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## THE EFFECT OF GREEN PRACTICES ON SCEP IN PAINT INDUSTRIES OF KARACHI WITH MODERATING ROLE OF ABSORPTIVE CAPACITY

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### Abstract

In this promptly changing world people are becoming more advance in technology and conscious regarding their health, the main factor that is necessary to live a healthy life is a cleaner and greener environment, but due to the manufacturing firms producing hazardous products the rate of pollution is increasing rapidly and many firms are working and trying to implement methods that help them safe environment from the hazardous effect of pollution. The main focus of this research is on the supply chain performance of paint manufacturing firms because the chemicals used in the manufacturing of paints can be hazardous, as the mixing and solutions of paint create some toxic air pollutants and volatile organic compounds. As these manufacturing firms are well aware of the side effects of this issue, they are adopting green practices these days to improve their SCEP. This study is conducted to identify the effect of green practices that how they affect supply chain environmental performance with mediating role of absorptive capacity. The green practices include 7 variables which are green manufacturing, green purchasing, green marketing, green distribution, green packaging, internal environmental management and environmental education. The factual data is collected through an online questionnaire survey form, total of 103 employees of paint manufacturing firms based in Karachi who is listed with the supply chain department are requested and invited to fill out the survey form for this study. The results of this study are important in highlighting the importance of GSCM in the environmental performance of paint manufacturing firms in Karachi.

**Keywords:** Green Practices, Environmental performance, Supply chain, Paint manufacturing, Effect of Pollution

## Introduction

### Background of Study

One of the most defining issues of today's and future business world is environmental sustainability, as quoted in the words of a famous researcher:

"Environmental sustainability is not an option it is a necessity for economies to flourish, for global poverty to be banished, for the well-being of the world's people to be enhanced. Not just in this generation but in succeeding generations too. We have a compelling and ever more urgent duty of management to take care of the natural environment and resources on which our economic activity and social fabric is dependent" (Choi and Hwang 2015)

Environmental performance is one aspect of sustainability as mentioned in the literature every firm must strike a balance in environmental processes and be effective in its attempts to address all elements to be sustainable (Wong et al. 2012).

### Problem Statement

When there is the execution of GSCM practices in a firm it faces substantial challenges in which there are multiple complex issues and uncertainties which play an important role in running the organizational activities, but key challenges for firms include that how to imply GSCM methods in their operations.

If we discuss paint manufacturing industries, they are one of the biggest contributors to the damage to the environment and with the growing consciousness of protecting the environment these manufacturers are trying their best to follow the GSCM practices.

Due to faster changing concerns and choices of customers and suppliers regarding the environmental activities of manufacturers, the paint manufacturers have to focus on internal management and their performances and their effects.

Manufacturers must examine the impacts of all kinds of environmental approaches and techniques on business performance which affect the firm's economic viability and standard; as well as these firms must focus on their environmental performance (Green et al. 2012).

### Research Objectives

In the recent time that the ruling government bodies have forced the manufacturers to improve their process supply chain and also consider the adoption of Green Supply Chain Management (GSCM) practices, the term "green supply chain" and its impact on the environment refers to a multidisciplinary problem that occurred primarily from the implementation of sustainable friendly management methods in SCM networks (Choi and Hwang 2015).

The paint industry is a contributor to CO<sub>2</sub>, B3 waste and solid or liquid waste which is very dangerous, the mixture of paint also includes lead in it which also causes skin cancer.

In the last few years, a new generation of environmentally friendly paint using water as a solvent and different chemicals have been included which are not harmful to humans or marine life, the reason for using water-based solvents is that because water-based systems contain fewer solvents than solvent-based coatings, they help in reduced VOC emissions, and exposure for work can also be reduced, so the objective of this study is to know that when a paint manufacturing industry in Karachi is trying to follow the GSCM practices how are they reacting on its environmental performance and how much capacity they have to absorb these changes.

### Research Questions

1. What is the effect of green practices on the SCEP of paint manufacturing firms in Karachi?
2. How does the absorptive capacity impact the performance of green practices?

3. How a paint manufacturing firm is implying green practices to maintain environmental sustainability?
4. How the paint manufacturing firm is reacting internally to maintain environmental sustainability?

### Significance of the Study

This research is very substantial for getting information about the environmental performance of a paint manufacturing firm how their performance will be affected when they adopt GSCM practices and how much absorptive capacity they have to go through such changes.

This study will also indicate how much the paint manufacturing firms are putting effort to go environmentally friendly.

The findings of this study will also help in improving the design of following the pattern for GSCM practices and implementing them within the organization.

### Literature Review

We have identified seven GSCM components which include green purchasing, green manufacturing, green distribution, green packaging, green marketing, internal environmental management and environmental education; and the main goal of this study is to observe the impact of these dimensions on the environmental performance of supply chain of a paint manufacturing firm.

Green supply chain management (GSCM) is critical, it is a concept that is progressively growing in the business these days, and most companies plan activities that take environmental issues as part of the SCM process, these 7 practices are aimed at improving both suppliers and customers environmental performance and by improving both edges, a firm can achieve the organizational goals effectively.

The moderator 'absorptive capacity' is chosen because, in the progress and growth of any organization, the absorptive capacity

will expand on previous efforts to develop each constituent's unique absorption capacities and like individual absorption capacities, organizational absorptive capacity will tend to develop cumulatively (Cohen and Levinthal 1990a).

### Green Supply Chain Management Practices

GSCM has developed itself as an essential corporate environmental strategy for paint manufacturing companies and as a result of environmental concerns the manufacturers must relate internal GSCM practices with external GSCM practices to fully realize the performance potentials of GSCM (Zhu, Sarkis, and Lai 2012).

A comprehensive investigation discovered several types of research which illustrated the relationship between GSCM and its impact on sustainability performance, and their findings revealed that green practices contribute to greater environmental performance (Vanalle et al. 2017).

Many studies have been undertaken in a variety of countries to determine the impact of GSCM procedures on the performance of a firm. However, due to the diversity of the dimensions and their interactions with other variables, striking this balance and achieving success is difficult.

The importance of GSCM practices cannot be ignored because they are highly beneficial for a firm's sustainability performance. After all, a sustainable organization is always focused towards providing benefits to its partners and customers.

According to (Walker, Di Sisto, and McBain 2008) all the stages of the product life cycle which the design of extraction of raw material, the production and distribution of goods, the consumption of the product and disposal after the use of the product is included, they all are covered by green supply chain concepts.

When empirical research on GSCM is examined, it is discovered that different

writers have described more than 10 GSCM aspects but in this research seven dimensions are selected to be included. The following sections provide a brief review of these selected seven green practices in SCM.

### **Green Purchasing (GP)**

The first dimension we have included in this research is Green Purchasing, it is a GSCM practice which refers to the purchasing and procurement of products and materials that do not hurt human health or the environment.

As purchasing professionals become more aware of environmental regulations, they've started undergoing environmental compliance audits to study current laws, spot new restrictions, and evaluate how environmental initiatives assist their businesses to comply with shifting legal requirements (Min and Galle 1997).

The term "green purchasing" refers to incorporating environmental issues and concerns into the procurement process (Rao and Holt 2005), To buy an environment-friendly product or material the choosing of the proper supplier may help a firm achieve its environmental objectives. However, picking the right supplier is difficult and it is not easy to find a suitable supplier to improve environmental performance on its own.

The purchasing and supply process must be handled by adopting a strategic and collaborative understanding with the suppliers after a suitable supplier is identified. During the supplier selection and management process, it is critical to determine if the supplier satisfies the firm's environmental requirements (Paulraj 2011) so it is necessary to do supplier selection accordingly by doing proper audits and searches.

### **Green Manufacturing (GM)**

The second dimension is Green Manufacturing, it is a GSCM practice which establishes and renews the production

processes and follows enviro-friendly practices with manufacturing during the ring of a product enter chess active change in the organization's manufacturing techniques, we have selected GM because the processes related to help crease the resource wastes, energy conservation, optimization manufacturing process, and enhancing a company's overall performance or image collectively (Khan et al. 2017). To minimize the negative influence on the environment, companies are attempting to reuse, remanufacture, and recycle old items as part of their environmental and ecological responsibilities (Paul, Bhole, and Chaudhari 2014), GM can lead to lower raw material costs, helps in efficiently getting production gains area is less energy consumption and less water wastage, it also reduces environmental and occupational safety expenses and hero corporate image. Green manufacturing is essentially the adoption and planning of actions in the production system few use fewer energy resources and pollute the environment as little as possible, it is not wrong if we say that it is one of the most important phases in GSCM operations.(Yildiz Çankaya and Sezen 2019a).

### **Green Marketing (GMar)**

The third dimension is Green marketing. As per scholars, n marketing is the practice of promoting environment-friendly products because it is also a sustainable advertising strategy and it helps manufacturing firms to reduce their carbon footprint. According to (Pride and Ferrell 1993) GMar is defined as attempts to create, advertise, price, and distribute products that do not harm the environment while satisfying human needs with a little negative impact on the natural environment so here in this research we will take green marketing as more for promotional strategies.

Companies that have implemented green initiatives have gained market share in some

critical areas and any organization that claims green marketing should clearly describe environmental advantages, and environmental features and explain how benefits are obtained and justified or use understandable terminology and images (P B Singh and Pandey 2012).

Companies must first segment the market based on degrees of pro-environmental buying behaviour then target the "greener" market categories in order other green product offers (Álvarez Gil et al. 2001). Green Distribution (GD)

The fourth dimension we selected is Green distribution, all actions aimed at reducing or eliminating environmental harm and waste during transportation are referred to as a green distribution, it helps firms to help sieve superior economic and environmental performances and it is a significant activity that has an impact on a GSCM performance (Gao, Li, and Song 2009). The performance of green distribution is affected by the fuel consumed by vehicles which are transferring the goods from one channel to another, the frequency of transport operations, the distance between the channels, and the features of the packaging which includes weight, shape, and material because of material handling (Sarkis 2003).

Green distribution minimizes environmental harm and makes the possibility of making greener choices across the whole supply chain.

#### **Green Packaging (GPac)**

The fifth dimension is Green packaging, also known as "ecological packaging", which is made entirely of natural plants which can be recycled or reused and won't degrade, and it encourages sustainable development. Additionally, it poses less of a threat to the environment, human health, animals, and of one life. (Zhang and Zhao 2012). The practices followed in green packaging procedures while biodegradability, cutting back on unnecessary

packaging, utilizing paper for wrapping, using much less polystyrene, being simple to disassemble, as well as using simple packaging materials. Leading corporations such as Coca-Cola, PepsiCo, Procter & Gamble, H.J. Heinz, and International Paper have introduced recyclable and reusable packaging as part of their green packaging initiatives because packaging materials are a major source of solid waste, a successful green packaging program is important to the overall environmental program's success (Min and Galle 1997).

The core of green packaging is its material, which reduces environmental pollution and conserves and replaces some of the costly or scarce resources in those waste resources.

Green packaging materials are recycled materials that have the least impact and the highest usage coefficient throughout the life cycle.

Green packaging is crucial not only because it is interlinked with other elements of the value chain, but also because it has a direct impact on the environment (Sarkis 2003)

#### **Internal Environmental Management (IEM)**

Internal environmental management refers to a company's establishment of its environmental policies and objectives to ensure environmental protection (Chan et al. 2012), Interdepartmental collaboration for environmental improvements focuses on the creation of an environmental management system, upper- and mid-level management support for sustainability policies they are all examples of internal environmental management activities (Zhu, Feng, and Choi 2017).

The reason to select IEM as a dimension in this study is Internal environmental activities have generally been the focus of corporate environmental management that's why to perform efficiently with EMS there is a particular standardized certification which is

known as ISO 14001 which has the clauses manage the environmental system and it's belongings and ISO 14001 also shows that a corporation has implemented an EMS.

Environmental management is used by businesses to assess performance across industries and within their facilities and comparing operations to identify environmental leaders and non-adopters is critical to bringing firms closer to successful practices which also helps them in setting a benchmark (Mitchell and Hill 2009).

An EMS often offers each facility operational standards, such as an environmental policy and procedures that outline activities, as well as employees which who assigned to environmental concerns, Internal corporate environmental evaluation may be substantially facilitated by an EMS's complete cycle and the extent to which corporation is deploying it across their enterprises (Matthews 2003).

#### **Environmental education (EEd)**

The last dimension is Environmental Education, According to (Misseynani, Marouli, and Papadopoulou 2020) education can either serve as a tool to help the next generation fit into the logic of the existing system and promote conformity, or it can be used as a way for people to engage critically and creatively with reality and learn how to take part in changing their world. The history of environmental education indicates a strong link between developing environmental concerns and their associated difficulties, the way environmental education was defined and promoted is always been an issue for some organizations. Environmental education is viewed as one of the most significant strategies for assuring human resource development and paving the root for a more sustainable society (Leicht et al. 2018). Recent empirical research save highlighted the necessity of education for successful green

management in businesses (Sarkis, Gonzalez-Torre, and Adenso-Diaz 2010).

The nature of environmental education has been the subject of significant and critical debate at the national and international levels in recent years and many scientists and researchers have agreed that environmental education in the future decade should emphasize easing the quality of performance of all organizations (Tilbury 1995). Environmental education is said to fulfil two essential functions the first one is to educate employees on the company's environmental policies, and the second is to modify employees' habits to develop a more lasting and responsible relationship with the environment (Sammalisto and Brorson 2008). The environmental education community has reacted in a variety of ways to the deliberate attempts to transform environmental education into education for sustainable development (Hesselink 2000).

#### **Absorptive capacity**

Here the absorptive capacity will be working as a related interaction between the GSCM practices and the environmental performance of the supply chain.

An organization's absorptive capacity is not only determined by observing things, it depends on information being transferred between and among subunits, some of which may be far from the place of introduction, in addition to its direct connection with the outside world.

Absorptive capacity relates not just to an organization's ability to acquire or work effectively, but also to its ability to exploit it.(Diabat and Govindan 2011). S of true research implies that absorptive capacity might develop as a result of a company's production processes or it can be developed as a firm's research and development investment.

According to research on cognitive structures and problem-solving techniques, an individual's learning is enhanced when new information is connected to the individual's current knowledge structure. Companies also make direct investments in absorptive capacities such as when they send employees for advanced technical training (Cohen and Levinthal 1990b).

In terms of remembering information, the level of effort is essential and it is insufficient to just expose an individual short to relevant past information to create an efficient absorptive capacity, whether for general knowledge, problem-solving, or learning skills (Matusik and Heeley 2001). Individual absorptive capacities and organizational absorptive ability tend to increase cumulatively as a result of earlier investments in the development of an organization's constituents, much like individual absorptive capacities because the absorptive capacity of an organization is determined by the absorptive capabilities of its members (Zahra and George 2002).

Individuals other's talents and expertise will be improved when an organization develops a broad and active network of internal and external interactions by which individual absorptive capacities are thereby increased, while the organization's absorptive capacity is reinforced.

### **Supply Chain Environmental Performance**

Environmental performance is a measure that assesses a company's capacity to decrease pollution, waste, hazardous substance use, and environmental hazards. Environmental impact is defined as the potential negative influence on the environment that a business may have as a result of the usage and release of chemicals into the environment. (Choi and Hwang 2015).

This dimension is concerned with the influence of organizational operations on the environment, the identification of the basis of

environmental issues must be a focus of every organization such as focusing on production, transportation and the whole procuring process in the supply chain, these focuses may result in the understanding of basic environmental challenges and the provision of effective and efficient solutions (Wijethilake 2017). Manufacturing companies must take proactive steps to implement GSCM practices to provide improved environmental performance to their consumers and there is a significant number of green supply chain management research which have looked into whether implementing environmental supply chain strategies improves business performance or not (Sarkis 2012). Organizations utilize limited resources and pollute the environment by interfering with hazardous wastes, air, water, and soil that they discharge into the environment while creating goods and services to fulfil requirements (Azapagic 2003). Numerous studies show that green activities, such as lowering waste output and energy and material usage, favourable rabble influence on environmental performance and minimizing waste generated by enterprises, green practices help to enhance environmental performance.

### **Hypothesis Development**

The paper of (Yildiz Çankaya and Seen 2019b) shows the direct impact of green practices on supply chain environmental performance and it proposes the following hypothesis:

- H1a. There is a positive relationship between Green Purchasing and the supply chain's environmental performance.
- H1b. There is a positive relationship between Green Manufacturing and the supply chain's environmental performance.
- H1c. There is a positive relationship between Green Marketing and the supply chain's environmental performance.

- H1d. There is a positive relationship between Green Distribution and the supply chain's environmental performance.
- H2e: There is a positive relationship between Green Packaging and the supply chain's environmental performance.
- H2f: There is a positive relationship between internal environmental management and the supply chain's environmental performance.
- H2g: There is a positive relationship between Environmental education and the supply chain's environmental sustainability performance.

In this research, we have followed the structural framework of (Yildiz Çankaya & Sezen, 2019), but if the absorptive capacity is taken as the moderator between Green practices and SCEP it proposes the following hypothesis:

- H2a. When absorptive capacity is taken as a moderator, green purchasing has a directly proportional relationship with supply chain environmental performance.
- H2b. When absorptive capacity is taken as a moderator, green manufacturing has a directly proportional relationship with supply chain environmental performance.
- H2c. When absorptive capacity is taken as a moderator, green marketing has a directly proportional relationship with supply chain environmental performance.
- H2d. When absorptive capacity is taken as a moderator or, green distribution has a directly proportional relationship with supply chain environmental performance.
- H2e. When absorptive capacity is taken as a moderator, green packaging has a directly proportional relationship with supply chain environmental performance.
- H2f. When absorptive capacity is taken as a moderator, Internal environmental management has a directly proportional

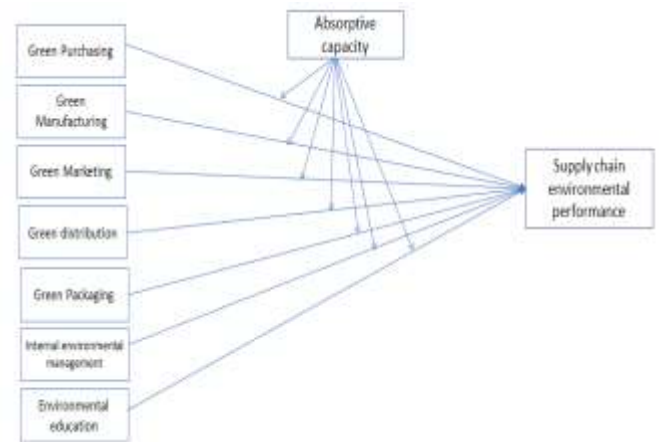
relationship with supply chain environmental performance.

- H2g. When absorptive capacity is taken as a moderator, environmental education has a directly proportional relationship with supply chain environmental performance

## Research Methodology

### Research Design

The conceptual framework for this research is given below:



### Research Approach

The research conducted for this paper is quantitative, the quantitative design has been chosen because quantitative research is preferable to qualitative research the reason for which is, it is more scientific, focused, fast and has a particular objective.

### Sample Size

The sample size will be calculated by using G\*power in which we have selected Linear multiple regressions: Fixed model, R<sup>2</sup> deviation from zero, in the result of which the sample size is 103. The version of G\*power we have used for the calculation is G\*power 3.1.9.6.

### Sampling Technique

The sampling technique used for this research is stratified random sampling, the strata are selected from different paint manufacturing industries following appropriate supply chain management procedures.



**Respondents of Research**

The research took place in a paint manufacturing firm that has more than 50 employees in Karachi, Pakistan. The respondents should be connected with the firm for more than 6 months and they must have well knowledge of environmental management systems and they should be above 25 years of age.

**Statistical Tools**

SMART-PLS 4.0 and SPSS both software are used to check the confirmatory factor analysis (CFA). PLS-SEM (partial least squares-structural equation model)

**Statistical Inference Technique**

The PLS-SEM will be used as a statistical inference technique; which is used to check outer loading and discriminant values of collected responses and it is a method that allows the estimation of complex cause-effect relationships in path models with latent variables. The soft software used for the inferential analysis of the data is Smarts 4.0.M3 software.

**Measurement of Model**

The two ways of measurement of the model are construct reliability and discriminant validity, measured in SMART PLS 4 software.

**Data Analysis**

**Convergent Validity**

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	The average variance extracted (AVE)
GP	0.851	0.850	0.900	0.692
GM	0.718	0.758	0.843	0.645
GMR	0.804	0.826	0.872	0.633
GD	0.817	0.819	0.891	0.732
GPC	0.772	0.787	0.867	0.684
GMIE	0.829	0.836	0.898	0.745

E	0.784	0.804	0.875	0.701
CA	0.858	0.868	0.904	0.703
SC	0.867	0.878	0.903	0.652

**Table 5.1**

Convergent validity verifies the reliability of data amongst the variables which are paired or used by more techniques for the singular matrix to find the level of data.

According to the famous researchers, the values in the convergent validity table, the average variance extracted (AVE) should be greater than 0.5 and According to this table, the AVE values are for all 7 green practices, the moderator absorptive capacity and SCEP and the findings on the table show that the constructs of this research are reliable and valid.

Composite reliability must be more than 0.7 and the above table shows that all the values of green practices and AC as well as SCEP are 0.7 or greater than it. Cornbrash's alpha must be acceptable on 0.7 and all the values above show the accuracy of this statement.

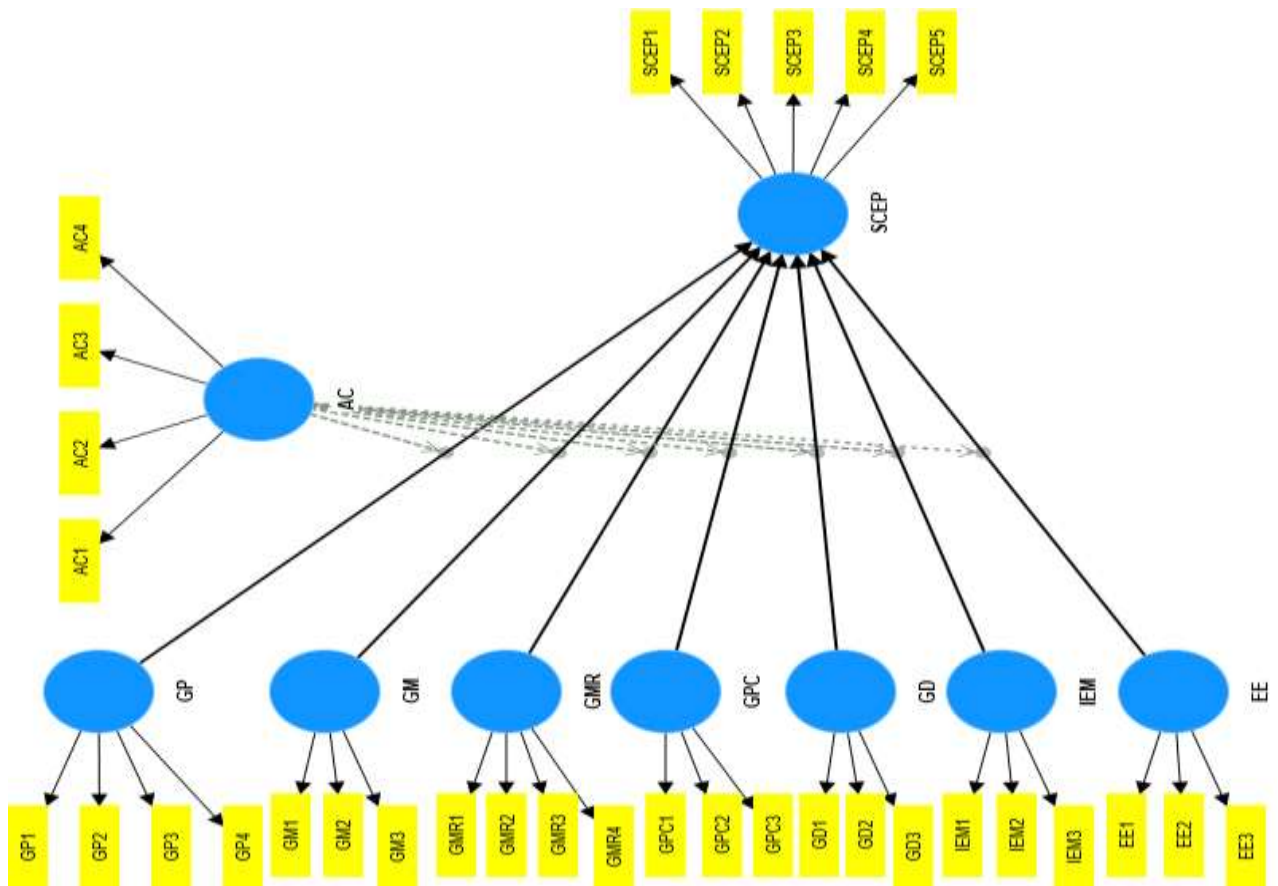
**Discriminant Validity**

The discriminate validity tests are acceptable after AVE loads of ads with more than 0.5 for each. In the Discriminant validity of this paper, the author has analysed a strong relationship between GSCM Practices and SCEP of 0.8, with AC and SCEP having positive relation of 0.80 and AC and Green practices relationship is h with a value of 0.79 between Green practices of the supply chain, absorptive capacity And SCEP.

**Table 5.2**

	AC	EE	GD	GM	GMar	GP	GPac	ITEM	SEP
AC	0.790								
EE	0.628	0.837							
GD	0.775	0.780	0.856						
GM	0.777	0.806	0.796	0.803					
GMar	0.743	0.601	0.754	0.777	0.796				
GP	0.744	0.676	0.749	0.825	0.755	0.832			
GPac	0.623	0.731	0.722	0.748	0.637	0.729	0.827		
IEM	0.788	0.611	0.708	0.741	0.634	0.736	0.643	0.863	
SCEP	0.807	0.720	0.758	0.831	0.748	0.740	0.668	0.699	0.807

**Result and Findings:  
Structural Path Model**



**Table 6.1**  
**Path Coefficients Table**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/S TDEV )	P values
GP -> SCEP	0.114	0.128	0.270	0.422	0.000
GM -> SCEP	0.303	0.331	0.276	1.098	0.000
GMR -> SCEP	0.137	0.128	0.226	0.605	0.000
GD -> SCEP	0.167	0.175	0.324	0.052	0.000
GPC -> SCEP	0.111	0.361	0.228	0.049	0.000
IEM -> SCEP	0.267	0.191	0.227	0.118	0.000
EE -> SCEP	0.222	0.152	0.276	0.803	0.000
AC x GP -> SCEP	0.296	0.277	0.442	0.669	0.000
AC x GM -> SCEP	0.494	0.393	0.480	1.030	0.000
AC x GMR -> SCEP	0.824	0.750	0.353	0.234	0.000
AC x GPC -> SCEP	0.102	0.236	0.394	0.260	0.000
AC x GD -> SCEP	0.170	0.243	0.425	0.400	0.000
AC x IEM -> SCEP	0.132	0.103	0.300	0.441	0.000
AC x EE -> SCEP	0.510	0.420	0.526	0.969	0.000

To prove the validity and acceptance of the hypothesis the p-values must be less than 0.05 the table above shows the p-values of the data observed or collected is less than 0.05 i.e. all the values are nearly 0.00 which means the hypothesis is accurate.

**Hypothesis Testing Results**

The below table shows the path coefficient of the structural model:

	Path coefficients
GM -> SCEP	0.911
GP -> SCEP	0.871
GMR -> SCEP	0.791
GD -> SCEP	0.912
GPC -> SCEP	0.900
IEM -> SCEP	0.819
EE -> SCEP	0.752
AC x GP -> SCEP	0.876
AC x GM -> SCEP	0.897
AC x GMR -> SCEP	0.912
AC x GD -> SCEP	0.785
AC x GPC -> SCEP	0.890
AC x IEM -> SCEP	0.965
AC x EE -> SCEP	0.912

**Table 6.2**

The values of the path coefficients are should be nearly 1 which shows the accuracy of the correlation between the variables of this research.

The hypothesis taken from the base paper of this research shows the following results of the path coefficient.

**H1a:** The relationship between GP and SCEP was significant with 0.911 showing that the GP has a related positive and effective influence on the SCEP. The GP changes in direct extent SCEP with a coefficient of 0.911. This unmistakably shows a 1 unit focuses change GP will get 0.911 focuses change the SCEP.

**H1b:** The relationship between GM and SCEP was significant with = 0.871 showing that GM has a related positive vital influence on the SCEP. The GM changes in direct

extent SCEP with a coefficient of 0.871. This unmistakably shows a 1 unit focuses change GM will get 0.871 focuses change the SCEP

**H1c:** The relationship between GMar and SCEP was significant with  $\beta = 0.791$  showing that GMar has a related positive vital influence on the SCEP. The GMar changes in direct extent SCEP with a coefficient of 0.791. This unmistakably shows a 1 unit focuses change GMar will get 0.791 focuses change the SCEP.

**H1d:** The relationship between GD and SCEP was significant with  $\beta = 0.912$  showing that GD has a related positive vital influence on the SCEP. The GD changes in direct extent SCEP with a coefficient of 0.912. This unmistakably shows a 1 unit focuses change GD will get 0.912 focuses change the SCEP.

**H1e:** The relationship between GPac and SCEP was significant with  $\beta = 0.900$  showing that the GPac has a related positive vital influence on the SCEP. The GPac changes in direct extent SCEP with a coefficient of 0.900. This unmistakably shows a 1 unit focuses change GPac will get 0.900 focuses change the SCEP.

**H1f:** The relationship between IEM and SCEP was significant with  $\beta = 0.819$  showing that the IEM has a related positive vital influence on the SCEP. The IEM changes in direct extent SCEP with a coefficient of 0.819. This unmistakably shows a 1 unit focuses change IEM will get 0.819 focuses change the SCEP.

**H1g:** The relationship between EE and SCEP was significant with  $\beta = 0.752$  showing that the EE has a related positive vital influence on the SCEP. The EE changes in direct extent SCEP with a coefficient of 0.752. This unmistakably shows a 1 unit focuses change EE will get 0.752 focuses change the SCEP.

The following hypothesis is with the moderating role of absorptive capacity:

**H2a:** The relationship between GM and SCEP was significant with  $\beta = 0.876$  showing that the GM has a related positive and proportional impact on the SCEP when absorptive capacity is performed as moderator. The GM changes in direct extent SCEP with a coefficient of 0.876. This unmistakably shows a 1 unit focuses change GM will get 0.876 focuses change the SCEP

**H2b:** The relationship between GP and SCEP was significant with  $\beta = 0.897$  showing that the GP has a related positive vital influence on the SCEP. The GP changes in direct extent SCEP with a coefficient of 0.897. This unmistakably shows a 1 unit focuses change GP will get 0.897 focuses change the SCEP.

**H2c:** The relationship between GMR and SCEP was significant with  $\beta = 0.912$  showing that the GMR has a related positive vital influence on the SCEP when absorptive capacity is performed as moderator. The GMar changes in direct extent SCEP with a coefficient of 0.912. This unmistakably shows a 1 unit focuses change GMar will get 0.912 focuses change the SCEP.

**H2d:** The relationship between GD and SCEP was significant with  $\beta = 0.785$  showing that the GD has a related positive vital influence on the SCEP when absorptive capacity is performed as moderator. The GD changes in direct extent SCEP with a coefficient of 0.785. This unmistakably shows a 1 unit focuses change GD will get 0.785 focuses change the SCEP.

**H2e:** The relationship between GPac and SCEP was significant with  $\beta = 0.890$  showing that the GPC has a related positive vital influence on the SCEP when absorptive capacity is performed as moderator. The GPac changes in direct extent SCEP with a coefficient of 0.890. This unmistakably

shows a 1 unit focuses change GPac will get 0.890 focuses change the SCEP.

**H2f:** The relationship between IEM and SCEP was significant with  $\beta = 0.965$  showing that the IEM has a related positive vital influence on the SCEP when absorptive capacity is performed as moderator. The IEM changes in direct extent SCEP with a coefficient of 0.965. This unmistakably shows a 1 unit focuses change IEM will get 0.965 focuses change the SCEP.

**H2g:** The relationship between EE and SCEP was significant with  $\beta = 0.912$  showing that the EE has a related positive vital influence on the SCEP when absorptive capacity is performed as moderator. The EE changes in direct extent SCEP with a coefficient of 0.912. This unmistakably shows a 1 unit focuses change EE will get 0.912 focuses change in the SCEP.

## Conclusion

It is important to make the environment friendlier as global warming and pollution are damaging it, but organizations are not taking it seriously.

As our objective was to find the effects of GSCM practices on supply chain integration flouncing organization's environmental performance and we were finding the impacts of our independent variables of GSCM practices which includes **GM, GP, GMar, GD, GPac, IEM, EE** and keeping the absorptive capacity as moderator which effects on organization's environmental performance.

The independent variables are selected to see whether these are essential for absorption and at which capacity the paint manufacturing firms are accepting it to make their environmental performance the supply chain efficient.

The main aim of the house paint manufacturing industry is because they are one of the biggest contributors to harming the environment and changing the SCM practices

in this industry will have a great and influential impact on the environment.

We used SPSS software as well as SMART PLS 4 software for our calculations and the data is collected from the employees who had related experience in the particular field in paint manufacturing firms. So all the green practices have a significant impact on SCEP, and it also helps in identifying that the absorptive capacity of a firm is an important part to make our SCEP better because it has a positive impact a have great importance in making SCEP effective and efficient.

## Recommendations

This article and results will help us to make our organizational sustainability performance more effective and efficient. This study states the significance of performing with a win-win principle where profit aims s join with not only the expansion of profit but also many social benefits. Managers will now be able to gain information and facts about the virtual benefit of every green practice which is important in this modern era. Green purchasing is one of the important components that will decrease the environmental influence of the product in the entire era. Green marketing offers a big chance and an opportunity to do business and run the firm smoothly and connect them with society and organization which is doing many things for the

Environment. The firms which are taking action to make the environment better will get more benefits and they can have a great word of mouth in this global warming and polluted era.

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