

ORGANIZATIONAL ORIENTATIONS, GREEN SUPPLY CHAIN PRACTICES AND ORGANIZATIONAL PERFORMANCE

A. Mahmood¹, A. Khaliq², A. Ahmad³

^{1,2}Institute of Business & Management, University of Engineering & Technology, Lahore – Pakistan

³Institute of Quality & Technology Management, University of the Punjab, Lahore – Pakistan

ABSTRACT

This objective of this study was to examine and to comprehend the antecedent roles of strategic organizational orientations (i.e. supply chain, environmental and marketing orientation) on both the execution and results of green supply chain management practices by utilizing resource-based and strategic choice theories. A questionnaire based survey method was used to gather data about the antecedent roles of organizational orientations, green supply chain management practices/strategies and corporate performance from supply chain executives of large Pakistani Fast moving consumer goods companies. To empirically verified the hypothesis partial least square structural equation modelling technique used. Result outcomes in study propose that a capabilities of marketing orientation and blend of supply chain orientation and environmental orientation positively impact the usage of green supply chain management hones, and positively improve corporate performance. In addition results also propose that combine capability of supply chain and environmental orientations and green supply chain practices ought to be versatile to the changing corporate environment.

Keywords: *Organizational Orientation, Green Supply chain Practices, Corporate Performance, Fast Moving Consuming Goods, Pakistan*

1) INTRODUCTION

The aggregate figure of world's total living population was 7.562 billion starting at July 1, 2016 as per the medium fertility gauge by the population division of US Dept. of Economic and Social Affairs. With a specific end goal to satisfy the demand of purchasers that keep expanding and driving by population, more ventures and firms are rising; both locally and all over world. Consequently, the economy builds the level of energy and material utilization taking after the development of the businesses, which adds to the environmental and asset exhaustion issues/problems. Presently, it's a standard for organizations to face rivalry, tight directions and group pressures. The organizations not just need to create quality goods/services that satisfy client needs and fulfillment, additionally to deliver goods/services with shorter lead times and restricted assets in the method for environment sustainability (Rahim, Fernando & Saad, 2006). The proper technique that encourages is to put resources into the correct green innovation or technology with intend to minimize or kill wastages including perilous, chemical, energy discharges and solid waste along different stages of the supply network. These stages incorporate material resourcing, product planning product fabricating processes, final good deliverance and end-of life good's administration. For competitive advantage effective management or administration has produced the supply chain management logics and related practices.

The accompanying definitions was an effort to illuminate the idea of supply chain management. As Morgan (1997) characterized and incorporated SCM as: *"the arrangement of purchasers, providers, and clients and their procedures to accomplish a propelled type of upper hand or reasonable advantage"*. Similarly, Morash & Clinton (1997) and Wisner (2003) characterize supply chain as: *"the organizational endeavors to oversee and coordinate material and related data streams keeping in mind the end goal to get nearer to clients."*

The importance and scope of supply chain in recent time has expanded primarily from managing purchases and supplies to body of knowledge leading with integration, client satisfaction and firm performance outcomes. In present century, activities of green supply chain management (GSCM) are progressively on the agenda of numerous associations (Zhu, Sarkis & Lai, 2013; Kirchoff, Tate & Mollenkopf 2016). Supervisors are roused or motivated by the possible attracted benefits connected with

green supply chain management, including upgraded notoriety, expanded business proficiency, adequacy, market differentiation, and income development (Tate, Ellram & Kirchoff, 2010; Wu & Pagell, 2011; Golicic & Smith, 2013). The potential for financial advantages is key for managerial reception of green rehearses/practices and the proper resource allocation. Besides, being "green" is too critical from a long haul financial point of view - without resources, business and utilization of merchandise is extremely compelled (Rao and Holt, 2005 & Bell, Mollenkopf & Stolze, 2013). However, managers remain exceedingly impacted and remunerated by the idea promoted by famous American economic expert, Milton Friedman (1962), that the matter of business will be business (i.e. to make benefits) and due to this, minimize consideration on other clashing urgencies, for example, environmental concerns or issues (Busch, Bauer & Orlitzky, 2015).

Research Studies of Golicic & Smith, (2013) and Wu & Pagell, (2011) had discovered confirmation of positive substantial monetary and environmental results connected with green supply chain management rehearses. Notwithstanding, the Cost-benefit exchange offs or trade-offs connected with green supply chain management (GSCM) keep on being discussed. Managers might be uncertain which green practices are the most profitable to create, or how to most viably create them (Rao and Holt, 2005; Kleindorfer, Singhal & Van Wassenhove, 2005). While researchers agree that particular green-related resources and abilities are important to make monetary and ecological advantages, a hefty portion of these resources and abilities still can't seem to be researched (Guang et al., 2012).

Many green supply chain antecedents have already being studied in previous literature like stakeholders, administrative, and institutional weights (Pagell and Wu, 2009; Zhu, Sarkis & Lai, 2013). But in contrast to these very limited attention has been given on organizational orientations as green supply chain's antecedent. Practitioners required more consideration to comprehend their effect since they represent to vital direction and practices that are executed all through the firm to make predominant performance (Chan, Chan & Wang, 2012).

Seeing more about the assets and capabilities required to actualize green practices guarantee managed monetary and ecological execution or performance may lie in company's orientation toward green supply chain management issues. Strategic organizational orientation unequivocally

impact firm behavior leading ultimately to competitive firm performance and are basic factors incorporate when exploring the results of business rehearses (Noble, Sinha & Kumar, 2002). This is especially critical in the context of supply chain because strategic orientation guide on qualities, behavior and decision making inside and over the supply chain network (Mello and Stank, 2005). In this manner, the motivation behind the present research is to discourse the role of organizational orientation (environmental, marketing and supply chain) as significant capabilities or antecedents for developing and using profitable green supply chain rehearses or mechanism and its impact of corporate performance upgradation.

2) LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1) Green Supply chain Management:

Researchers have sought after research examining the mix of environmental and financial sustainability through the advancement of framework and solutions which make a “double concentration: on the firm... and on the External Society” (Whiteman, Walker & Perego, 2013). Looking for ways that lead firms to this double concentration, specialists have concentrated on Green supply chain management on the grounds that it touches almost each part of the firm and consequently have a high potential to accomplish issues regarding the improvement of environment (Tate, Ellram & Kirchoff, 2010).

Studies on green SCM has usually centered around the useful supply chain’s functions only, for example, purchasing supplies and their administrations (Carter & Dresner, 2001). While limited degree of consideration found on the scope or reach of vital capabilities and practices. Selected research study of Sarkis (2012) started to coordinate green practices all through numerous business internal units and different levels of suppliers and clients, stamping these practices as vital capabilities which are more implicit and hard to intimate, and hence found more profitable. Subsequently, Griggs et al., (2013) characterized green supply chain management as a key vital capability comprising of procedures, practices, and strategies that focus on dealing with the natural or environmental effect of inventory network operations.

Literature of green supply chain has taken two essential and fairly dissimilar paths (i.e. empirical and conceptual) an empirical way primarily focuses on characterizing and operationalizing green management exercises (Mitra & Datta, 2014; Zhu, Sarkis & Lai, 2008 and Rao & Holt, 2005) Whereas the conceptual wayput spotlights on key strategic ramifications and theoretical improvement (Darnall, Jolley & Handfield, 2008; Guang et al., 2012). While both ways set green supply chain as a vital capability that enhances the performance of firm.

Present study test the theoretical-based model of green supply chain management that determine how firms seek after monetary and environmental objectives at the same time or simultaneously. This “extensively integrative” green supply chain approach recognize that coordinating and measuring intra-and inter firm green practices can prompt to a maintainable competitive benefit or advantage (Sarkis, 2012; Tate, Dooley & Ellram, 2010). Such extensively integrative green supply chain approach incorporates coordinated life-cycle supply chains administration; goods packaging and process plan for environment administration of the upstream, downstream and closed loop supply chain practices. Zhu, Sarkis & Lai, (2008) characterized the extensively integrative green supply chain management approach by five dimension; green purchasing, investment recovery, internal environment administration, cooperation with clients and eco-design.

2.2) Organizational Orientation--Green supply chain management

Organizational orientation are socially perplexing intuition and learning forms that are one of a kind, difficult for contenders to intimate, and resonate inside all through the firm (Hult et al., 2008). These relationships have driven practitioners to consider orientation as immaterial strategic abilities representing complex intellectual behavior that give an underlying organizational decree toward strategic objectives (Bowen et al., 2001). Managers perceive the incentive in organizational orientation and will create them with an intent to directly and indirectly affect performance of the firm positively (Hult et al., 2008; Mello & Stank, 2005; Min, Mentzer & Ladd, 2007).

Practices of green supply chain intelligently divided particularly into three distinct subjected themes that can be allied to organizational orientation. First theme is environmental allied to green rehearses involving both the

administration of the environmental effect of the supply network and the monetary esteem determined thereof, operationalized by environmental orientation (Banerjee, Iyer & Kashyap, 2003; Kirchoff, Tate & Mollenkopf, 2016). Second is a coordinated marketing theme connected to supply chain management practices that involved meeting firm performance objective through behavioral components and decision criteria, operationalized by market orientation (kholi & Jaworski, 1990; Green, McGaughey & Casey, 2006). Third one is an explicitly monetary theme connected to supply chain rehearses included in meeting the business goals with proficient and powerful supply chain administration, operationalized by Supply chain Orientation (Mentzer et al., 2001; Kirchoff, Tate & Mollenkopf 2016). These forerunners are the vital abilities that give the establishment to effectively creating and actualizing profitable green supply chain practices.

2.3) Environmental orientation and green Supply Chain management

Environmental orientation (EO) is characterized as “acknowledgment by managers on the significance of environmental issues confronting their organizations”. Environmentally orientated organizations actively reconfigured the corporate commercial practices to lessen the environmental effect of organization’s operations and good (Banerjee, Iyer & Kashyap, 2003).

Environmental Orientation has been appeared to display the properties of a strategic ability since it manages organization strategies, system and behavior, thus ly has impact on the organization performance or outcomes (Chan, Chan & Wang, 2012; Banerjee, Iyer & Kashyap, 2003).

Properties identified with interior and exterior connections that cultivate support for firm’s environment obligation are communicated through two measurements: internal and external environmental Orientation (Banerjee, Iyer & Kashyap, 2003). An internal environmental Orientation alludes to an aggregate intra-firm cognizance of employee promise to environmental obligation among individuals all through an organization. An external environmental orientation depends on legitimizing firm exercises to partners (stakeholders) and incorporating the practices of environment with monetary performance objectives (Fraj-Andres, Martinez-Salina & Matute-Vallejo, 2009, Chan, Chan & Wang, 2012).

Organizations need to actively deal with the perplexing and changing corporate commercial environment so as to create effective green supply chain practices. Environmental orientation furnishes managers with organizational procedures that help in developing the processes considerably social perplexing, innovative and hence valuable strategic abilities (Gabler, Richey & Rapp 2015; Kirchoff, Tate & Mollenkopf 2016). Harmonious with the principles of resource based theory (RBT), a vital capability that backings the improvement of green supply chain management by meeting organization's commercial objective, an environmental orientation likewise bolster or support the usage of green supply chain management activities by meeting environmental goals

H₁: The strategic antecedent-Environmental orientation influences the green supply chain management practices.

2.4) Marketing Orientation and green supply chain management:

The dimensions of marketing orientation in supply chain administration procedure as per Wisner (2003) incorporates, making a more prominent level of trust all through the supply network, distinguishing and participating in extra supply chains, setting up more continuous contact with supply chain network's individuals, making a perfect correspondence systems and including all supply network individuals in goods/services marketing plans of the organization. Martin & Grbac (2003); Mentzer, Stank & Esper (2008) stipulated that techniques of supply chain network rely a nearby connection with in-organization sales and marketing assets, procedures and aptitudes. Ferdows & De Meyer (1990); Vokurka, Zank & Lund, (2002); Wisner (2003) built up that good/services provider administration and client relationship procedure; reliable with the market orientation have positively connection with supply chain practices. Likewise Elmuti (2002); Green, McGaughey & Casey, 2006; Tukamuhabwa, Eyaa & Friday, (2011) also discovered that market orientation relates decidedly (positively) and altogether to strategies of supply chain management. Min, Mentzer & Ladd, (2007) contended that market orientation assumes a key part in actualizing supply chain mechanism in addition also .affirmed that market orientation enhances green supply chain through supply chain orientation. Thus, in this way study propose the hypothesis.

H₂: The strategic antecedent-marketing orientation influences the green supply chain management practices.

2.5) Supply chain orientation and green supply chain management

Supply chain orientation (SCO) characterized by Mentzer et al., (2001) as the acknowledgment by universal firms, key implication of the strategic exercises required in dealing with the different streams in a supply chain network. Supply Chain Orientation recognized as an inside philosophy of supply chain management that place in first order the association between supply chain allies or partners furthermore supply chain orientation shaping the supply chain partner's association with organization-wide concentration (Min & Mentzer, 2004; Min, Mentzer & Ladd,2007).

Different behavioral measurements of supply chain orientation i.e. commitment, organizational compatibility, trust, cooperative norm and top management support are developed by Mentzer et al., 2001 and Min & Mentzer, (2004) and define as, Commitment is a long lasting desire by supply chain allies to continually proceed their inert-firm association into the years yet to come. Organizational compatibility represent the degree of similarity in organizational culture. Trust is the manner to relay confidently on firm's supply chain allies or partners. Cooperative norm allude the impression of combine efforts of supply chain partners to progress in direction to achieve common objectives. Top management support helps in keeping solid associations with store network individuals.

These behavioral measurement of supply chain orientation allows organization to increase green activities all through the supply chain network where they are more viable than inside focused practices, and can possibly progress firm execution or performance (Bowen et al., 2001, Mello & Stank, 2005 and Vachon & Klassen, 2008).

Additionally Resource based theory recommend supply chain orientation as key capability due to its ability to make firm's functional procedures that drive the firm to organize the connections of supply chain network efficiently. Intangible capability of supply chain orientation allows the managers to utilize both formal and casual associational mechanisms between the members of supply chain network to assist in long haul way approach to green practices of supply chain. (Kozlenkova, Samaha & Palmatier, 2014).

Thus, in this way study propose the hypothesis.

H₃: The strategic antecedent-supply chain orientation influences the green supply chain management practices.

2.6) Green supply chain management and corporate performance upgradation:

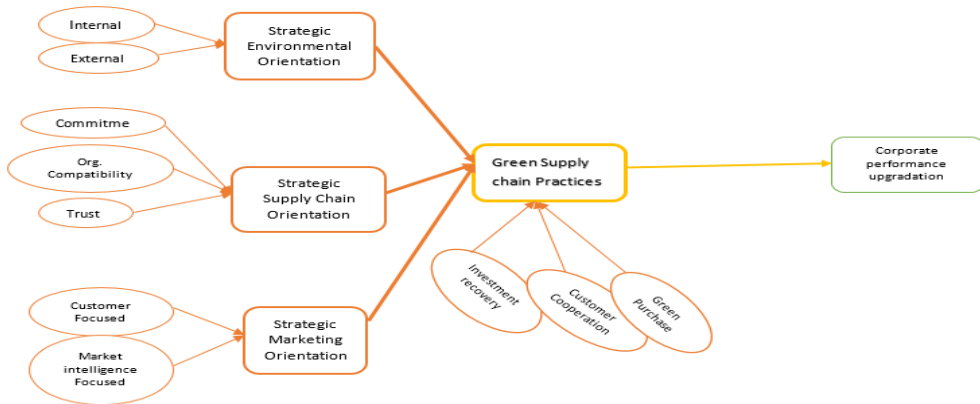
One most critical tenets of resource based theory (RBT) is that distinctions in capabilities of strategic organization orientation help to clarify the differences in firm's competitiveness and output related performance (Crook et al., 2008). Along these lines, the estimation of green practices of supply chain management by Environmental, marketing and supply chain orientation must be associated with firm performance level.

Relating particularly to supply chain administration field, researchers likewise contended that green practices of supply chain management will realize or experienced widespread long term performance outcome through better-quality supervision of environmental, customer related and supply chain partners related risk and through development and continued advancement of organizational orientations capabilities (Gil, Jimenez, & Lorente, 2001; Otto & Kotzab). However, few researchers owing to the gigantic investment included, GSCM is probably not going to add in profitability and firm performance in short-term (Bowen et al., 2001). In recent back studies of Zhu & Sarkis (2004); Chan, Chan & Wang (2012); Green, McGaughey & Casey (2006) and kirchoff, Tate & Mollenkopf (2016) showed that green practices of supply chain able to increase firm's performance outcome in different industries.

Thus, in this way study propose the hypothesis.

H₄: The green supply chain management practices influences the corporate performance.

2.7) Conceptual Framework:



3) RESEARCH METHODOLOGY

The study adopt positivist philosophy and applied quantitative research design method to examine the effect environmental, marketing and supply chain orientation on corporate performance through the mediation impact of green supply chain activities. To examine the study hypothesis empirically, primary data responses has been collected from the target audience (i.e. supply chain executive of package food item distributors) through a well-established survey questionnaire. Such survey questionnaire has two parts, first part contains questions to determine the demographic information of the respondent whereas the second part contains various questions on Likert scale of seven points to measure the selected constructs or variables in order to determine the study's hypothesis.

To collect the primary data response through questionnaire convenience sampling technique is used here as size of population unknown (Farokhi & Mehmoudi, 2012). Survey questionnaires are circulated to potential supply chain executives of package food item distributing firms in Lahore, Pakistan to give their perception on firms' strategies and practices through e-mails and other social media sources. Nearly 450 questionnaires are circulated, from 450 only 350 responses with complete filled questionnaires return back (response rate approximately 77.78%).

In this study instrument used to collect data responses (Survey questionnaire) have questions or items to measure the each selected

construct or factor of the model are primarily taken from the different previous research studies with little needed alteration to assess the hypothesis. Like, Environmental orientation measured by eight questions adopted from earlier studies (Fraj-Andres, Martinez-Salina & Matute-Vallejo, 2009; Kirchoff, Tate & Mollenkopf, 2016). Marketing Orientation measured by eight questions adopted from the earlier studies (Deshpande & Farley 1996; Green, McGaughey & Casey, 2006). Supply chain Orientation measured by ten questions adopted from earlier studies of (Min, Mentzer & Ladd, 2007; Kirchoff, Tate & Mollenkopf, 2016) Similarly, Green Supply chain mechanism consist of three activities are measured by ten questions adopted from earlier studies of (Zhu, Sarkis & Lai, 2013; Chan, Chan & Wang, 2012) and corporate performance upgradation measured by four questions adopted from earlier studies of (Banerjee, Iyer & Kashyap, 2003).

To analyze the respondent's responses part one of questionnaire contains demographic related questions, SPSS-24 has used to exercise different descriptive statistic test i.e. frequency distribution. Whereas Partial least square structure equation modelling (PLS-SEM) has applied through Smart PLS in order to check the reliability of the construct items through Cronbach alpha, composite reliability, factor loading values and to check validity of the construct items through convergent validity test (Average Variance Extracted) and discriminant validity test under measurement model. Whereas, the study proposed hypothesis are tested through path coefficient along with T-statistic and P-value under structural model.

4) DATA ANALYSIS AND FINDINGS

It was found in the analysis of collected data from the respondents that 238 out of 350 participants (70%) contain the relevant supply chain experience ranges from 1 to 10 years in their credentials. Data also showed more participation of supply chain executive 196 (56%) found in data collection in comparison with subordinates 154 (44%). Further the outcome of descriptive statistic in table 1 revealed that 76% of the participant in data collection were male whereas, only 24% of participant were female, it clearly presented the picture of masculinity culture in most of the companies in Pakistan. All stated results have been displayed in Table 1 in term of figures.

Table 1: Demographic Profile of Respondents

N = 350			
Variable	Category	Frequency (f)	Percentage (%)
Experience	• 1-4 years	122	35
	• 5-10 years	116	33
	• 11-15 years	56	16
	• More than 15 years	56	16
Cadre	• Subordinates	154	44
	• Executives	196	56
Gender	• Males	266	76
	• Females	84	24

Source: Researcher calc.

4.1) Measurement Model Analysis:

4.1.1) Reliability and Validity:

During the analysis of Partial least square structure equation modelling through smart PLS usually we have two models (measurement model and structural model). In measurement model, reliability of the constructs or items have been analyzed by two different reliability measures i.e. Cronbach’s α and composite reliability. As per structure equation modelling protocols and the creation of Yap, Ramayah & Shahidan, (2012); Surienty, Ramayah & Tarmizi, (2013) and Hair et al. (2014) Cronbach alpha and composite reliability value of each construct or variable of the study should be more than 0.7. The results output in table 2 shows that all selected constructs of the present study have value of each reliability measures greater than the threshold limit 0.7. Similarly, in measurement model, validity of the construct have been analyzed by distinct validity measures i.e. convergent and discriminant validity. Convergent validity measured through Average variance extracted (AVE) value which according the criterion of Bagaozzi & Yi, (1991); Yap, Ramayah & Shahidan (2012); Surienty, Ramayah & Tarmizi, (2013) and Hair et al. (2014) should have value more than or equal to 0.5. The results output in table 2 shows that all selected construct’s AVE was more than 0.5 as well. Whereas, discriminant validity defines the degree the construct is dissimilar to other construct. According to the criterion of Fornell & Larcker, (1981) under each construct the square root value of AVE should be highest in correlation with other constructs validity. Table 3 shows that all underlying

construct have valid discriminate validity. **Table 2 and Table 3** indicated that the collected data was reliable and valid in every context.

Table 2: Reliability Verses Convergent Validity of Construct

Model Construct	Construct's Items	Factor Loading Value	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Supply chain management orientation	SO1	0.650	0.861	0.894	0.547
	SO2	0.726			
	SO3	0.714			
	SO4	0.714			
	SO5	0.768			
	SO6	0.792			
	SO7	0.801			
Environmental Orientation	EO1	0.708	0.827	0.874	0.537
	EO4	0.713			
	EO5	0.727			
	EO6	0.746			
	EO7	0.719			
	EO8	0.760			
Marketing Orientation	MO1	0.745	0.900	0.920	0.590
	MO2	0.743			
	MO3	0.795			
	MO4	0.792			
	MO5	0.825			
	MO6	0.729			
	MO7	0.749			
	MO8	0.760			
Green Supply Chain Practices	GSCP1	0.757	0.910	0.927	0.585
	GSCP2	0.836			
	GSCP3	0.762			
	GSCP4	0.854			
	GSCP5	0.651			
	GSCP6	0.757			
	GSCP7	0.691			
	GSCP8	0.799			
	GSCP9	0.766			
Corporate Performance upgradation	CPU1	0.830	0.861	0.917	0.734
	CPU2	0.843			
	CPU3	0.920			
	CPU4	0.832			

Source: Researcher Calc.

Note: Loading value of constructs EO2, EO3 & GSCP10 was found below 0.60 therefore was deleted from the model.

Table 3: Discriminant Validity

	CPU	EO	GSCP	MO	SCO
CPU	0.857				
EO	0.768	0.887			
GSCP	0.829	0.874	0.764		
MO	0.655	0.816	0.755	0.768	
SCO	0.547	0.863	0.693	0.660	0.739

Source: Researcher Calc.

4.1.2) Structural Model Analysis:

In structural model, hypothesis of the study was analyzed and tested by Path beta-coefficients, T-statistic and P-value. The outcome of path analysis diagram (figure 1) shows that unit change in supply chain orientation (SCO) will insignificantly decrease the use of green supply practices (GSCP) by 0.2020 with P-value 0053>0.05 (see table 4) appears not to be a significant direct antecedent of green supply chain practice but a unit change in supply chain orientation (SCO) will significantly increase the environmental orientation or capabilities by 0.863 units with P-value 0.00<0.05 (see table 4) and then unit change in environmental orientation of the firm will increase the green supply chain practices by 0.859 units with p-value 0.00<0.05 (see table 4). That means supply chain orientation influence green supply chain practices significantly and positively through mediation of Environmental orientation and have significant influence on corporate performance. Whereas, a unit change in marketing orientation (MO) will significantly increase the green supply chain practices (GSCP) by 0.233 units with P-value 0.013<0.05 (see table 4). Green Supply chain practices have significant positive association (β value = 0.848, P-value 0.000) with corporate performance upgradation (CPU). After introduction of green supply chain practices (GSCP) as mediator, marketing orientation (MO) become insignificant inconnected with corporate performance upgradation (CPU) by β = 0.023 with P-value 0.823 >0.05 (see table 4). **Figure - 1** displays the construct’s path coefficients values. That means marketing orientation influence corporate performance upgradation significantly and positively but indirectly through mediation of green supply chain practices.

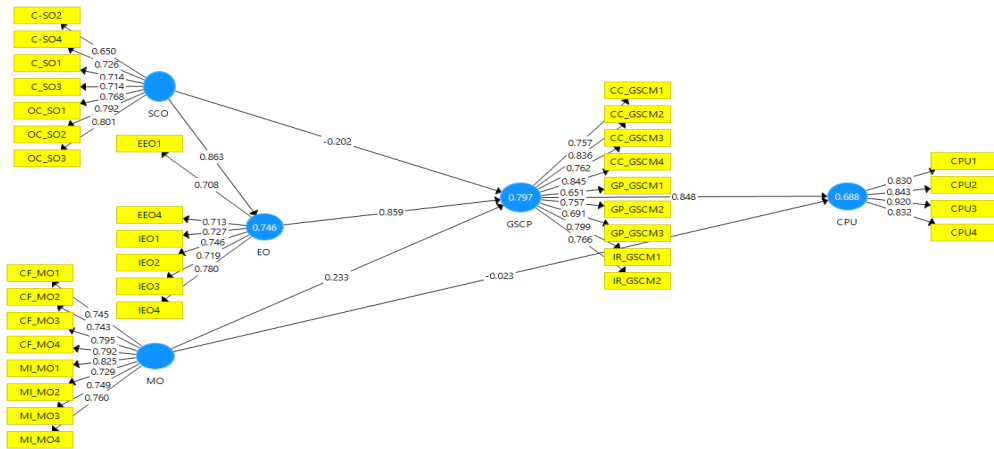


Figure 1: PLS Path Analysis

To support the outcomes of path analysis diagram in partial least square – structure equation modelling technique, the P-values, T-statistic values and path coefficients values of each possible path association have been displayed in **Table-4**.

Table-4: Testing Hypotheses

Relationship	Mean	Coefficient (Beta)	Standard deviation	T-Statistic	P-Value	Hypothesis Output
EO -> GSCP	0.870	0.859	0.127	6.745	0.000	Accepted
GSCP-> CPU	0.842	0.848	0.090	9.440	0.000	Accepted
MO -> CPU	-0.019	-0.023	0.103	0.223	0.823	Rejected
MO-> GSCP	0.226	0.233	0.094	2.490	0.013	Accepted
SC0 -> EO	0.867	0.863	0.027	31.408	0.000	Accepted
SC0 -> GSCP	-0.208	-0.202	0.104	1.933	0.053	Rejected

Source: Researcher Calc.

5) CONCLUSION AND STUDY IMPLICATIONS

The objective of current study to analyzed what parts do strategic organizational orientation play in cultivating effective green supply chain management? The outcomes of the study recommend that strategic organizational orientations can be important capabilities, utilized by managers to create and execute green supply chain hones that in turn, enhances corporate performance.

The outcomes give empirical backing that all three organizational orientation are valuable antecedents or precursors to green supply chain management practices. While previous studies (i.e. Hult et al., 2008; Min, Mentzer & Ladd, 2007), support supply chain orientation as an only supply chain management's antecedent, generally little research has analyzed supply chain orientation and other strategic organizational orientation as green supply chain's antecedents or precursors (Pagell and Wu, 2009). The current study propose indirect effect of supply chain orientation and direct effect of environmental orientation and marketing orientation on green supply chain mechanism these results are found consistent with results of (Banerjee, Iyer & Kashyap, 2003; Green, McGaughey & Casey, 2006; Chan, Chan & Wang, 2012; Kirchoff, Tate & Mollenkopf, 2016). This is vital on the grounds that these basic subjective, firm-level antecedent give additionally support to the possibility that green SCM will turn out to be progressively coordinated with customary SCM.

The results also extend the notion and considered the combine effect of SCO/EO as an organizational capability package (Wiklund & Shepherd, 2003) that can impact green supply chain management positively through causal association between such two antecedents, and permits the researchers a view into the design behind the improvement and usage of fruitful green SCM hones. Similarly, marketing orientation influence green supply chain with an evidence that solid supply chain procedures and practices support the philosophy of marketing orientation and prompt to enhance organizational performance. Moreover, the roundabout impact of SCO on green SCM practices might be clarified by the setting of green SCM. These results add an incremental addition in the theories of supply chain management, permitting a superior comprehension of how antecedent's information can be encouraged, exchanged, and incorporated to enhance performance.

Furthermore, positive association among green supply chain practices and performance output proposes that green practices take into consideration a more adjusted performance scorecard (Fugate, Mentzer & Stank, 2010). In this sense, such outcome can help managers to better comprehend that being green may improve corporate performance in the quest of maintainable competitive benefits.

6) LIMITATION AND FUTURE RECOMMENDATIONS

The current study contains limitations. Like it was conducted with data collected from Supply chain executives of Fast moving Consumer Good Companies in Pakistan only, secondly the research design of the study was quantitative and data was collected through survey questionnaire from small number of respondents.

Based on these limitation, some recommendation for upcoming researcher are presented below:

- i) To increase the generalizability of the present study model future researcher should replicate this study with large data by considering all sector of organizations.
- ii) Future research may use qualitative research design for in-depth analysis of the study, to explore new antecedents of organizational orientation influencing the implementation or usage of green supply chain practices.

REFERENCES

- Banerjee, S.B., Iyer, E.S. and Kashyap, R.K., 2003. Corporate environmentalism: Antecedents and influence of industry type. *Journal of Marketing*, 67(2), pp.106-122.
- Bagozzi, R.P. and Yi, Y., 1991. Multitrait-multimethod matrices in consumer research. *Journal of Consumer Research*, 17(4), pp.426-439.
- Bell, J.E., Mollenkopf, D.A. and Stolze, H.J., 2013. Natural resource scarcity and the closed-loop supply chain: a resource-advantage view. *International Journal of Physical Distribution & Logistics Management*, 43(5-6), pp.351-379.
- Bowen, F.E., Cousins, P.D., Lamming, R.C. and Farukt, A.C., 2001. The role of supply management capabilities in green supply. *Production and operations management*, 10(2), pp.174-189.
- Busch, T., Bauer, R. and Orlitzky, M., 2015. Sustainable Development and Financial Markets: Old Paths and New Avenues (Digest Summary).
- Carter, C.R. and Dresner, M., 2001. Purchasing's role in environmental management: cross-functional development of grounded theory. *Journal of Supply Chain Management*, 37(2), pp.12-27.
- Chan, R.Y., He, H., Chan, H.K. and Wang, W.Y., 2012. Environmental orientation and corporate performance: The mediation mechanism of green supply chain management and moderating effect of competitive intensity. *Industrial Marketing Management*, 41(4), pp.621-630.
- Crook, T.R., Ketchen, D.J., Combs, J.G. and Todd, S.Y., 2008. Strategic resources and performance: a meta-analysis. *Strategic management journal*, 29(11), pp.1141-1154.
- Darnall, N., Jolley, G.J. and Handfield, R., 2008. Environmental management systems and green supply chain management: complements for sustainability? *Business Strategy and the Environment*, 17(1), pp.30-45.
- Deshpandé, R. and Farley, J.U., 1996. Understanding market orientation: A prospectively designed meta-analysis of three market orientation scales. Na.
- Elmuti, D., 2002. The perceived impact of supply chain management on organizational effectiveness. *Journal of Supply Chain Management*, 38(2), pp.49-57.

- Farrokhi, F. and Mahmoudi-Hamidabad, A., 2012. Rethinking convenience sampling: Defining quality criteria. *Theory and practice in language studies*, 2(4), p.784.
- Ferdows, K. and De Meyer, A., 1990. Lasting improvements in manufacturing performance: in search of a new theory. *Journal of Operations management*, 9(2), pp.168-184.
- Fornell, C. and Larcker, D.F., 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, pp.382-388.
- Fraj-Andrés, E., Martínez-Salinas, E. and Matute-Vallejo, J., 2009. A multidimensional approach to the influence of environmental marketing and orientation on the firm's organizational performance. *Journal of Business Ethics*, 88(2), pp.263-286.
- Friedman, M., 1962. *Capitalism and Freedom* University of Chicago Press Chicago Google Scholar.
- Fugate, B.S., Mentzer, J.T. and Stank, T.P., 2010. Logistics performance: efficiency, effectiveness, and differentiation. *Journal of Business Logistics*, 31(1), pp.43-62.
- Gabler, C.B., Richey, R.G. and Rapp, A., 2015. Developing an eco-capability through environmental orientation and organizational innovativeness. *Industrial Marketing Management*, 45, pp.151-161.
- Gil, M.A., Jiménez, J.B. and Lorente, J.C., 2001. An analysis of environmental management, organizational context and performance of Spanish hotels. *Omega*, 29(6), pp.457-471.
- Golicic, S.L. and Smith, C.D., 2013. A meta-analysis of environmentally sustainable supply chain management practices and firm performance. *Journal of supply chain management*, 49(2), pp.78-95.
- Green Jr, K.W., McGaughey, R. and Casey, K.M., 2006. Does supply chain management strategy mediate the association between market orientation and organizational performance? *Supply Chain Management: An International Journal*, 11(5), pp.407-414.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M.C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N. and Noble, I., 2013. Policy: Sustainable development goals for people and planet. *Nature*, 495(7441), pp.305-307.
- Guang Shi, V., Lenny Koh, S.C., Baldwin, J. and Cucchiella, F., 2012. Natural resource based green supply chain management. *Supply Chain Management: An International Journal*, 17(1), pp.54-67.

- F. Hair Jr, J., Sarstedt, M., Hopkins, L. and G. Kuppelwieser, V., 2014. Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), pp.106-121.
- Hult, G.T.M., Ketchen Jr, D.J., Adams, G.L. and Mena, J.A., 2008. Supply chain orientation and balanced scorecard performance. *Journal of Managerial Issues*, pp.526-544.
- Kirchoff, J.F., Tate, W.L. and Mollenkopf, D.A., 2016. The impact of strategic organizational orientations on green supply chain management and firm performance. *International Journal of Physical Distribution & Logistics Management*, 46(3), pp.269-292.
- Kleindorfer, P.R., Singhal, K. and Wassenhove, L.N., 2005. Sustainable operations management. *Production and operations management*, 14(4), pp.482-492.
- Kohli, A.K. and Jaworski, B.J., 1990. Market orientation: the construct, research propositions, and managerial implications. *The Journal of Marketing*, pp.1-18.
- Kozlenkova, I.V., Samaha, S.A. and Palmatier, R.W., 2014. Resource-based theory in marketing. *Journal of the Academy of Marketing Science*, 42(1), pp.1-21.
- Martin, J.H. and Grbac, B., 2003. Using supply chain management to leverage a firm's market orientation. *Industrial marketing management*, 32(1), pp.25-38.
- Mentzer, J.T., DeWitt, W., Keebler, J.S., Min, S., Nix, N.W., Smith, C.D. and Zacharia, Z.G., 2001. Defining supply chain management. *Journal of Business logistics*, 22(2), pp.1-25.
- Mentzer, J.T., Stank, T.P. and Esper, T.L., 2008. Supply chain management and its relationship to logistics, marketing, production, and operations management. *Journal of Business Logistics*, 29(1), pp.31-46.
- Mello, J.E. and Stank, T.P., 2005. Linking firm culture and orientation to supply chain success. *International Journal of Physical Distribution & Logistics Management*, 35(8), pp.542-554.
- Min, S. and Mentzer, J.T. 2004. "Developing and measuring supply chain management concepts", *Journal of Business Logistics*, 25(1), pp. 63-100.
- Min, S., Mentzer, J.T. and Ladd, R.T., 2007. A market orientation in supply chain management. *Journal of the Academy of Marketing Science*, 35(4), p.507.

- Mitra, S. and Datta, P.P., 2014. Adoption of green supply chain management practices and their impact on performance: an exploratory study of Indian manufacturing firms. *International Journal of Production Research*, 52(7), pp.2085-2107.
- Morash, E.A. and Clinton, S.R., 1997. The role of transportation capabilities in international supply chain management. *Transportation Journal*, pp.5-17.
- Morgan, J., 1997. Integrated supply chains: How to make them work. *Purchasing*, 122(8), pp.32-37.
- Noble, C.H., Sinha, R.K. and Kumar, A., 2002. Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. *Journal of marketing*, 66(4), pp.25-39.
- Otto, A. and Kotzab, H., 2003. Does supply chain management really pay? Six perspectives to measure the performance of managing a supply chain. *European Journal of Operational Research*, 144(2), pp.306-320.
- Pagell, M. and Wu, Z., 2009. Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of supply chain management*, 45(2), pp.37-56.
- Rahim, S.A., Fernando, Y. and Saad, R., 2016. Sustainable Green Supply Chain Management and Impact on Organizations. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 7(3), pp.147-155.
- Rao, P. and Holt, D., 2005. Do green supply chains lead to competitiveness and economic performance? *International journal of operations & production management*, 25(9), pp.898-916.
- Sarkis, J., 2012. A boundaries and flows perspective of green supply chain management. *Supply Chain Management: An International Journal*, 17(2), pp.202-216.
- Surienty, L., Ramayah, T., Lo, M.C. and Tarmizi, A.N., 2014. Quality of work life and turnover intention: a partial least square (PLS) approach. *Social indicators research*, 119(1), pp.405-420.
- Tate, W.L., Ellram, L.M. and Kirchoff, J.F., 2010. Corporate social responsibility reports: a thematic analysis related to supply chain management. *Journal of supply chain management*, 46(1), pp.19-44.
- Tukamuhabwa, B.R., Eyaa, S. and Friday, D., 2011. Mediating variables in the relationship between market orientation and supply chain performance: A theoretical approach. *International Journal of Business and Social Science*, 2(22).

- Vachon, S. and Klassen, R.D., 2008. Environmental management and manufacturing performance: The role of collaboration in the supply chain. *International journal of production economics*, 111(2), pp.299-315.
- Vokurka, R.J., Zank, G.M. and Lund III, C.M., 2002. Improving competitiveness through supply chain management: a cumulative improvement approach. *Competitiveness Review: An International Business Journal*, 12(1), pp.14-25.
- Whiteman, G., Walker, B. and Perego, P., 2013. Planetary boundaries: Ecological foundations for corporate sustainability. *Journal of Management Studies*, 50(2), pp.307-336.
- Wiklund, J. and Shepherd, D., 2003. Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic management journal*, 24(13), pp.1307-1314.
- Wisner, J.D., 2003. A structural equation model of supply chain management strategies and firm performance. *Journal of Business Logistics*, 24(1), pp.1-26.
- Wu, Z. and Pagell, M., 2011. Balancing priorities: Decision-making in sustainable supply chain management. *Journal of Operations Management*, 29(6), pp.577-590.
- Zhu, Q. and Sarkis, J., 2004. Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. *Journal of operations management*, 22(3), pp.265-289.
- Zhu, Q., Sarkis, J. and Lai, K.H., 2008. Confirmation of a measurement model for green supply chain management practices implementation. *International journal of production economics*, 111(2), pp.261-273.
- Zhu, Q., Sarkis, J. and Lai, K.H., 2013. Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *Journal of Purchasing and Supply Management*, 19(2), pp.106-117.
- Wah Yap, B., Ramayah, T. and Nushazelin Wan Shahidan, W., 2012. Satisfaction and trust on customer loyalty: a PLS approach. *Business Strategy Series*, 13(4), pp.154-167.