012) defines investment recovery as concept which involves a company's strategic approach to maximize the value it can derive from its materials and products through techniques such as recycling, redeployment, and reselling. Investment recovery, while considered as a traditional business practice, can also contribute to green initiatives by reducing waste that may have otherwise been discarded. Although it may not be the most sustainable practice, it can extend the life of a product or material, which can be repurposed or recycled into other products or materials (Zhu & Sarkis, 2004). In addition, investment recovery is considered as a means of preventing pollution. This involves the recycling and selling of excess inventory, used materials, and scraps. Moreover, investment recovery is a specific example of GSCM practices that requires

cooperation among all members of the supply chain. The successful implementation of investment recovery requires collaboration and coordination among all members of the supply chain, emphasizing the need for a holistic approach to environmental management (Sarkis et al., 2011).

Investment recovery refers to a company's ability to derive economic benefits from its environmental actions, resulting in increased income or cost reduction. Effective investment recovery often requires the use of reverse logistics, which involves bringing products back into the supply chain for reuse, ultimately leading to cost reduction (Corbett & Klassen, 2006). Companies consider unnecessary inventories and materials as part of their operating cost and inventory management cost (Rogers & Tibben-Lembke, 2001), in addition to that selling them could also assist the company in freeing up storage and warehousing space (Lun, 2011). Investment recovery is usually carried out at the end of the supply chain cycle or as a way to "close the loop." Zhu et al. (2008).

1.2.5. Eco Design

Life cycle assessment is a one of the methods which support engineers designing products that have minimal environmental impact throughout their usable life and after they are discarded. It could be achieved by designing according to needs of reuse, recycle processes and/or decreasing hazardous materials consumed in order to produce to product as well as decreasing the energy necessity for the production process. This multidisciplinary field involves engineering, product design, and resource depletion considerations, and has been studied by researchers such as Rebitzer et al. (2004) and Pennington et al. (2004). Such practices and processes aimed at producing desired products while minimizing the emissions of hazardous substances that can be harmful to human health and the environment, all without compromising the quality of the product in an economically feasible way (Gunasekaran & Spalanzani, 2012). Dambach and Allenby (1995) worked on sustainable and green product and process design, referred the efforts as ‘Design For Environment (DFE)’. The terminal disposal of a product largely depends on the decisions made during its earlier design stages. The product's design plays a significant role in determining how much of it can

be repurposed, remanufactured, recycled, incinerated, or discarded (Linton et al., 2007). Waste management practices can range from basic steps like sorting waste streams and recycling to more elaborate measures like forming strategic partnerships, product design or relocating manufacturing facilities (Sroufe, 2009). The emphasis on supply chains represents a significant move towards greater implementation and advancement of sustainability practices. This is because the supply chain encompasses the entire product journey, from the initial processing of raw materials to the delivery of the finished product to the customer. his includes integrating issues and flows related to product design, by-products generated during manufacturing, by-products produced during product usage, extending the product life cycle, managing product end-of-life, and implementing recovery processes at end-of-life (Linton et al., 2007).

Closed-loop supply chain management has become increasingly significant in response to legislative requirements for producer responsibility, which compel companies to retrieve products from customers and organize appropriate recovery and disposal methods. Such legislation has been driven by heightened environmental awareness. Nevertheless, forward-thinking businesses have recognized that returned products frequently contain valuable materials that can be recovered and has to be planned from product design phase. As a result, they are implementing closed-loop supply chain management as a lucrative business strategy (Flapper et al., 2005:1). The distribution of limited resources among environmental practices that are in competition usually tends to focus on either waste or design initiatives (Sroufe, 2009). The importance of recovery of material has been rapidly increasing, and many research papers have been published on the design aspects of product recovery networks (Jayaraman et al., 2003 ; Flapper et al., 2005; Kroon & Vrijens, 1995). To ensure sustainable practices in supply chains, it is important to consider the entire life cycle of a product, including the by-products generated throughout the supply chain. Optimizing a product requires looking beyond just current costs and taking into account the overall costs, such as resource depletion and the generation of pollutants and waste that are not reused (Linton et al., 2007). During various phases of the production process, there are several by-products that are produced. A significant number of these by-products are recuperated, which helps to minimize the requirement for new materials (Flapper et al., 2005: p.22).

1.3. GREEN SUPPLY CHAIN PRACTISES IN TURKEY

Eventhough there are relatively limited efforts on green supply chain practices in Turkey, the significance of the subject for the future of the world and its positive contributions to company performance indicate the need for increased focus on this topic. Therefore, it is crucial to determine the extent of green supply chain practices implemented by companies, in order to accelerate efforts in this area. Accordingly, the objective of this study is to assess the implementation level of green supply chain practices among supply chain members through a field study (Atrek & Özdağoğlu, 2014). Through this study conducted by Atrek and Özdağoğlu (2014) in the supply chain of a door handle manufacturing company, the concept of green supply chain was examined under four main categories: green procurement, green manufacturing, green distribution/packaging, and reverse logistics. The findings regarding green procurement indicate a higher level of environmental awareness, particularly in the stages of aluminum production and door handle manufacturing within the supply chain. However, the absence of a shared goal with suppliers to minimize environmental damage and the lack of a mechanism to control the potential negative impacts on the environment by suppliers indicate that green procurement practices are not widely implemented in the industry. While some green manufacturing practices were observed in aluminum recycling and door handle production processes, it is noted that these practices are driven by legal obligations. There was no evidence of collective efforts for environmentally friendly product design throughout the entire supply chain. The findings related to green distribution/packaging reveal the absence of any green practices in this area.

In their research Büyüközkan and Çifçi (2012) evaluated GSCM initiatives of a company within Automotive Industry in Turkey. In the study researchers respond the need of strategic analysis model for supporting management of the company when they make decisions on their further green supply chain practises. Researchers evaluated the models by Fuzzy ANP method. A review of relevant literature was conducted to develop an evaluation model, which was subsequently fine-tuned with input from industrial experts. The resulting model was then put into practice at relevant company. Andıç et al. (2012) conducted a focus group study in electronic component

manufacturing companies located in Atatürk Organized Industrial Zone and Ulucak Industrial Zone in Izmir, Turkey. The focus group study examined the level of waste management system implementation and environmental awareness within the supply chain of these companies. The identified keywords from the interviews were recorded and grouped under main headings. The main headings included the advantages of being green, barriers to becoming green, and factors leading to the transition to waste and green management. The results of the focus group study revealed that businesses considered waste management as a good starting point for the green supply chain process and emphasized the importance of integration in the green supply chain. In a study conducted by Altuntaş and Türker (2012) in Turkey, they analyzed the sustainability reports of 10 manufacturing companies operating in Turkey from the perspective of supply chain practices. Their findings revealed that the concept of sustainable supply chain is still in its early stages in Turkey, as it has not been clearly systematized despite addressing the environmental and social dimensions of sustainability. At the study conducted by Demirel and Yilmaz (2019) aim is to assess the extent of green supply chain activities and evaluate the effectiveness of the current initiatives undertaken by the chosen firms. The study's sample was determined based on the response status of companies in the "industry" category of BIST 100 (Borsa Istanbul 100) to the The Carbon Disclosure Project (CDP) Climate Change survey in 2017, which is considered an indicator of their environmental consciousness. The sustainability/activity reports of these firms were subjected to content analysis, focusing on the aspects and practices of GSCM. The findings indicate that the most frequently mentioned activities in Green Manufacturing among the sample firms in Turkey are efficient utilization of natural resources, utilization of renewable energy resources, improving energy efficiency, and waste reduction. The firms claim to implement environmental compliance monitoring and auditing, and express managerial commitment to sustainability as a corporate culture. They also emphasize the importance of setting environmental objectives and regularly monitoring environmental performance. However, the study highlights the lack of employee incentive programs for environmental suggestions.

1.4. GREEN SUPPLY CHAIN PRACTISES IN THE WORLD

While the impact of green supply chain on a firm's profitability and even its competitive advantage in the market is acknowledged (Zhu & Sarkis, 2004:Rao & Holt, 2005), it has been found that publicly announcing a firm's initiation of investments in GSCM has an effect on stock prices (Bose & Pal, 2012).

As the largest and fastest-growing economy in the world, China bears a high ecological cost and has been identified as a country with the highest emissions of ozone-depleting substances and the second-highest greenhouse gas emissions. Due to these factors, GSCM initiatives hold significant importance in China. Consequently, green supply chain practices are frequently observed and studied in China (Chan et al., 2012). It is also stated that these green supply chain activities and collaboration with customers positively influence company performance (Chan et al., 2012).

Zhu, Sarkis, and Lai (2008) conducted a survey with a total of 314 firms operating in various sectors such as automotive, electronics, chemicals, energy, and textiles revealed that organizational learning and top management support influence green supply chain practices within Chinese manufacturers. Two measurement models for the implementation of GSCM practices were subjected to confirmatory factor analysis and compared. The results confirmed the validity and reliability of both models for GSCM implementation. This empirical study aims to assess the construct of GSCM practices implementation and provide managers with a validated measurement scale to evaluate the strengths and weaknesses of their organizations in various aspects of implementing GSCM practices. Shen et al. (2013) utilized the Fuzzy TOPSIS method for the evaluation and selection of green suppliers. In this regard, they conducted assessments based on criteria such as wastewater, pollutant emissions, resource consumption, eco-design, environmental management system, management participation in green supply chain activities, eco-friendly technology usage, eco-friendly material usage, and staff training to enhance environmental awareness. Three department managers in an automotive manufacturing company, serving as decision-makers, evaluated three alternative green suppliers.

Hoejmose et al. (2012) studied two relatively unknown aspect of GSCM. Firstly engagement levels of Business to Business and Business to Consumer

industries. Secondly, they studied prerequisites for the effective adoption of environmentally-friendly and GSCM practices in B2B supply chains. Study address this topics with their research of 340 buyer-supplier relationships in the United Kingdom. It utilizes a novel research methodology to capture firms' involvement in GSCM practices and mitigate social desirability and common source biases. The findings indicate that GSCM implementation is relatively less prevalent among firms operating in B2B markets compared to those in B2C markets. Additionally, the study demonstrates that establishing trust with supply chain partners and receiving top management support significantly influence engagement with GSCM practices for firms in the B2B sector, whereas these factors are relatively less critical for firms in the B2C sector.

In the research from Bhateja et al. (2012) 145 survey respondents collected across Indian Manufacturing sectors which presented diverse industry sectors including Micro, Small, and Medium & Large Enterprises. The findings of the survey indicate that companies in India perceive GSCM as a competitive advantage and are highly aware of it. The study also found that companies are more likely to adopt GSCM practices when there is a direct correlation to efficiency and cost savings. Conversely, when there is no immediate cost or efficiency benefit, adoption rates are lower. Overall, the results suggest that having a green supply chain is increasingly becoming a top priority in the market.

CHAPTER TWO
JOB ATTITUDES AND JOB SATISFACTION THEORIES

2.1. VALUES

The way individuals perceive and feel about their work, jobs, and organizations significantly affects their work experience. Certain perceptions and emotions are primary and comprehensive, focusing not just on specific aspects of a job or organization but rather on the essence and significance of work or also called meaningfulness of work and nature of work itself. These perceptions and emotions are referred to as values, which are relatively enduring longer than the attitudes (George & Jones, 2012: p.66). Values serve as the basis for comprehending attitudes and motivation, and they have a significant impact on shaping our perceptions. According to the definition provided by Maio et al. (2006) values are fundamental beliefs that indicate that a particular way of behavior or a specific outcome of existence is more desirable and favorable for an individual or society compared to an opposing or contrary way of behavior or outcome. Values possess an evaluative component as they convey a person's beliefs about what is ethical, right, beneficial or appealing (Robbins & Judge, 2016: p.189).

The concept of person-organization fit suggests that individuals are drawn to and recruited by companies that align with their values, and they tend to leave organizations that do not correspond with their personalities (Arthur et al., 2006). Studies investigating person-organization fit have explored whether an individual's values align with the culture of their organization. When there is alignment between the two, it tends to result in job satisfaction, organizational commitment, and reduced turnover (Verquer et al., 2003).

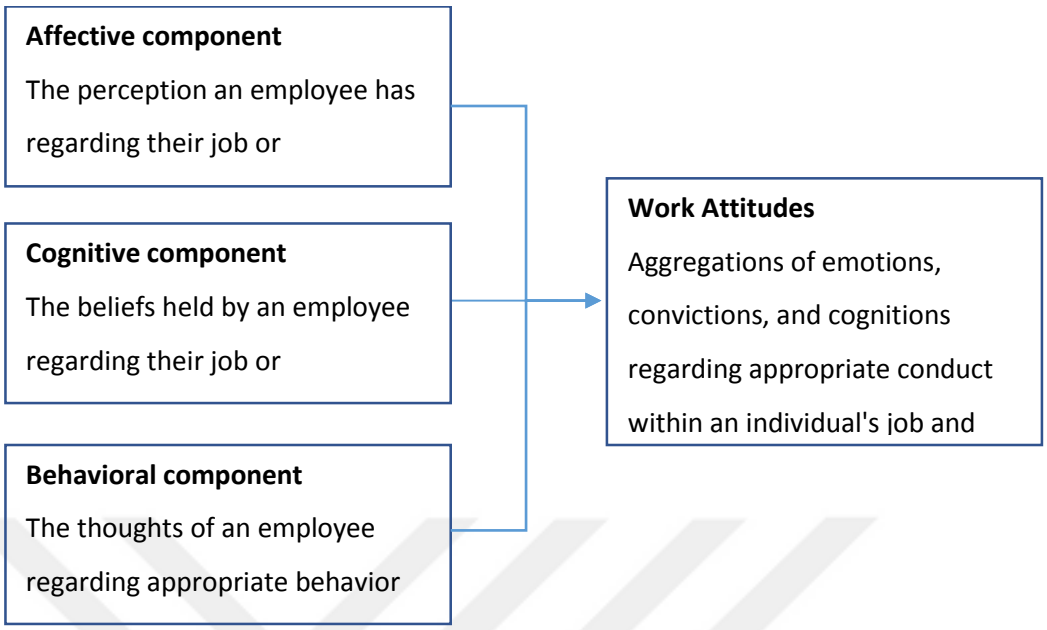
2.2. JOB ATTITUDES

2.2.1. Definition of Job Attitudes

Robbins and Judge (2016: p.113) define attitudes as expressive statements that people use to communicate their feelings with others about something. Even though people may describe their feelings with a single word, there are underlying complex reasons and components to create those evaluations. George and Jones (2012: p.71) define work attitude as collections of beliefs, thoughts, and feelings that they are currently holding about their jobs and organizations which is reasoning their behaviours. Work attitudes are more specific than values and less enduring than values because people's experiences with their jobs may change over time. According to Eagley and Chaiken (1993), an attitude is characterized as a psychological inclination that involves assessing a specific entity with a certain degree of approval or disapproval.

To fully understand the complicated concept of the attitudes, we must consider the underlying properties or components (Robbins & Judge, 2016: p.113). Usually researchers divide attitudes to three parts: cognition, effect, and behaviour (Barsky et al., 2011; Tejada et al., 2011). The cognitive aspect of an attitude pertains to one's beliefs or descriptions of a situation, such as the phrase "My salary is insufficient". This component serves as a precursor to the affective aspect, which encompasses the emotional or feeling dimension of an attitude. The affective component can be exemplified by the statement "I feel frustrated about my pay". Such emotions may prompt certain actions, which are outlined in the behavioral component of an attitude. This component concerns the individual's intentions to behave in a particular manner towards a person or thing, such as "I intend to seek better-paying job opportunities" (Robbins & Judge, 2016: p.113). Relationship between affective component, cognitive component, behavioral component and work attitudes has given at Figure 1.

Figure 1: Components of Work Attitudes



Source: George and Jones, 2012: p.71

Work attitudes can be defined as an individual's favourable or unfavourable emotional states or attitudes directed towards an object, such as their job or the organization they work for (Brief & Weiss, 2002: p:3). These attitudes include beliefs, values, and emotions that shape an individual's behaviour that they show in the workplace (Judge & Bono, 2001). Common work attitudes can be listed as; job satisfaction, organizational commitment, and employee engagement, among others (Saks, 2006). Job satisfaction is a positive feeling that arises from an individual's evaluation of their job or work experiences (Locke, 1976, p:1300). While organizational commitment refers to "the extent to which an employee identifies with an organization and its goals and wishes to maintain membership in the organization" (Mowday, Steers, & Porter, 1979: p.226). In summary, work attitudes are an individual's feelings, beliefs, and values related to their job and work environment, and they may have a significant impact on employees' behaviour and job performance. Understanding and managing the work attitudes can help organizations create a positive work environment and promote employee satisfaction, retention, and productivity (Judge et al., 2001; Meyer & Allen, 1991; Saks, 2006). Therefore work

attitudes were a popular research topic and took attention from practitioners for a long time.

2.2.2. Job Satisfaction

George and Jones (2012: p.75) define the job satisfaction as current emotions and convictions that individuals hold regarding their present jobs and it can vary in a wide range among individuals from high level of satisfaction or high level of dissatisfaction. Job satisfaction also defined as an individual's overall positive or negative feelings about their job or job experiences (Locke, 1976). It can be influenced by various factors such as job conditions, relationships with co-workers, compensation, and opportunities for growth and development (Brief & Weiss, 2002). According to Judge et al. (2001) job satisfaction is positively related to job performance and organizational citizenship behaviour, and negatively related to absenteeism and turnover. The satisfaction of employees can lead to increased confidence, loyalty, and ultimately higher quality output from the workforce (Tietjen & Myers, 1998).

In general, employees are most satisfied with jobs that offer stimulating work, training opportunities, autonomy, and a sense of control. Additionally, social support, interaction with colleagues outside of work, interdependence, and feedback are factors that are closely linked to job satisfaction, even when considering the job's inherent characteristics (Humphrey et al., 2007). Job factors, particularly the inherent nature of the work, social interactions, and supervision, have a significant influence on job satisfaction. While each factor carries weight and their importance may vary for individual employees, the intrinsic nature of the work remains the most critical determinant of job satisfaction (Calvo-Salguero et al., 2011). There are two common approaches for measuring job satisfaction. The first is the single global rating, which involves asking respondents to rate their overall job satisfaction on a scale of 1 to 5, based on a single question such as "How satisfied are you with your job overall?" This rating ranges from "highly satisfied" to "highly dissatisfied." The second method, known as the summation of job facets, is more complex. It involves identifying key components of a job, such as the nature of the work, required skills, supervision,

current pay, potential for advancement, workplace culture, and relationships with coworkers. Participants then rate each of these facets on a standardised scale, and researchers add up the ratings to determine an overall job satisfaction score (Robbins & Judge, 2016: p.119). Researchers declare both approaches can be equally helpful to measure job satisfaction and one is not superior to the other (Dolbier et al., 2005).

2.2.2.1. Approaches and Models of Job Satisfaction

According to Robbins and Judge (2016: p.121) following characteristics of the job expected to affect the job satisfaction level that a person experiences ; ‘'Job Conditions’’, ‘’Personality’’, ‘’Pay’’, ‘’Corporate Social Responsibility’’’. Among the various theories proposed to explain job satisfaction, it appears that three have received the greatest amount of research validation. These are Locke's value-percept theory, the job characteristics model, and the dispositional approach (Judge & Klinger, 2008: p.403). Numerous theories have been suggested regarding the factors that contribute to job satisfaction. These can broadly be categorized into situational theories, which propose that job satisfaction is influenced by the nature of the job or other environmental factors; dispositional approaches, which assert that job satisfaction is inherent to an individual's personality traits; and interactive theories, which suggest that job satisfaction is the result of the interplay between an individual's personality and the work environment (Judge et al., 2012). These diverse theoretical perspectives on job satisfaction work together harmoniously, offering valuable insights into the different facets of job satisfaction and emphasizing the factors and considerations that managers should take into account to improve the satisfaction levels of their employees (George & Jones, 2012: p.79).

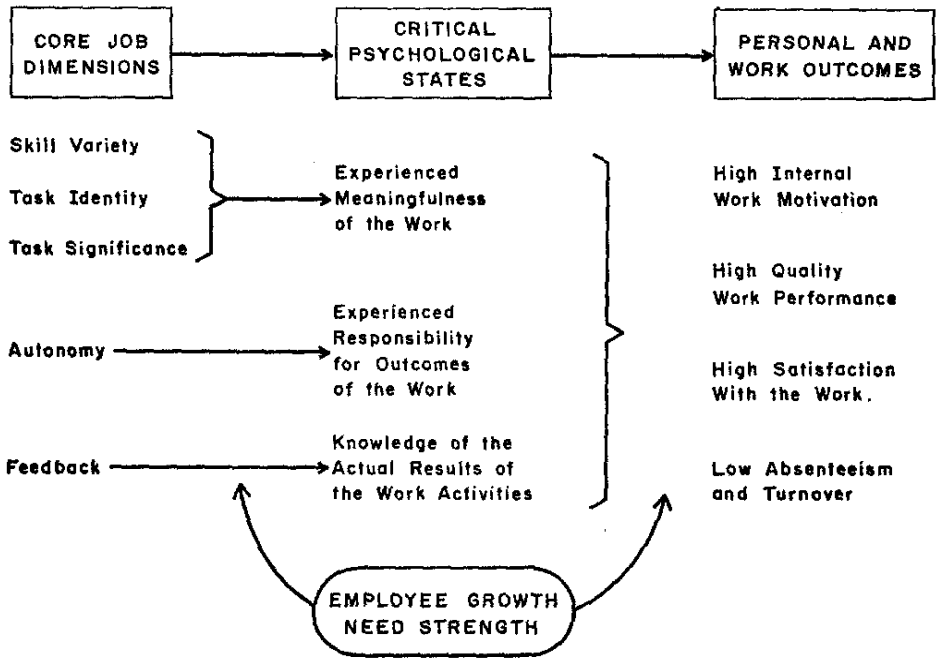
2.1.2.1.1. Job Charachteristics Theory

Job Characteristics Theory, developed by Hackman and Oldham in 1976, suggests that job characteristics such as skill variety, task identity, task significance, autonomy, and feedback can lead to increased meaningfulness of work and job satisfaction. According to this theory, three critical psychological states that must be

present for job characteristics to lead to positive outcomes: meaningfulness of work, responsibility for outcomes, and knowledge of results. Positive outcomes may include job satisfaction, increased job performance, employee engagement and organizational commitment. The job characteristics theory presented a framework consisting of five fundamental job characteristics (skill variety, task identity, task significance, autonomy, and feedback) that influence various work-related outcomes (motivation, satisfaction, performance, absenteeism, and turnover) through three psychological states (experienced meaningfulness, experienced responsibility, and knowledge of results) (Hackman & Oldham, 1975). Figure 2 illustrates the fundamental job characteristics model from Hackman and Oldham (1976), which proposes that five essential job dimensions stimulate three psychological states, ultimately resulting in various advantageous personal and work-related consequences. The associations between the job dimensions and the psychological states, as well as between the psychological states and the outcomes, are influenced by an individual's growth need strength (Hackman & Oldham, 1976). Empirical studies has shown that there is a positive relationship between meaningfulness of work and job satisfaction. There is substantial evidence that supports the notion presented in the Job Characteristics Model, that the existence of these job characteristics leads to greater job satisfaction and commitment to the organization by increasing motivation (Humphrey et al., 2007). For example, a study by Grant, Christianson, and Price (2007) found that employees who perceived their work as meaningful reported higher levels of job satisfaction, as well as lower levels of burnout and turnover intentions. Similarly, a meta-analysis by Tims, Bakker, and Derks (2013) found that meaningful work was positively related to job satisfaction, organizational commitment, and work engagement. Studies suggest that corporate-supported volunteer programs have a positive impact on the dimensions of meaningfulness and task significance within the Job Characteristics Model, which in turn serve as motivating factors for employees to engage in volunteering activities. The Job Characteristic Model suggests that individuals experience internal rewards when they receive feedback (knowledge of results in the model) indicating that they have performed well (experienced responsibility) on a task that they find meaningful (experienced meaningfulness) (Smith & Hitt, 2007; Gibson et al., 2011).

Studies suggest that corporate-supported volunteer programs have a positive impact on the dimensions of meaningfulness and task significance within the Job Characteristics Model, which in turn serve as motivating factors for employees to engage in volunteering activities (Pajo & Lee, 2011).

Figure 2: Job Charachteristics Model



Source: Hackman and Oldham,1976:255

2.1.2.1.2. The Facet Model of Job Satisfaction

The facet model of job satisfaction primarily centers on factors within the work situation. It achieves this by deconstructing a job into its constituent elements, or job facets, and examining the level of employee satisfaction with each specific facet. In this mode, the aggregate level of an employee's job satisfaction is derived by combining their satisfaction with each individual facet of the job. One important aspect to consider when utilizing facet models of job satisfaction is the varying levels of importance that different job facets may hold for each individual employee. Table 3 provides a comprehensive list of the job facets that have been examined and defined by researchers (George & Jones, 2012: p:80). Locke's (1969) theory suggests that facet descriptions and facet importance work together to influence facet satisfaction.

Specifically, the personal significance placed on a particular facet act as a weighting factor, influencing the strength of the relationship between facet descriptions and facet satisfaction. For instance, the connection between the perceived amount of promotion opportunity and satisfaction with promotion opportunity is influenced by the level of importance assigned to promotion opportunity. Using the sum of facet satisfactions as the measure of overall job satisfaction is considered appropriate when assuming the satisfaction questionnaire adequately captures all relevant aspects. Nonetheless, when additional variables that contribute to overall job satisfaction are not accounted for in the questionnaire, there may be concerns about the reliability of using the facet sum as the sole measure of overall satisfaction (Scarpello & Campbell, 1983).

Table 3: Job Facets and Descriptions

Job Facet	**Description**
Ability utilization	The degree to which an individual can utilize their abilities in their job.
Achievement	The level of fulfillment an employee experiences from their job, based on the sense of achievement they derive from it.
Activity	The ability to stay engaged and occupied with tasks and responsibilities while working.
Advancement	Having promotion opportunities
Authority	Having the ability to direct and influence the actions and decisions of others.
Company policies and practices	The degree to which an employee finds job-related aspects pleasing or enjoyable.
Compensation	The payment or salary an employee receives for their job.
Coworkers	The level of interpersonal relationships and the ability to work harmoniously with colleagues in the workplace.
Creativity	The level of freedom to generate innovative ideas and contribute to the job.
Independence	The opportunity to work independently and without constant supervision.

Moral values	Being able to align one's actions and decisions at work with personal values and principles.
Social service	Having the opportunity to contribute and provide assistance to others.
Social status	The level of acknowledgment and esteem received from the broader community in relation to the job
Human relations supervision	The ability of management' to effectively interact and communicate with others.
Technical supervision	The proficiency of one's supervisior's in job-specific skills and competencies.
Variety	Engaging in diverse tasks and activities within the job.
Working conditions	Factors such as working hours, temperature, furnishings, office location, and layout.
Recognition	Receiving recognition or praise for doing a good job.
Security	Having job security or a stable employment situation.
Responsibility	Taking responsibility for one's decisions and actions.

Source: Adapted from D. J. Weiss et al., Manual for the Minnesota Satisfaction Questionnaire, 1967

2.1.2.1.3. Herzberg's Motivator-Hygiene Theory of Job Satisfaction

Frederick Herzberg's motivator-hygiene theory, which is one of the earliest theories of job satisfaction, examines the impact of specific job facets on job satisfaction. According to Herzberg's theory, employees have two distinct sets of needs or requirements: motivator needs and hygiene needs (Herzberg, 1966). Motivator needs pertain to the intrinsic aspects of the job, such as its level of challenge and the nature of the work itself. Job facets like the level of task interest, autonomy in decision-making, and the degree of responsibility fulfilled contribute to satisfying motivator needs. On the other hand, hygiene needs are related to the external factors and conditions surrounding the job. Job facets such as the physical work environment (e.g.,

temperature, comfort), the quality of supervision, compensation, and job security play a role in satisfying hygiene needs. Herzberg presented a theoretical framework that outlines the relationship between motivator needs, hygiene needs, and job satisfaction. According to his theory, if the motivator needs are fulfilled, employees will experience satisfaction, whereas unmet motivator needs lead to dissatisfaction. Similarly, when hygiene needs are fulfilled, employees will not experience dissatisfaction, whereas unmet hygiene needs result in dissatisfaction. Accordingly dissatisfaction and satisfaction are distinct dimensions that exist independently. One dimension spans from satisfaction to no satisfaction, while the other dimension spans from dissatisfaction to no dissatisfaction (George & Jones, 2012: p:81). According to the theory, the presence of motivators such as recognition, meaningful work, career advancement, responsibility, and achievement contributes to job satisfaction, while their absence results in a lack of job satisfaction. However, their absence does not directly cause job dissatisfaction. On the other hand, the absence of hygiene factors such as working conditions, compensation, interpersonal relationships, job security, company policies, and administration leads to job dissatisfaction, but it does not impact job satisfaction (Malik & Naeem, 2013).

Herzberg's motivator-hygiene theory sparked significant interest among researchers and motivated them to further explore the topic of job satisfaction Porter et al.,2003). However, there is a lack consistency in the literature in terms of support. Despite researchers employing various methods to test Herzberg's theory, the theory did not receive sufficient support (King, 1970).

2.1.2.1.4. The Discrepancy Model of Job Satisfaction

The discrepancy model of job satisfaction operates on a fundamental principle: employees assess their job satisfaction by comparing their current job to an ideal job according to their current perspective (McFarlin & Rice, 1992). The discrepancy model of job satisfaction suggests that if employees have high expectations for their ideal job and those expectations are not fulfilled, they will experience dissatisfaction. This is especially true for new college graduates who often have excessively high expectations for their initial employment. As per the discrepancy models of job

satisfaction, it is inevitable for them to encounter certain levels of job dissatisfaction when their new positions do not live up to their elevated aspirations (George & Jones, 2012:82).

2.1.2.1.5. Job Satisfaction and CSR (Corporate Social Responsibility) & Meaningfulness of Work

The level of commitment an organization demonstrates towards corporate social responsibility (CSR) has an increasingly significant impact on employee job satisfaction. CSR refers to an organization's voluntary efforts to benefit society or the environment beyond the legal requirements. This can include various initiatives, such as environmental sustainability, philanthropic endeavours, and non-profit work. The relationship between CSR and job satisfaction is found particularly strong for Millennials and when effectively managed, CSR initiatives can substantially enhance employee job satisfaction. It benefits both the environment and individuals. Employees who align their personal values with the organization's CSR mission often experience even higher levels of satisfaction (Robbins & Judge, 2016: p:123) The decisions made by top management instinctively affect corporate employees. If the decision aims to introduce innovative changes to the corporate culture, employees tend to react positively and their perception of the job gets improved. Many previous studies have discussed the idea that corporate social responsibility can lead to an increase in employees' job satisfaction and positive attitude towards the company (McGuire et al., 1988;Valentine & Fleischman, 2007). It is also widely accepted that individuals who perceive their work as serving a greater purpose tend to experience elevated levels of job satisfaction (Feintzeig, 2015). Nonetheless, for long-term benefits in terms of job satisfaction, an organization's corporate social responsibility (CSR) endeavors must be effectively managed and its initiatives must be viable and enduring (Filatotchev & Nakajima, 2014). Research has consistently shown that CSR has a positive correlation with various aspects of employee dynamics. It has been associated with improved employee relationships (Agle et al., 1999: Glavas & Piderit, 2009), enhanced employee performance (Jones, 2010), increased commitment (Maignan et al., 1999) and engagement (Glavas & Piderit, 2009), greater attractiveness to potential

employees (Greening & Turban, 2000;Turban & Greening, 1997), heightened organizational identification (Carmeli et al., 2007), fostering organizational citizenship behaviors (Lin et al., 2010; De Luque et al., 2008), and promoting creative involvement (Glavas & Piderit, 2009). Overall, CSR represents a necessary and beneficial trend of accountability and service. When effectively managed, it can greatly contribute to enhancing employee job satisfaction (Robbins & Judge, 2016:124).

The examination of GSCM antecedents and outcomes through the lens of CSR offers valuable insights for companies seeking to adopt and implement GSCM practices. By considering CSR as a driving force, firms can enhance their adoption of GSCM and effectively improve overall performance (Wang et al., 2020). CSR can encourage firms to prioritize addressing social issues, safeguarding the environment, and enhancing social welfare, thereby influencing changes in business management practices (Chernev & Blair, 2015). Hence, companies embracing CSR can transfer their operational and managerial models, promoting the greening of their supply chain management practices (Babiak & Trendafilova, 2011). Therefore, it is important to give greater consideration to the correlation between CSR, GSCM, and company performance (Wang et al., 2020). The practical implication of Wang et al. (2020) study' suggests that companies should actively engage in fulfilling CSR responsibilities. Embracing CSR practices has a positive impact on enhancing social and environmental benefits, and it supports the successful implementation of GSCM (Wang et al., 2020).

Babiak and Trendafilova (2011) categorized sustainable practices within the framework of corporate social responsibility (CSR) and investigate the underlying factors that drive environmental behavior. The disputation is that environmentally responsible business practices fall within the scope of CSR as they are frequently motivated by factors other than monetary gains (although they can lead to financial benefits), are not always mandated by regulations, and contribute to the welfare of society (Montiel,2008). Huang et al. (2021) also suggests that incorporating sustainability practices into the supply chain requires adopting a comprehensive approach that encompasses the entire manufacturing process. This approach takes into

account both internal corporate social responsibility (CSR) considerations and the expectations of external stakeholders (Huang et al., 2021).

The role of the natural environment as a fundamental component of CSR is gaining prominence and lately the environment has emerged as a key focal point in assessing the market's perception and approach towards CSR. (Babiak & Trendafilova, 2011: Bird et al., 2007: Wahba, 2008). There is a growing convergence in research within the management literature on CSR and environmental sustainability, driven by shared concerns related to the environment, economy, and society. Findings from the survey revealed that 43% of executives identified the perception of being a 'good citizen' as a significant motivating factor for organizations to address environmental issues, while 39% acknowledged that environmental responsibility had become a societal norm (Babiak & Trendafilova, 2011). Likewise, studies conducted by Welford et al. (2008) and Kassinis and Vafeas (2006) highlighted the environment as the primary concern among stakeholders in relation to a company's CSR initiatives.

Various terminologies have been employed to describe the activities related to business and the natural environment, such as total environmental quality management, ecological responsibility, corporate greening, or corporate environmental responsiveness. However, all of these terminologies are based on the singular perspective of Corporate Sustainability. Some scholars recognize that Corporate Sustainability (CS) and Corporate Social Responsibility (CSR) can be seen as interchangeable concepts, with CS being considered as one way to conceptualize CSR, or vice versa (Montiel, 2008). In broad terms, corporate social responsibility primarily encompasses responsibilities related to the environment and social welfare (J. Huang et al., 2021). As consumer social awareness continues to rise, enterprises are compelled to proactively develop and implement CSR initiatives within their supply chain systems in order to gain sustainable competitive advantages (Golden et al., 2011). Furthermore, enterprises should not solely focus on their own profitability in their production and operations, but also take responsibility for contributing to the environment, consumers, and society. Scholars across different disciplines are currently incorporating CSR into supply chain management and decision-making processes (Huang et al., 2021).

2.1.2.1.6. Job Satisfaction and Employee Performance

Individuals who experience greater job satisfaction tend to perform better, and organizations with a higher level of employee satisfaction tend to be more effective than those with lower levels. While some researchers previously dismissed the relationship between job satisfaction and job performance as a myth, a review of 300 studies indicated that the correlation between the two is, in fact, robust. (Judge et al., 2001;Robbins & Judge, 2016:124). Judge et al. (2001) concluded in their meta-analysis that job satisfaction and job performance is related to each other (Judge et al., 2001).

2.2.3. Meaningfulness of Work

While the concept of the "meaning of work" pertains to various types or sources that individuals attribute as meaningful, the "meaningfulness of work" refers to the level of significance generated by mechanisms and processes associated with one's perception of work's meaningfulness (Steger, 2016). Experienced meaningfulness of work refers to the extent to which employees perceive their jobs as significant, valuable, and purposeful (George & Jones, 2012:192). Hackman (1980) proposed that people experience three different psychological states, which are meaningfulness, safety, and availability, that builds the shape of their behaviour at work and their attitude towards work. This proposal also highlight how essential is the concept of meaningfulness for employees and in what degree it can affect the work outcomes. Based on study of Kahn (1990) it is claimed that the attributes of a job might impact the degree of meaningfulness of an employee's perception of their work. This is statement also linking with Job Characteristics Model (Hackman, 1980). Meaningfulness of work is studied in the context of employee engagement as well and employee engagement has generated considerable attention and engagement within the field of organizational behavior since its introduction (Kahn, 1990). According to previous research, experiencing meaningfulness in their work has been found to improve organizational performance, enhance emotional commitment, and increase employee engagement (Asik-Dizdar & Esen, 2016; Rosso et al., 2010). The impact of

the meaning of work has been evidenced in significant outcomes in organizational research, such as employee engagement (May et al., 2004), job satisfaction (Wrzesniewski et al., 1997), and individual performance (Hackman & Oldham, 1980). Indeed, the meaning of work has been shown to influence some of the most important outcomes in organizational studies, engagement (May, Gilson, & Harter, 2004), job satisfaction (Wrzesniewski,2003) and individual performance (Hackman & Oldham, 1980; Wrzesniewski, 2003). A lack of meaning in work is frequently linked to feelings of apathy and detachment towards one's tasks (Thomas & Velthouse, 1990). A significant portion of recent literature on empowerment and employee involvement centers around the provision of meaningful work to employees in order to enhance their motivation and foster personal development (Spreitzer et al., 1997).

The experience of meaningfulness associated with work has been linked to positive work-related outcomes, such as affective commitment and employee engagement (Geldenhuys et al., 2014). Employees who experience meaningfulness in their work are capable of adapting to the needs and goals of the organization. Concept of meaningfulness has been receiving growing recognition, yet there remains a dearth of empirical studies on this topic (Dobrow & Tosti-Kharas, 2011). Meaningful work is stated as important prerequisite for induvial's job satisfaction at work (Herzberg,1966). Correlation has been detected between low perceived meaningfulness of work and being indifference to work issues or to work environment as whole which consequently leads to lower level of individual job satisfaction (Thomas & Velthouse, 1990). Researchers suggest that individuals who perceive their work as serving a greater purpose tend to experience greater job satisfaction. (Feintzeig, 2015 as cited in Robbins & Judge, 2016). Scholars have established a strong connection between the concept of meaning and the fulfillment of values and overall satisfaction. Therefor it is predicted that the empowerment aspect related to meaningful work would primarily influence the emotional aspect of work satisfaction. Particularly, individuals who perceive their jobs as personally significant, in other word 'meaningfull' are prone to displaying higher levels of personal commitment towards their work and invest more effort in the task. Conversely, individuals who do not perceive their work as meaningful would behave in the opposite direction in the work environment (Spreitzer et al., 1997).

2.2.4. Engagement

The term "human spirit" refers to the aspect of individuals that seeks personal fulfillment and self-expression in the workplace. In order for the human spirit to flourish at work, individuals need the opportunity to fully immerse themselves in their work. This entails actively engaging their cognitive, emotional, and physical dimensions in the tasks they perform (May et al., 2004). Work engagement is originally defined as the process of employees connecting their personal selves to their work roles. Engaged individuals actively utilize and express themselves through their physical, cognitive, and emotional involvement in their job responsibilities (Kahn, 1990). Engagement is considered as a state of mind relatively persistent but also can change from time to time (Schaufeli et al., 2002). Engagement also involves the active utilization of physical energy by individuals to fulfill their job responsibilities. This utilization of energy contributes to the integration of the self within the role (Morris & Feldman, 1996). Developing engagement is crucial for managers as it directly addresses the issue of workers' lack of commitment and motivation, which stems from disengagement or alienation (Aktouf, 1992). In line with Kahn's conceptualization of the engagement construct Britt et al. (2001) discovered that engaging in meaningful work can result in perceived advantages derived from the work.

The concept of employee engagement has been extensively researched in organizational behavior, psychology, and industrial psychology (Pradhan & Jena, 2019). Further studies employing alternative measures of engagement (such as involvement and enthusiasm) have established connections between engagement and various factors, including employee turnover, customer satisfaction-loyalty, safety, and to a lesser extent, productivity and profitability metrics (Harter et al., 2002). As a result working on employee engagement may be beneficial in terms of functionality of business outcomes and in terms of overall well-being of employees (May et al., 2004).

According to International Survey Research description, employee engagement is a practice used by organizations to higher the dedication and involvement of their labour force, resulting in enhanced business outcomes (Andrew & Sofian, 2012).

Durón-Ramos et al. (2018) state that employee engagement is an organizational initiative aimed at ensuring profitability and success. According to Bakker and Demerouti (2008) employee engagement is characterized as a positive and fulfilling work-related state of mind, involving vigor, dedication, and absorption. In this context, vigor means an individual's willingness to practise extra effort and energy in their work, maintaining high levels of enthusiasm and focus even during difficult or challenging times. Researchers found out that there is a positive correlation between the meaningfulness of work, employee engagement, and an employee's affective commitment. Additionally, they hypothesized that affective commitment acts as a mediator between meaningfulness of work and employee engagement. The study's results confirmed that the meaningfulness of work plays a crucial role in enhancing employee engagement. The findings also suggest that meaningfulness of work has an impact on affective commitment (Kaur & Mittal, 2020).

Numerous researchers have concurred that employee engagement plays an important role in determining an organization's success and meeting its performance goals because it has the probability to significantly impact employee retention, loyalty, and productivity, while also being associated to customer satisfaction, organizational reputation, and overall stakeholder value (Harter et al., 2002;Schaufeli et al., 2006; Xanthopoulou et al., 2009; Dajani, 2015; Hallberg & Schaufeli, 2006). Work engagement pertains to the active allocation of personal resources to work. In other words, engagement reflects the convergence of physical, emotional, and cognitive energies that individuals devote to their work responsibilities. Therefor work engagement can be considered as a motivational construct that represent the proactive investment of personal resources in performing the tasks and responsibilities which assigned to an employee corresponding with their position (Rich et al., 2010; Kanfer, 1990).

CHAPTER THREE
METHODOLOGY AND FINDING

Main goal of this study is to identify whether GSCM practices effects employee's attitude towards their job.

3.1. DESIGN OF THE STUDY

3.1.1. Objective of the study

GSCM became highly popular among practitioners and scholars for the last decade as humanity as whole recognised environmental issues and became more willing to take counter actions. Environmentally friendly and CSR based marketing strategies became an important topic in terms of influencing final consumers. Another reason for GSCM to become popular is that implementing GSCM practises argued to increase profits and evaluate performance of the business (Srivastava, 2007:Zhu & Sarkis, 2004:Rao & Holt, 2005:Bose & Pal, 2012). However, there has been little attention given to impacts of GSCM practices in employee attitudes even though positive attitude towards job has been found to be beneficial for business and organizational development (Visamitanan & Assarut, 2021; Robbins & Judge, 2016: 124). Aim of this research is to discover effects of GSCM practise implementation on supply chain professionals regarding their well-being and attitudes toward and understand the underlying factors of the affect. To be more specific, objectives of this research are listed as below;

- To investigate whether green supply chain management practises affect job engagement, affective commitment, job satisfaction and perceived job performance.
- To investigate whether perceived degree of meaningfulness of work mediates the relationship between GSCM and positive employee attitudes.

3.1.2. Type of the study

This study has been designed as an empirical research with a correlational survey research because of the existence of relation between dependent and independent variables.

3.2. MODEL OF THE STUDY

Model of the study has been developed bases on Job Characteristics Theory Hackman and Oldham (1976) and The Facet Model of Job Satisfaction by Locke (1969). GSCM is considered as the cognitive component of the employee which would determine work attitudes of the employee. According to Hackman and Oldham (1976) task significance with other characteristics of the job, would lead to elevated job satisfaction, increased job performance and employee engagement through experiencing state of meaningful work. The Facet Model of Job Satisfaction from Locke (1969) also in the same context that arguing when a person having a job parallel with their moral values would lead to positive work attitudes such as job satisfaction.

The meaning attributed to work and the sense of meaningfulness of work of the employee associated with it result in positive work-related outcomes, specifically in terms of affective commitment and employee engagement (Hackman & Oldham, 1976). Current literature and previous research have stated that employees no longer perceive money as the primary motivator, as they recognize its limited contribution to their overall well-being. The significance of work's meaningfulness has become an essential component within an organizational system (Kaur & Mittal, 2020).

The current literature provides evidence in favour of the concept that when employees perceive their work as meaningful, it promotes organizational performance and leads to heightened emotional commitment and employee engagement (Asik-Dizdar & Esen, 2016; Cameron & Dutton, 2003), job satisfaction and employee retention (Rosso et al., 2010). Fairlie (2011) conducted survey-based research with 574 employed respondents in North America. They found that meaningful work is positively related with job satisfaction, organizational commitment, and engagement. They also suggested that meaningfulness of work characteristics has the strongest

correlation with engagement. Panda et al. (2021) in their research suggested that relationship between job performance and job meaningfulness is mediated by cognitive, motional and psychological engagement. To state it differently it can be said that when employees' experiences meaningfulness in their job, they tend to be more engaged, in terms of cognitive, motional and psychological engagement, which would lead to elaborated performance. Kaur and Mittal (2020) found in their empirical study, which conducted in India, that meaningfulness of work positively related to employee engagement and affected commitment. Also, affective commitment found out to be positively related to employee engagement.

In another perspective, GSCM implementation considered as CSR initiative. There are scholars who studied concept Corporate Social Responsibility within Supply Chain Management (Chi, 2011; Spena & De Chiara, 2012). Svensson (2009) underline how significance is ethical considerations in performing supply chain management (SCM) practises to stimulate enduring and sustainable relations among stakeholders, while also noticing and signifying its beneficial effects on society. Employees actively search for a sense of meaningfulness in their work by embracing the organization's CSR programs, as these initiatives exemplify values like integrity, respect for others, social and environmental concern, and genuine effort to create a better world to reside in. Eventually this would lead to experience meaningful work and feel purposeful as an employee (Afsar et al., 2020). Afsar et al. (2020) found that perceiving corporate social responsibility (CSR) will contribute to the improvement of work meaningfulness. Moreover, there was a significant interaction between incremental morality beliefs and CSR in predicting work meaningfulness. Among employees who possess stronger incremental morality beliefs and weaker moral identity centrality, perceptions of corporate social responsibility (CSR) had the most pronounced positive impact on employee engagement through the pathway of work meaningfulness. There are several studies which shows the positive effects of CSR on employee engagement (Duthler & Dhanesh, 2018; Valentine & Fleischman, 2007). Supanti and Butcher (2019) argue that CSR participation strongly influences work related outcomes. They found that out when CSR participation is mediated by meaningfulness of work, leads to increased level of affective commitment. They conducted a study with 245 respondents, and they analyzed the data with a partial least squares structural equation

modelling (PLS-SEM) approach and multigroup analysis. Youn and Kim (2022) came to conclusion in empirical study that CSR may positively influence Organizational Citizenship Behavior. Internal CSR and CSR participation is found to be directly promotes to the meaningfulness of work and affective commitment. The findings from study by Cunha et al. (2022) suggest that through a sequential mediation process, meaningfulness has a role in facilitating the positive effects of CSR perceptions on job engagement. Participation in CSR found out to have a strong positive relationship with work-related outcomes. Srisuphaolarn and Assarut (2017) argues that perceived degree of CSR of the organization from the employee's eyes is positively effecting engagement of employee and commitment.

Srisuphaolarn (2013) considered GSCM practises such as green design and eliminating hazardous materials from production proses as corporate social responsibility (CSR). Visamitanan and Assarut (2021) also considered and examined GSCM as a type of corporate social responsibility (CSR). They found that GSCM practices leads to engagement when mediated by social and operational performance of organization.

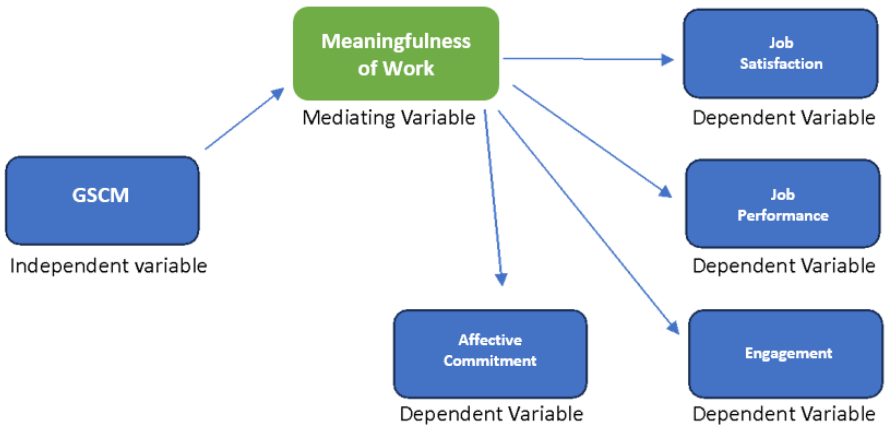
Visamitanan and Assarut (2021) examined GSCM practises as a factor which influences employees' attitude towards their organizations. They conducted the research in Thailand with 268 respondents, it showed that investing on GSCM practises which are the drivers of social and operating performance will positively impact the level of employee engagement and organizational commitment of the employees by analysing their structural model using partial least squares structural equation model (PLS-SEM). S. W. Kim et al. (2021) in their empirical study, in China, discovered positive effects of GSCM on job satisfaction. Study argues that recently implemented environmentally friendly manufacturing operations and work processes, such as decreasing usage of hazardous and toxic materials, may lead employees to experience increased safety and satisfaction which in is in line with the perspective of Lee and Chang (2008). Lee and Chang (2008) proposes that innovative and team orientated changes in terms of way of working would lead to job satisfaction.

In this research's model, perceived level of GSCM implementation is considered as task significance factor and/or a factor that would align with employees' moral values regarding environmental issues likewise impact of the CSR on

employees. In this manner, this study conceptualized that GSCM implementation expected to prompt positive job-related outcomes through meaningfulness of work.

While previous research has had investigated the relationship between GSCM and firm performance, organizational performance and financial performance, there are few studies that examine the effect of GSCM practices on individual employees. There is less work objected to find out about how the implementation of GSCM practices affects employee attitudes towards their respective organizations (Visamitanan & Assarut, 2021). Thus, this interdisciplinary study will contribute to Supply Chain Management, GSCM and Organizational Behaviour literature in an uncommon aspect. Based on existent literature following research model has been developed and given at Figure 3.

Figure 3: Research Model



3.2.1. Variables of the Model

Variables of the model is explained in detail below.

Perceived degree of GSCM Practises implementation (GSCM): This variable represents the perceived degree of GSCM Practises implementation in employee level of the organization. It is the independent latent variable of the model.

Meaningfulness of Work (MW): This mediating variable of the model refers to the level of significance generated by mechanisms and processes associated with one's perception of work's meaningfulness as Steger (2016) defined.

Affective Commitment (AF): Independent lvariable of the model represents the degree of an employee feel affectively committed to their jobs.

Engagement (EN): This mediating variable of the model states for the degree of an employee how much connection they can find between their selves and the job as defined on Kahn (1990).

Job Satisfaction (JS): This independent variable represents positive emotional state which employees experience towards their jobs as defined on Hackman and Oldman (1976).

Perceived Job Performance (JP): This independent variable represents employee's perception of their level of efforts towards the organizational goals as defined at Campbell (1990).

3.2.2. Hypotheses

The hypotheses of the study that show the relations between variables are indicated below:

H_1 : Green supply chain practices have a positive impact on employees' job satisfaction.

H_{1a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and job satisfaction.

H_2: Green supply chain practices have a positive impact on employees' perceived job performance.

H_{2a}: Meaningfulness of work mediates the positive relationship between green supply chain practises and job performance.

H_3 : Green supply chain practices have a positive impact on employees' affective commitment.

H_{3a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and affective commitment.

H_4 : Green supply chain practices have a positive impact on employees' affective commitment.

H_{4a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and affective commitment.

H_5 : Green supply chain practices have a positive impact on employees' experienced meaningfulness of work.

3.3. METHODOLOGY

3.3.1. Questionnaire Design

The study's questionnaire is composed of seven parts and answers are evaluated on a five-point Likert scale. The initial part comprises three demographic questions which includes date of birth, in order to obtain age of the participant, their professional experience in supply chain and finally number of employees who work within their organization. Survey questions has been given at the appendix. The detailed information about the scales used in the survey is provided below:

GSCM (GSCM): The second part of the questionnaire is an adaption from a scale which is designed to measure degree of GSCM practises implementation in responder's organization. The scale is adapted from Vijayvargy et al. (2017). There is total thirteen questions regarding internal environmental management, external GSCM practices, investment recovery and eco-design. The questions are anchored with 5 point Likert scale. The survey includes of inquiries regarding the perception of GSCM practices, with the goal of measuring the degree of implementation of a specific GSCM practice.

Meaningfulness of Work (MW): The third part of the questionnaire is adapted from a scale which developed to measure the degree of experienced meaningfulness of the work for employees and it is evaluated with Five-Point Likert Scale. It is adapted from The Work and Meaning Inventory (WAMI) which has been developed by Steger et al. (2012). The inventory is aiming to assess the role of work in the respondent's life. This instrument contains three dimensions which are: perceiving one's work as contributing to a broader purpose or greater good, one's degree of experiencing positive meaning in work and acknowledging work as the substantial route map for finding meaning. When the result score of this questionnaire calculated low it might suggest negative attitude toward to the one's job While developing this scale first mentioned dimensions are described. Then an initial assessment of the reliability and

construct validity of the instrument's scores has been calculated by using sample of 370 university employees from different departments and different job titles (Steger et al., 2012).

Engagement (ENG): The third part of the questionnaire is adapted from a scale designed to measure work engagement of an employee. It is adapted from Utrecht Work Engagement Scale (UWES) which developed by Schaufeli et al. (2006). The instrument has three fundamental facet of work engagement which can be listed as absorption, dedication, and vigor. The concept of work engagement, which comprehend the dimensions of vigor, dedication, and absorption, is widely regarded as a consistently positive and relatively stable measure of organizational well-being (Schaufeli et al., 2002). Both full set and short version of the UWES has the same ability on assessing employee engagement and has been utilized in various studies (Breevaart et al., 2016; Enwereuzor et al., 2018; Yongxing et al., 2017).

Affective Commitment (AF): At the fourth part the questionnaire continues with aiming to measure degree of affective commitment of the respondents. The questions are adapted from Employee Commitment Survey which developed by Meyer et al. (1993). Original survey consist of three different parts as follows: obligation-based (normative commitment), desire-based (affective commitment) and finally cost-based (continuance commitment). In this research only desired based (affective commitment) part has been utilized in line with the perceptual framework.

Job Satisfaction (JS): At the fifth part of the questionnaire is aiming to measure level of overall job satisfaction of the respondents and Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JSS) is utilized which is a short and to the point face-valid measure of global job satisfaction assessment tool (Cammann et al., 1979). Bowling and Hammond (2008) in their meta-analysis study found out that this scale is reliable and construct-valid measure of job satisfaction. One of the most apparent advantages of MOAQ-JSS is that being significantly shorter than other job satisfaction scales. For example, another popular job satisfaction scale is the Job Descriptive Index (JDI) consisting of 72 items (Smith et al., 1969). Also, short version of Michigan Organizational Assessment Questionnaire Job Satisfaction consist of 20 items and long version of Michigan Organizational Assessment Questionnaire has 100 items (Cammann et al., 1979). The initial version of Michigan

Organizational Assessment Questionnaire Job Satisfaction Subscale designed as Seven Point Likert Scale (Cammann et al., 1979) but Brasher and Chen (1999) has used the scale in their study with six-point, Allen (2001) and Grandey (2003) have used five points. In order to be consistent with other parts of the survey, five-point scale is used in this study.

Perceived Job Performance (JP): Finally at the final part of the survey is aiming to measure respondent's perceived job performance of their own. The Individual Work Performance Questionnaire (IWPQ) which developed by Koopmans et al. (2012) is utilized as a scale for this part because it is an instrument which is applicable to all job titles and occupations and easy to understand. Van Der Vaart (2021) supported the construct validity of the instrument.

3.3.2. Sampling

Convenience sampling is a type of nonprobability or non-random sampling where members of the target population are included for the purpose of the study if they meet specific practical criteria, such as easy accessibility, geographic proximity, availability at a specific time, or the willingness to participate (Etikan et al., 2016). Therefore convenience sampling is used as the sampling method of this research paper.

In Turkey, enterprises which has number of employee between 0-250 are defined as Small and Medium Sized Enterprise. (Küçük Ve Orta Büyüklükteki İşletmelerin Tanimi, Nitelikleri Ve Siniflandirilmasi Hakkinda Yönetmelik, 2005) Accordingly, participants of the research categorized as "SME employee (employee number <251)" and "Large Enterprise (employee number > 250)".

3.3.3. Data Analysis

PLS-SEM has found to be effective when the sample size is considerably small (Hair et al., 2017). Therefore analysis has been done by PLS-SEM algorithm. The data collected from the respondents analysed in SMART-PLS4 software program with PLS-SEM method. Both measurement model and structural model are assessed respectively. Validity tests have been conducted. In some cases, non-normal data may

affect the results of PLS-SEM, in order to avoid this effect, bias-corrected and accelerated (BCa) bootstrapping routine is performed (Efron, 1987).

3.3.3.1. Structural Equation Modelling (SEM)

Structural equation modeling (SEM) contains a range of statistical techniques that entitle the investigation and analysis of relationships between one or more independent variables (IVs). Those variables could be continuous or categorial (Ullman & Bentler, 2012).

Structural equation modeling (SEM) is an important analytical instrument for working on a multivariate data (Savalei & Bentler, 2006: 36)

SEM is also be described as a set of statistical procedure that explicate hypotheses about the means, variances, and covariances of observed variables in relation to a subset of the structural parameters specified by the inherent hypothesis model (Kaplan, 2000: 1).

Structural equation modeling (SEM) is a substantial method for developing and testing models that investigate the causal relationships amid variables in integrated hypotheses within statistical dependence models. It let researchers to analyze theoretical models complete and determine both indirect and direct effects between variables. SEM, as a multivariate statistical approach, models the interactions among theoretical constructs, errors, and the relationships between measurement errors. Furthermore, it is referred to as equality models or multivariate regression models (Kline, 2011& Gunzler et al., 2013).

Structural equation modeling (SEM) reflect relationships between multiple variables, including both unobserved and directly observed variables hypothetical variables. SEM encompasses various well-known statistical techniques, as these methods can be seen as specific instances or special occasion of SEM (Crowley & Fan, 1997). Conventional statistical tools like ANOVA/MANOVA and regression meet obstacles regarding analyzing the relationships among attributes due to measurement errors. However, structural equation modeling (SEM) offers a answer by dividing measurement errors from the true scores of attributes, allowing for direct modelling of

latent variables. It is frequently regarded as an expansion or extension of factor analysis (Hershberger, 2003; Yuan & Bentler, 2006).

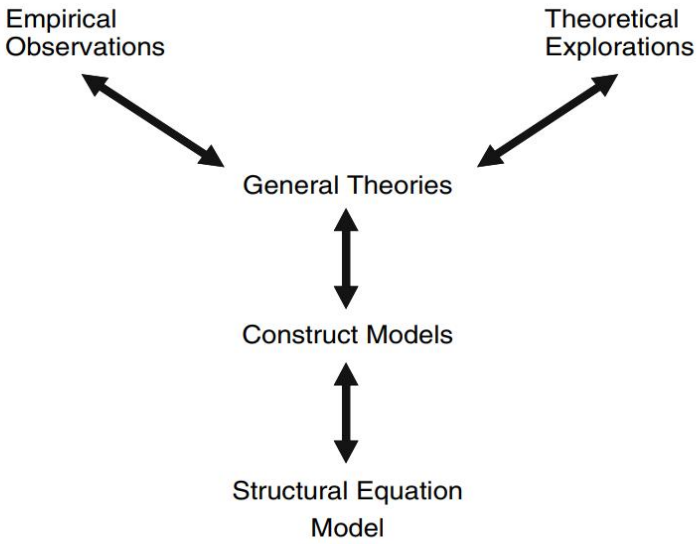
Goal of Structural Equation Modelling (SEM) is to measure the validity of hypotheses that proposed by studying the indirect and direct effects of mediators which influence the relationship between dependent and independent variables. SEM also let scholars for the analysis of the moderators and role of controls in the model. All SEM models are differentiate by three characteristics as follows; aptitude assert unobserved constructs in these relationships and correct the measurement errors in the estimation procedure; approximation of multiple and interconnected dependence relationships; establishing model to interpret the whole relationship between variables (Hershberger, 2011).

An approach to start modelling process is to establish the foundational theoretical concepts, which are also can be named as constructs. The theoretical definition of a construct is to be made to understand and communicate its intended meaning and its unique dimensions or facets (Bollen, 1989: 180). Hypothesized relationships between variables should be based on expected or known underlying mechanisms, which are called 'construct models' (Grace & Bollen, 2007). Relationship between theories, SEMs and construct models are visualized at Figure 4.

Structural equation models have proven to be significant in addressing many substantive matters in the social and behavioral sciences (Jöreskog & Sörbom, 1982). The goal of SEM is similar to factor analysis and path analysis, which is to propose a concise summary of the interconnections among variables in a parsimonious manner. Structural equation modeling (SEM) can be conceptualized as a conjunction of path analysis and factor analysis (Kahn, 2006).

Structural Equation Modeling (SEM) is a favoured procedure in complex analysis due to its benefits over traditional statistical methods. SEM is found to be most common approach among other commonly used analyses in several ways. Unlike many multivariate analyses, SEM can accurately estimate measurement errors. Additionally, SEM allows for the inclusion of both observed and latent variables in the analysis, unlike other data analysis approach that only depend on observed variables (Byrne, 2016: 9).

Figure 4: Overview of Relationships in SEM



Source: Grace and Bollen, 2007

3.3.3.1.1. Assumptions of Structural Equation Modeling

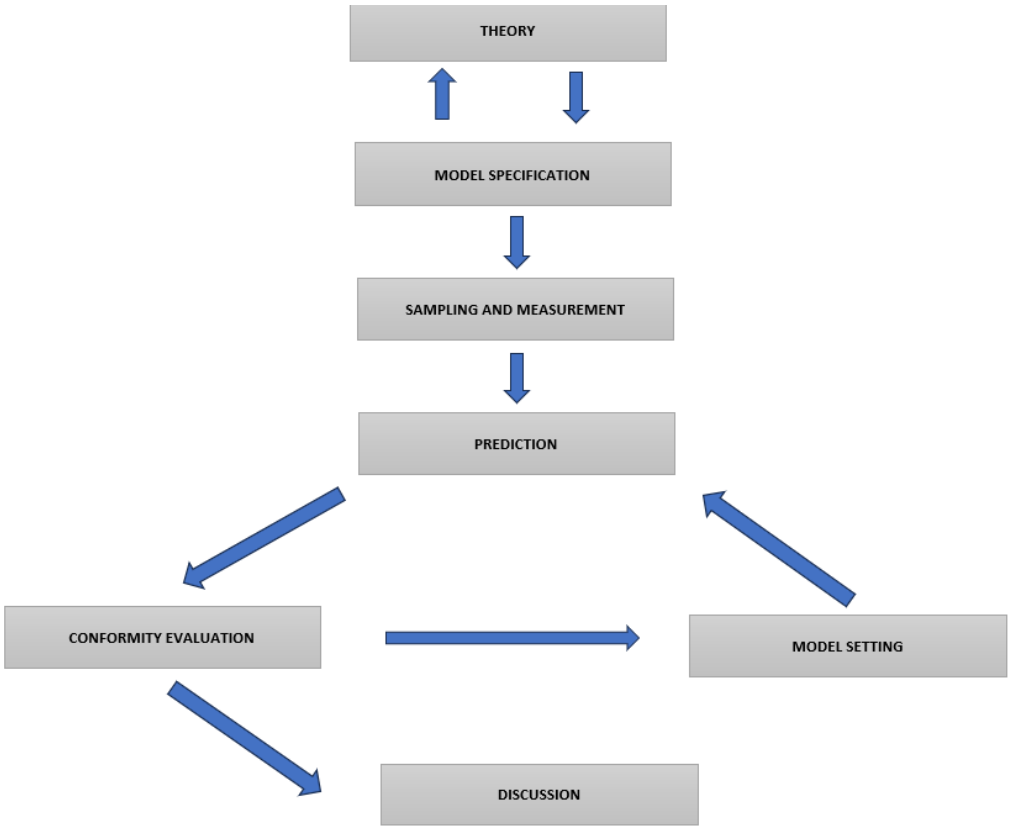
When building a model and measuring its fit indices normality for observations is the first essential assumption. In principle the observations should be drawn out of a continuous and multivariate normal population. However generally reaching perfect normality in the data is not very common. Because of that scholars make use of estimation methods based on the skewness and kurtosis of the related data. If the variable under study demonstrates normality, The maximum likelihood (ML) technique is employed to approximate and acquire parameter estimates. Otherwise in non-normality cases, Partial Least Squared SEM (PLS-SEM) shall employed (Kumar, 2015).

3.3.3.1.2. Structural Equation Modeling Steps

Among SEM experts, common constent in model testing regarding the six essential steps to be performed. These steps are data collection, model specification, identification or sampling and measurement, model estimation or prediction, evaluation or model testing, and finally modification or model setting (Hoyle, 1995:

18; Group et al., 2022: 8). The steps has been visualized at Figure 5 for better understanding.

Figure 5: Structural Equation Modelling Steps



Source: Kaplan, 2000:8

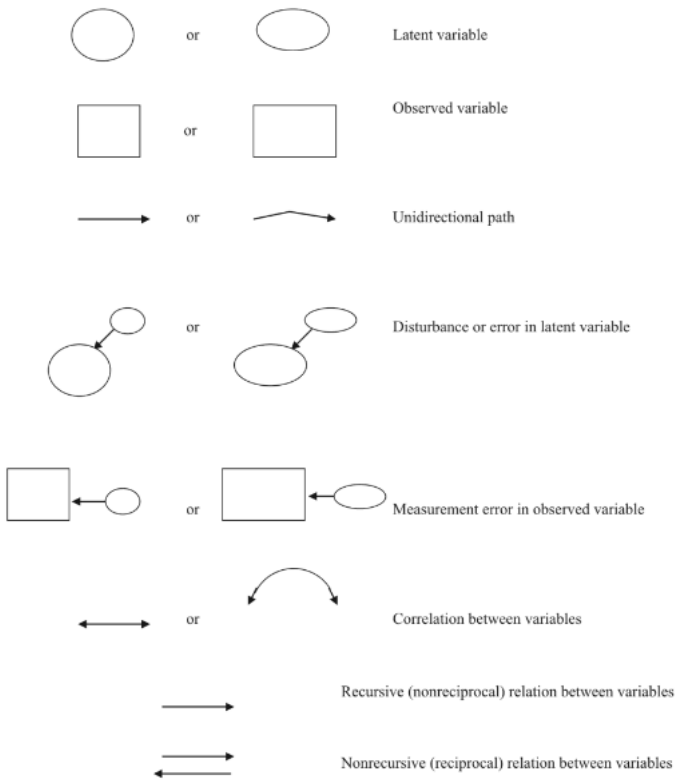
3.3.3.1.2.1. Model Specification

A researcher describes and specifies the expected relationships between latent variables and observed variables in this step. Specifying the relationships between variables is very important part of the whole process because unspecified relationships are assumed to be not exist. To achieve high accuracy regarding interpretation of theoretical assumptions and expectations of the model, these specifications should be done carefully (Weston & Gore, 2006).

Verbal hypothesis to be examined by creating experimental or path diagrams based on existed knowledge and theoretical ground is the model speciation step. Researchers visually represent the relationships between variables. This relationship should be consistent with previous studies and established theories (Çerezci, 2010: 21; Doğan, 2015: 12).

Conceptualizing and communicating of the models are generally done in graphical forms. According to these graphical forms, hypothesized casual direction is representing with a directional arrow. Direction of arrow points the dependent variable. Rectangular boxes represent the observed variables. Curved arrows are symbolizing the unexplained covariances among the variables. Circular or elliptical shapes are stand for latent variables (Elliott & Wu, 2007). Visuals are given for reference at Figure 5. In summary model specification is the step that researchers define the model and set parameters to be free or to be fixed (De Carvalho & Chima, 2014).

Figure 6: Common SEM Diagram Symbols



Source: Elliott and Wu (2007)

3.3.3.1.2.2. Model Identification

As previously mentioned, graphical models are used for explaining and organizing the concepts however in order to conduct a statistical analysis, they need to be translated to mathematical forms (Kline,2011: 34). In the model identification stage, it is aimed to find if applied theoretical model and the sample covariance matrix are unique in the parameter estimation of the social covariance matrix (Σ) (Schumacker & Lomax, 2004: 64). Some researchers consider model identification mostly as a condition which needs to be reached in order to do the analysis (Weston & Gore, 2006).

First condition is regarding completing scaling. With fixing factor variances (fixation must be set to 1.0 value) and specifying indicator signs, scaling is completed. Procedure should be operated without considering the complexity of the model. After that, 'variance covariance indices' should be checked. This parameter needs to be greater than or equal to 'estimated number of independent model' parameters. Third condition is number of observed variables. If the work is 'one-factor model', there

must be at least three different observed. This condition is ensuring the identification of model and reliabilities of estimation. Another condition is to avoid over-identification. When there are two or more factors in a model and each factor needing to at least two indicator, this result to over-identification. An over-identified model state there is excess information in the data in order to make the estimation (Brown,2006).

3.3.3.1.2.3. Model Estimation

The fundamental hypothesis is of Structural Equation Modelling is that the 'observed variables' is symbolize 'covariance matrix (∑(θ))'. This covers model parameters and population covariance matrix. Determining the 'difference (fit) function' that minimizes the difference between the 'sample covariance matrix' and 'the covariance matrix (∑(θ))' produced from the model is the purpose of the estimate procedure (Bollen, 1989: 104-105). After specification of the model is done and conclude that the model is identified, process continues with model estimation. During this step researchers start to obtain data from their sample group and cleanse the data when it is ready. Estimation is discovering errors associated with the estimated value and acquiring the value of 'unknown parameters' (Weston & Gore, 2006).

3.3.3.1.3. Model Testing

Researchers in this stage looks for the result to understand how compatible is the developed model with sample data to have a better insight into model testing and compatibility of the model properly value of fit indices is utilized (Schumacker & Lomax, 2004:69).

3.3.4. Limitation of the Study

The most important limitation of this study is to assess the employees perceived degree of GSCM implementation in their organization as there are very few scale available in the literature. The GSCM implementation scale which has been adapted

from Vijayvargy et al. (2017) is assessing the existence and efforts on implementation GSCM practices, neither their performance on doing so nor effectiveness of the practises. Lately there are many occasions that companies misleading the market about their environmentally friendly and green activities regarding their products, service or their business operations to gain better market coverage and company image. Those efforts in overall called ‘’Green Washing’’. Green washing is described as distributing incomplete or false information consciously to gain an environmentally responsible image by an organization. Consumers and investors gain awareness about green washing and there is negative impact found on their trust and confidence towards to the organizations (Delmas & Burbano, 2011; Furlow,2010; Lane, 2014). Since this study does not consist of any measurement regarding green washing and employee’s perception about their organization’s GSCM efforts, whether they find it effective or they perceive this efforts as greenwashing, it can be considered as an important limitation for understanding their attitudes towards the GSCM practices.

3.4. FINDING

3.4.1. Convergent Validity of the Scales

Cronbach's alpha Convergent validity is the expanse to which a measure that correlates positively with alternative measures of the same constructs (Basbeth & Ibrahim, 2016).

3.4.1.1. Cronbach's Alpha

Internal consistency of the measures is understood by reliability. Cronbach's Alpha is considered to be important internal consistency reliability measure for Likert-type scales and suggested to researchers (Nunnally & Bernstein, 1994; Gliem, 2003; Peterson,1994). When composite reliability value Croncach’s Alpha is between 0.6 to 0.7, it considered to be acceptable, and values between 0.7 and 0.9 can be regarded as satisfactory (Nunnally & Bernstein, 1994). At Table 4, Cronbach’s alpha values of the

study is displayed. All values are above 0.7, therefore they are all found out to be reliable.

Table 4: Cronbach's Alpha

Constructs	**Cronbach's alpha**
GSCM Practices (GSCM)	0.985
Engagement (ENG)	0.978
Meaningfulness of Work (MW)	0.974
Perceived Job Performance (JP)	0.974
Job Satisfaction (JS)	0.965
Affective Commitment (AF)	0.832

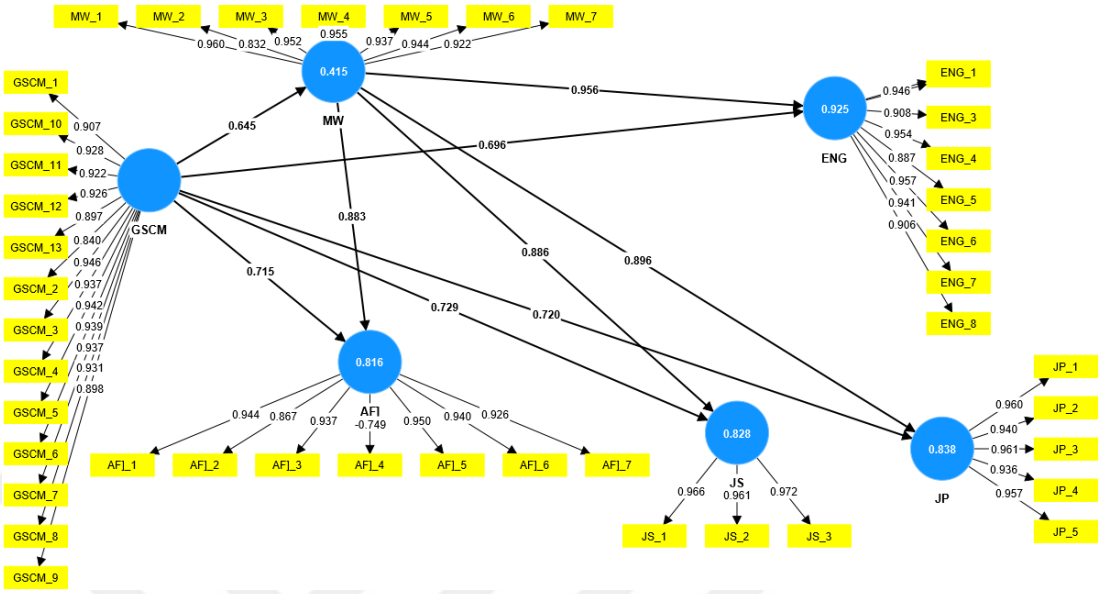
3.4.1.2. Outer Loadings

The standardized outer loadings should be above 0.70 because it represents how much variance is explained by the construct. In other words by interpreting outer loadings values, researcher can assess the quality of measurement. Outer loadings of the indicators which are below 0.70 can be remove from the model after assessing model fit and other indicators (Hair et al., 2016). Moreover, removal of indicators with outer values lower than 0.70 is suggested if removal leads to increase in AVE value (Basbeth & Ibrahim, 2016). Outer loadings of the constructs of study is displayed at Table – 6. All indicators except AF_4 has satisfactory outer loading values. Graphical output for better understanding given at Figure-7.

Table 5: Outer Loadings

Outer Loadings	AF	ENG	GSCM	JP	JS	MW
AF_1	0.944					
AF_2	0.867					
AF_3	0.937					
AF_4	-0.749					
AF_5	0.95					
AF_6	0.94					
AF_7	0.926					
ENG_1		0.946				
ENG_2		0.952				
ENG_3		0.908				
ENG_4		0.954				
ENG_5		0.887				
ENG_6		0.957				
ENG_7		0.941				
ENG_8		0.906				
GSCM_1			0.907			
GSCM_10			0.928			
GSCM_11			0.922			
GSCM_12			0.926			
GSCM_13			0.897			
GSCM_2			0.84			
GSCM_3			0.946			
GSCM_4			0.937			
GSCM_5			0.942			
GSCM_6			0.939			
GSCM_7			0.937			
GSCM_8			0.931			
GSCM_9			0.898			
JP_1				0.96		
JP_2				0.94		
JP_3				0.961		
JP_4				0.936		
JP_5				0.957		
JS_1					0.966	
JS_2					0.961	
JS_3					0.972	
MW_1						0.96
MW_2						0.832
MW_3						0.952
MW_4						0.955
MW_5						0.937
MW_6						0.944
MW_7						0.922

Figure 7: Outer Loadings - Graphical Output



3.4.1.3. Average Variance Extracted (AVE)

Average Variance Extracted means grand mean value of the squared loadings of the indicators associated with the constructs and it is used for asses convergent validity. AVE values should be above 0.50 in order to ensure convergent validity. Other scholars aim to have AVE values higher than 0.708 (H. Lee & Lyu, 2019).

At Table – 7 AVE values of the research constructs has been given. All constructs have higher AVE values than 0.50 and 0.708. Therefore, convergent validation has been established. Because AF_4 indicator has lower outer loading than 0.70, AVE values has been calculated after removal of the indicator, results has been displayed at Table – 8. Comparing Table – 7 and Table – 8 it can be obversed that removal of the indicator of AF_4, increases the AVE result. Therefore AF_4 indicator has been removed.

Table 4: Average Variance Extracted (AVE)

Constructs	Average variance extracted (AVE)
AF	0.818
ENG	0.868
GSCM	0.846
JP	0.904
JS	0.934
MW	0.865

Table 5: Average Variance Extracted (AVE) After Indicator Removal

Constructs	Average variance extracted (AVE)
AF	0.867
ENG	0.868
GSCM	0.846
JP	0.904
JS	0.934
MW	0.865

3.4.2. Discriminant Validity of the Scales

Discriminant Validity refers to degree of the constructs being different than one other (Basbeth & Ibrahim, 2016). Criteria to assess discriminant validity of the research is explained below.

3.4.2.1. The Cross Loading Criteria

To be able to separate the constructs for being different than the others, their cross loading values should be greater than any other cross loading of the other constructs (Basbeth & Ibrahim, 2016).

At Table – 9 cross loading values of the constructs is listed. Assessing the values, it can be seen that any of the indicators does not load higher than their own construct.

Table 6: Cross Loadings

Outer Loadings	AF	ENG	GSCM	JP	JS	MW
AF_1	0.946	0.848	0.642	0.818	0.894	0.836
AF_2	0.853	0.718	0.683	0.731	0.808	0.685
AF_3	0.943	0.872	0.66	0.816	0.839	0.856
AF_5	0.956	0.869	0.693	0.862	0.916	0.861
AF_6	0.949	0.894	0.678	0.822	0.854	0.86
AF_7	0.936	0.883	0.621	0.861	0.886	0.895
ENG_1	0.896	0.946	0.668	0.891	0.889	0.947
ENG_2	0.835	0.952	0.649	0.831	0.819	0.907
ENG_3	0.779	0.908	0.653	0.742	0.726	0.813
ENG_4	0.883	0.954	0.659	0.902	0.895	0.915
ENG_5	0.853	0.887	0.664	0.84	0.875	0.868
ENG_6	0.9	0.957	0.671	0.884	0.893	0.935
ENG_7	0.835	0.941	0.58	0.849	0.84	0.91
ENG_8	0.807	0.906	0.638	0.761	0.734	0.82
GSCM_1	0.773	0.734	0.907	0.731	0.754	0.702
GSCM_10	0.739	0.739	0.928	0.75	0.735	0.679
GSCM_11	0.743	0.743	0.922	0.753	0.746	0.684
GSCM_12	0.737	0.722	0.926	0.742	0.742	0.675
GSCM_13	0.7	0.686	0.897	0.719	0.71	0.65
GSCM_2	0.612	0.577	0.84	0.561	0.63	0.529
GSCM_3	0.614	0.6	0.946	0.622	0.642	0.557
GSCM_4	0.603	0.582	0.937	0.618	0.633	0.535
GSCM_5	0.592	0.586	0.942	0.609	0.627	0.537
GSCM_6	0.581	0.584	0.939	0.619	0.62	0.537
GSCM_7	0.596	0.57	0.937	0.613	0.631	0.527
GSCM_8	0.579	0.572	0.931	0.613	0.6	0.512
GSCM_9	0.512	0.503	0.898	0.554	0.546	0.459
JP_1	0.86	0.91	0.678	0.96	0.884	0.916
JP_2	0.868	0.859	0.781	0.94	0.888	0.832
JP_3	0.813	0.827	0.635	0.961	0.893	0.854
JP_4	0.801	0.77	0.65	0.936	0.894	0.766
JP_5	0.836	0.906	0.673	0.957	0.872	0.883
JS_1	0.903	0.901	0.736	0.932	0.966	0.9
JS_2	0.881	0.857	0.62	0.88	0.961	0.86
JS_3	0.913	0.84	0.753	0.887	0.972	0.808
MW_1	0.87	0.922	0.684	0.914	0.891	0.96
MW_2	0.711	0.768	0.391	0.718	0.711	0.832
MW_3	0.875	0.921	0.648	0.873	0.876	0.952
MW_4	0.886	0.929	0.673	0.888	0.9	0.955
MW_5	0.818	0.901	0.633	0.8	0.764	0.937
MW_6	0.833	0.893	0.51	0.839	0.832	0.944
MW_7	0.823	0.877	0.617	0.779	0.775	0.922

3.4.2.2. Fornell-Larcker Criterion

When assessing discriminant validity researchers examine Fornell-Larcker criterion. This criterion compares the latent variable correlations with the square root of the construct's AVE. The square roots of the average variance extracted (AVE) for each construct should exceed the highest correlations between that construct and any other construct (Basbeth & Ibrahim, 2016). Results has been given at Table – 10 and there is no higher corelations which is connecting to another construct. Therefore Fornell-Larcker criterion has been met.

Table 7: Fornell-Larcker Criterion

Fornell-Larcker Criterion	AF	ENG	GSCM	JP	JS	MW
AF	0.931					
ENG	0.912	0.932				
GSCM	0.711	0.696	0.92			
JP	0.880	0.901	0.72	0.951		
JS	0.931	0.897	0.729	0.932	0.966	
MW	0.896	0.856	0.644	0.896	0.886	0.930

3.4.3. Structural Model Assessment

Following to assessment of measurement model with Convergent and Discriminant Validity Tests, structural model assessment is performed for evaluation of structural paths and path coefficients. Hypotheses for direct and total effects has been evaluated below. Path coefficient result is displayed at Table – 11. Graphical overview has been given at Figure – 8. In overview it can be seen that all T statistics are higher than 1.6 and all p values are lower than 0.001.

H_1 : Green supply chain practices have a positive impact on employees' job satisfaction.

H_2: Green supply chain practices have a positive impact on employees' perceived job performance.

H_3 : Green supply chain practices have a positive impact on employees' affective commitment.

H_4 : Green supply chain practices have a positive impact on employees' engagement.

H_5 : Green supply chain practices have a positive impact on employees' experienced meaningfulness of work.

H_1 evaluates whether GSCM (GSCM) significantly and positively affects Job Satisfaction (JS). The results reveal that GSCM has a significant and positive impact on JS (β=0.268, t=6.128, p<0.001). Therefor H_1 is supported.

H_2 evaluates whether GSCM (GSCM) significantly and positively affects Job Performance (JP). The results reveal that GSCM has a significant and positive impact on JP (β=0.242, t=6.993, p<0.001). Therefor H_2 is supported.

H_3 evaluates whether GSCM (GSCM) significantly and positively affects Affective Commitment (AF). The results reveal that GSCM has a significant and positive impact on AF (β=0.226, t=7.244, p<0.001). H_3 is supported.

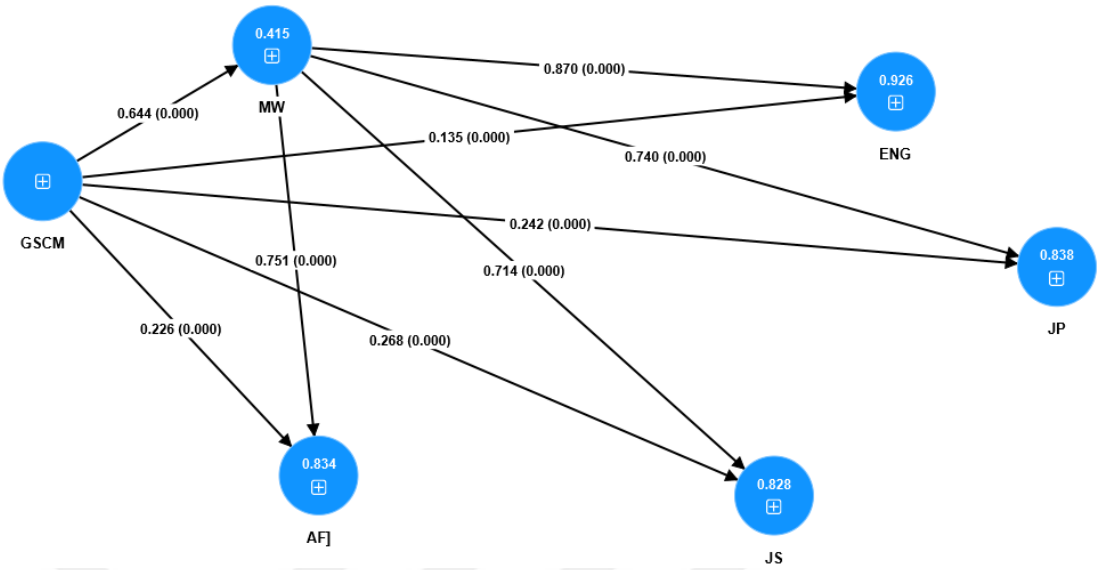
H_4 evaluates whether GSCM (GSCM) significantly and positively affects Engagement (ENG). The results reveal that GSCM has a significant and positive impact on ENG (β=0.135, t=6.193, p<0.001) Therefor H_4 is supported.

H_5 evaluates whether GSCM (GSCM) significantly and positively affects experienced Meaningfulness of Work (MW). The results reveal that GSCM has a significant and positive impact on MW (β=0.644, t=17.067, p<0.001) Therefor H_5 is supported.

Table 8: PLS-SEM Results

Hypothesis	Beta Coefficient	T statistics	P values	Decision
H1:GSCM -> JS	0.268	6.128	0.000	Supported
H2:GSCM -> JP	0.242	6.993	0.000	Supported
H3:GSCM -> AF	0.226	7.244	0.000	Supported
H4:GSCM -> ENG	0.135	6.193	0.000	Supported
H5:GSCM -> MW	0.644	17.067	0.000	Supported

Figure 8: Graphical Output of PLS-SEM Results



3.4.4. Mediation Analysis

Mediation analysis is performed in order to asses the mediation role of Meaningfulness of Work (MW) between GSCM (GSCM) and Engagement (EN), Affective Commitment (AF), Job Performance (JP) and Job Satisfaction (JS). Hypothesis with mediating relationship of the study is listed below;

H_{1a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and job satisfaction.

H_{2a}: Meaningfulness of work mediates the positive relationship between green supply chain practises and job performance.

H_{3a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and affective commitment.

H_{4a} : Meaningfulness of work mediates the positive relationship between green supply chain practises and engagement.

Table 9: Indirect Effects

Hypothesis	Beta Coefficient	T statistics	P values	Decision
H1a: GSCM -> MW -> JS	0.460	12.625	0.000	Supported
H2a: GSCM -> MW -> JP	0.477	14.461	0.000	Supported
H3a: GSCM -> MW -> AF	0.484	14.862	0.000	Supported
H4a: GSCM -> MW -> ENG	0.560	18.137	0.000	Supported

CONCLUSION

This study investigated the impact of GSCM implementation on employee work attitudes, specifically in terms of Job Satisfaction, Job Performance, Affective Commitment and Employee Engagement. Contribution of the study to existing GSCM research is that elaborating of the concept to individual levels. In the existing literature, the focus is investigating the concept of business performance for organization as whole, on the economical perspective of GSCM (Visamitanan & Assarut, 2021). However business performance and/or organizational performance is not only only related with operational results, resources and assets. But there are evidences implying positive attitudes of the employees most likely will result in positive outcomes, including greater organizational effectiveness, higher customer satisfaction, and increased profits (Robbins & Judge, 2016: 130).

In this study, GSCM implementation is considered as a Job Characteristics which contributes to Task Significance as a facet, according to Job Characteristics theory by Hackman and Oldham in 1976 which is expected to create positive outcomes through Meaningfulness of Work. Besides that, according to The Job Facet Theory by Locke (1969), when requirements of the job align with the moral values of the employee, it is expected to observe ascent regarding positive work-related outcomes such as Job Satisfaction, Job Performance, Affective Commitment and Engagement. Conceptual Model of the study is based on these two theories. Hypotheses are designed to evaluate whether GSCM implementation is positively influencing Job Satisfaction, Job Performance, Affective Commitment and Engagement under the mediating effect of Meaningfulness of Work. In order to test the suggested model empirically, variables has defined and surveys are adapted from literature for GSCM implementation, Meaningfulness of Work, Job Satisfaction, Job Performance, Affective Commitment and Engagement. 298 responses from Supply Chain Professionals have been received for the survey across Turkey. Since sample size might considered to be small, PLS-SEM bias-corrected and accelerated (BCa) bootstrapping routine is performed with 5000 subsamples for assessment as literature advises (Hair et al., 2017;Efron, 1987). Smart-PLS 4.0 software is utilized to perform the tests. The convergent validity test for measurement model employed by Cronbach's Alpha and Outer Loading Criterion

and AVE. All test resulted to prove validity. For discriminant validity, Cross Loading Criterion and Fornell-Larcker Criterion is employed, once more results indicated validity.

Five hypotheses to investigate direct relationship between Independent Variable GSCM and Dependent Variables (Job Satisfaction, Job Performance, Affective Commitment, Engagement and Meaningfulness of Work) tested and confirmed with PLS-SEM bias-corrected and accelerated (BCa) bootstrapping routine. Four hypotheses to investigate mediating effect of Meaningfulness of Work between Independent and Dependent variables followed to same routine and confirmed. This empirical study revealed that implementation of GSCM can lead to positive work-related outcomes.

Findings of this study revealed that GSCM is not only a concept of Supply Chain Management operations but affects individuals' well-being. It helps companies connect and establish a deeper relationship with their employees which also might lead to monetary benefits for companies in the future (Robbins, 2016: 130).

The findings of this study can influence managers, decision-makers and enhance their willingness to implement GSCM practises. The existence of environmental attitude and GSCM adaption will not only enhance operational performance of Supply Chain Management but increase well-being of SCM professionals via Meaningfulness of Work.

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APPENDICIES

Appendix 1: Survey in English

Dear Respondents,

The following questionnaire is being applied at the Dokuz Eylül University within the scope of a master thesis research entitled “Effects Of Green Supply Chain Management Practises On Job Attitudes And Job Satisfaction”. Your answers will not be judged as true or false and will be evaluated collectively. Please answer all the questions.

Thanks for your participation.

Seda Kutlu

Dokuz Eylül Üniversitesi

1. **Please indicate your date of birth?**
2. **Please indicate your professional experience in Supply Chain Management.**

☐Less than 3 years ☐3-6 years ☐6-12 years ☐More than 12 years

3. **Please indicate number of employess in your organization.**

☐Less than 251 ☐More than 250

	No consideration to practise	A little consideration to practise in the	Planned to practise within a defined	Practising	Actively practising
Please evaluate your company's adoptation plans and/or practices of following Green Supply Chain practises.					
1. Environmental management system exist					
2. Support for GSCM from mid level managers					
3. Commitment of GSCM from senior managers					
4. Cooperative with suppliers for environmental objectives					

5. Cooperation with customers for eco design					
6. Cooperation with customers for green packaging					
	No conisderation to practise	**A little consideration to practise in the**	**Planned to practise within a defined**	**Practising**	**Actively practising**
7. Design of products for reduced consumption of material/energy					
8. Design of products for reuse of materials, component parts					
9. Design of products for recycle of materials, component parts					
10.Design of products for recovery of materials, component parts					
11.Design of products to avoid or reduce use of hazardous products and/or their manufacturing process					
12.Investment recovery (sale) of excess inventory/materials					
13. Sale of scrap and used materials					
Following questions asked to measure how meaningful you find your job for yourself and for others in overall. Work can mean a lot of different things to different people. The following items ask about how you see the role of work in your own life.					
	Absolutely Untrue	**Mostly Untrue**	**Neither True or Untrue**	**Mostly True**	**Absolutely Untrue**
17. I have found a meaningful career					
18. My work really makes no difference to the world.					

19. I understand how my work contributes to my life's meaning.					
20. I have a good sense of what makes my job meaningful.					
21. I know my work makes a positive difference in the world.					
22. I have discovered work that has a satisfying purpose.					
23. The work I do serves a greater purpose					
Following questions are asked to measure your engagement level to your job as an employee.					
	Absolutely Untrue	**Mostly Untrue**	**Neither True or Untrue**	**Mostly True**	**Absolutely Untrue**
24.I find the work that I do full of meaning and purpose					
25.At my job, I feel strong and vigorous					
26.When I get up in the morning, I feel like going to work					
27.I am enthusiastic about my job					
28.I am proud on the work that I do					
29.My job inspires me					
30.I get carried away when I'm working					
31.I feel happy when I am working intensely					
Following questions are asked to measure your affective commitment level to your job as an employee					

	Absolutely Untrue	Mostly Untrue	Neither True or Untrue	Mostly True	Absolutely Untrue
32.I would be very happy to spend the rest of my career with this organization					
33.I enjoy discussing my organization with people outside it					
34.I really feel as if this organization's problems are my own					

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly Agree
35.I think that I could easily become as attached to another organization as I am to this one					
36.I do not feel like 'part of the family' at my organization					
37.This organization has a great deal of personal meaning for me					
38.I do not feel a strong sense of belonging to my organization					
39.Following questions asked to measure your overall job satisfaction					
40.All in all, I am satisfied with my job					
41.In general, I don't like my job					
42.In general, I like working in my current job					

Following questions are asked to measure your perceived employee performance.					
43.In the past 3 months, I started new tasks myself, when my old ones were finished					
44.In the past 3 months, I took on challenging work tasks, when available					
45.In the past 3 months, I did more than was expected of me					
46.In the past 3 months, I actively looked for ways to improve my performance at work					
47.In the past 3 months, I actively looked for ways to improve my performance at work					

Appendix 2: Survey in Turkish

Değerli Katılımcı,

Aşağıda yer alan anket Dokuz Eylül Üniversitesi Ingilizce Isletme Yonetimi Tezli Yüksek Lisans programi tez araştırması kapsamında uygulanmaktadır. Cevaplar toplu olarak değerlendirilecek olup, veriler yalnızca bilimsel araştırma amacıyla kullanılacaktır. Lütfen tüm soruları cevaplandırınız..

Katkınız için teşekkür ederim.

Seda Kutlu

Dokuz Eylül Üniversitesi

1. **Lütfen doğum tarihinizi belirtiniz.**
2. **Lütfen Tedarik Zinciri Yönetiminde sahip olduğunuz tecrübeyi belirtiniz**
3. **Şirketinizde çalışan kişi sayısını belirtiniz**

☐251 kisiden az ☐250 kisiden fazla

	Uygulamaya hiç önem verilmemektedir	Uygulamaya az önem verilmektedir	Uygulamaya orta düzeyde önem	Uygulama üzerinde çalışılmaktadır	Aktif olarak uygulanmaktadır
Lutfen sirketinizdeki Yesil Tedarik Zinciri Uygulamalarini ve ya uygulama planlarini degerlendiriniz.					
1. Mevcut çevresel kaynak yönetimi sistemini değerlendiriniz					
2. Orta seviye yöneticilerinin Yeşil Tedarik Zinciri uygulamalarına olan bağlılığını değerlendiriniz					
3. Kıdemli yöneticilerin Yeşil Tedarik Zincirine olan bağlılığını değerlendiriniz					
4. Çevresel hedefler için tedarikçiler ile yapılan işbirliğini değerlendiriniz					
5. Çevreci ürün tasarımlarının yapılması için müşteriler ile yapılan işbirliğini değerlendiriniz					
6.Yeşil ambalaj için müşterilerle yapılan işbirliğini değerlendiriniz					
	Uygulamaya hiç önem verilmemektedir	Uygulamaya az önem verilmektedir	Uygulamaya orta düzeyde önem	Uygulama üzerinde çalışılmaktadır	Aktif olarak uygulanmaktadır
7. Malzeme ve enerji tüketimlerinin azaltılmasına yönelik ürün tasarım çalışmalarını değerlendiriniz					
8. Yeniden kullanıma olanak sağlayan ürün tasarım çalışmalarını değerlendiriniz					
9. Geri dönüşüme olanak sağlayan ürün tasarım çalışmalarını değerlendiriniz					
10. Geri kazanıma olanak sağlayan ürün tasarım çalışmalarını değerlendiriniz					

11. Zararlı maddelerin kullanımını azaltmaya yönelik ürün/süreç tasarımlarının yapılması					
12. Fazla envanter ve malzemelerinin satışının ve/ve ya yatırım geri kazanımının yapılması					
13. Hurda ve kullanılmış malzemelerin satışının yapılması					
Asagidaki sorulari isinizi ne kadar anlamli bulduğunuzu dusunerek degerlendiriniz.					
	Kesinlikle Dogru degil	**Cogunlukla Dogru Degil**	**Ne Dogru Ne De Dogru Degil**	**Cogunlukla Dogru**	**Kesinlikle Dogru**
17. Benim için anlamlı bir kariyere sahibim					
18. Benim işim dünya için gerçekten bir fark yaratmıyor					
19. İşimin, hayatıma katmakta olduğu anlamın farkındayım					
20. İşimi neyin anlamlı kıldığının farkındayım					
21. Yaptığım işin dünyada olumlu bir fark yarattığını biliyorum					
22. Tatmin edici bir amacı olan bir iş keşfettim					
23. Yaptığım iş daha büyük bir amaca hizmet ediyor					
Asagidaki sorulari sirketinize olan baglilik seviyenizi dusunerek degerlendiriniz.					
	Kesinlikle Dogru degil	**Cogunlukla Dogru Degil**	**Ne Dogru Ne De Dogru Degil**	**Cogunlukla Dogru**	**Kesinlikle Dogru**

24. Yaptığım işi anlam ve amaç dolu buluyorum					
25. İşimde kendimi dinç ve güçlü hissediyorum					
26. Sabahları kalktığımda işe gitmek istiyorum					
27. İşim konusunda hevesliyim					
28. Yaptığım işten gurur duyuyorum					
29. Yaptığım iş bana ilham verir					
30. Çalışırken kendimi işe kaptırırım					
31. Yoğun çalıştığımda kendimi mutlu hissederim					
Asagidaki sorulari sirketinize olan duygusal bagliliginizi dusunerek degerlendiriniz.					
	Kesinlikle Dogru degil	**Cogunlukla Dogru Degil**	**Ne Dogru Ne De Dogru**	**Cogunlukla Dogru**	**Kesinlikle Dogru**
32. Kariyer hayatımın geri kalanını bu şirkette geçirmekten mutlu olurum					
33. Kurumumu kurum dışındaki insanlar ile tartışmaktan keyif alırım					
34. Sanki bu kurumun sorunları benim sorunlarımmış gibi hissediyorum					
35. Başka bir kuruma bu kuruma bağlandığım kadar kolaylıkla bağlanabileceğimi düşünüyorum					
36. Bu kurumda "ailenin bir parçası" gibi hissetmiyorum					

	Kesinlikle Dogru degil	Cogunlukla Dogru Degil	Ne Dogru Ne De Dogru Degil	Cogunlukla Dogru	Kesinlikle Dogru
37. Bu kurumun benim için çok büyük bir kişisel anlamı var					
38. Kurumuma karşı aidiyet duygusu hissetmiyorum					
Asagidaki sorulari mevcut isinizde calisirken hissettiginiz is tatminini dusunerek degerlendiriniz.					
39. Sonuç olarak değerlendirdiğimde işimden memnunum					
40. Genel itibariyle işimi sevmiyorum					
41. Genel olarak şuanki işimde çalışmayı seviyorum					
42.Başka bir kuruma bu kuruma bağlandığım kadar kolaylıkla bağlanabileceğimi düşünüyorum					
Asagidaki sorulari isinizde gosterdiginiz performansi dusunerek degerlendiriniz.					
43.Geçtiğimiz üç ay içinde, ekstra sorumluluklar üstlendim					
44.Geçtiğimiz üç ay içinde, görevlerim bittikçe kendiliğimden yeni görevlere başladım					
45.Geçtiğimiz üç ay içinde, verildiğinde zorlu iş görevlerini üstlendim					
46.Geçtiğimiz üç ayda, benden beklenenden daha fazlasını yaptım					
47.Geçtiğimiz üç ayda, iş performansımı arttırmak için aktif olarak yollar aradım					