INDUSTRIAL ENVIRONMENTAL PERFORMANCE: MAPPING AND SYSTEMATIC LITERATURE REVIEW

AMMAR MASOOD[1], MOHSIN ALTAF[2], MOHSIN RAZA KHAN[3], TANVEER ILLAHI[4], ABDUL QAYYUM[5]

ABSTRACT

The objective of this study is to present extensive in term of mapping on the antecedents and outcomes of environmental performance which is key concern for industries at present. The trending issues in the environment in quantitative papers are reviewed since 2011 to 2018. The systematized review of literature with explicitly dimensions of the environmental performance including all environmental aspects allows to pursue this research and role as well as mapping of our focal variable which is Environmental performance in the area of supply chain, production and operational management. This study provides comprehensive information about key issues about environmental aspects. Particularly, most of the researchers focused on green concept such as Green supply chain management (GSCM) practices but they adopted diverse determinants of Green supply chain management (GSCM) and there is limited research on lean practices. Thus, no research provides a standardized method for improvement. Some researcher postulated that such as resource dependence, stakeholder, relational view, institutional, resource-based view theories impact on environmental performance. However, there is a recommendation to develop a theory for green concept. No prior research combined the trending issues in area of supply chain, production and operations management. However, we conduct a study to combine these issues regarding environment. Heretofore, there is need to deal with emerging issues and rapid change in environment with standardized approach. This study helps to researchers, practitioners and mangers to develop a standardized method to deal with key concerns which is ultimately for the survival of firms and gain of competitive advantage in future.

Keywords Environmental performance, Supply chain, environmental management system,
JEL Codes: O44, F64

I. INTRODUCTION

Organizations are initially considering environmental performance is derivation of competitive advantage (Wagner, 2005). In response, literature apprises impacts from customers' preferences about environment on companies' initiatives for environment (Coskun *et al.*, 2016; Nouira *et al.*, 2016; Kim *et al.*, 2014) as well as customer influence as organizational pressure to persuade originations to enhance environmental performance (Gualandris and Kalchschmidt, 2014; Lai *et al.*, 2012). A dynamic approach within an organization with extensive focus on social as well as environmental issues leads to improve environmental performance (Stadler and Lin, 2017). Globally, environmental affairs are a crucial concern for organizations as well as governments as a result of rapid change in climate. Thus, organizations have limited focus on climate change (Lupp *et al.*, 2016). In general, mostly originations fail due to unable to recognize sustainably in environment is not simply implementation but considering whole activities of an organization (Battacharya and Polman, 2017; Adams *et al.*, 2016). Environmental concerns have become a vital topic for most of the organizations (Mckinsey, 2010). According to report of IPCC (Intergovernmental panel on climate change, 2013) a small number of questions the human meddling embrace, substantial changes in ecological conditions and climate. Ozone layer reduction, global warming, expanding contamination level, waste and global warming make issues worldwide and widely issues occur due to ineffective directed production proceedings (Shukla *et al.*, 2009). Today environmental pressure has increased due to customer awareness. Diverse ecological supply chain management practices embraced by companies toward reduction of atmosphere effects (Hasan, 2013). The escalating issues to caring the surroundings shifted towards green legitimacy (Gunasekaran and Gallear, 2012). Stabilizing performance of

[1] UCP Business School, University of Central Punjab, Lahore
[2] Lahore Business School, The University of Lahore
[3] Bahria Business School, Bahria University, Islamabad
[4] Management Studies Department, Bahria Business School, Bahria University, Islamabad
[5] Noon Business School, University of Sargodha

atmosphere has become important for firms in order to face social and competitive pressures and regulations (Bai *et al.*, 2015). Achievements in satisfying natural issues might provide novel opportunities to make an incentive to vital corporate programs and remarkable chances for rivalry at present hastily shifting organizational surroundings (Tseng *et al.*, 2015; Tseng, 2014; Kurdve *et al.*, 2014; Shen *et al.*, 2013). Number of studies published globally that taped the environmental issues. Prior research conducted by various authors manifest the fragmentation in previous literature as adopted different parameters to measure environmental performance. Researchers have adopted a diverse method to measure environmental performance in supply chain as well as production and operations management domain. Here the questions arise, "what steps were taken for the environmental performance? and what criteria should be for it?". To answer this question, here researchers combined the contemporary indicators in this paper that tapped environmental performance. However, the central theme of this paper is to map the environmental performance, its antecedents, outcomes and the important theories that support the construct of environment performance. This study is meaningful in number of ways. First this is the initial study that systematized literature review on environmental performance that permits an expansion of conceptual groundwork of environmental performance. Second, this study recognizes along various dimensions of environmental performance that gives a holistic picture of the mapping. Third, this research aims at throwing light on insight in this area by signifying paths which is emerging as a global issue and indispensable for the present organizations to survive in future. Further, this study is arranged in following manner. First, the method is described for pooling and selection of papers is given. Second, the literature is given on the environmental performance, its antecedents, outcomes and the theories that support the relationships. In last, discussion, managerial implication and limitation of the study is given.

II. METHODOLOGY

Systematized review of literature is generally acknowledged as a consistent way to examine published studies in the management area and are recognized for limiting biasness in research paper determination, furthermore, offering the open door for research replication (Tranfield *et al.*, 2013), with explicitly dimensions of the environmental performance. For the reason, researchers in the study conducted the mapping on the last ten years papers published in well reputed journals. In view of that, first research collected papers on the domain of environmental performance published in last ten years in well reputed journal. Secondly, researchers constructed map based on the collected papers. By focusing the mapping on the domain, researchers conducted a literature review on the domain where researcher mainly focused on the antecedents and outcomes of environmental performance and the theories used in the area.

III. REVIEW OF THE LITERATURE

According to the perspective of environmental impact analysis, the environmental performance is a significant pointer to assess the effects to going green on performance as well as both inside and outside green practices can enhance performance of the atmosphere and according to literature of green practices have much influence on to going green (Zhu and Sarkis, 2004; Zhu *et al*., 2013; Zhu *et al*., 2012). The environmental performance is characterized as the result of an organizational operational actions that govern its effect on climate (Dividers *et al.*, 2012). Client and cost drivers impact both inward and outside green practices which thus leads to performance of the natural environment (Wang *et al*., 2018). Environmental performance indicates positive results like the depletion of strong/fluid squanders, decrease of outflows, reduction of consumption of perilous/ detrimental/ noxious substances, lessening the accidents in atmosphere a well as rise in consistence with atmospheric excellence (Geyer and Jackson 2004; Zhu and Sarkis, 2004). Customer pressure as well as indirectly eco-design influences environmental performance and through legitimate direction and motivational firms can accomplish performance of atmosphere (Hanim *et al.*, 2012). Green supply chain management (GSCM) enhance natural performance by taking care of utilization of strong/fluid squanders dangerous materials, reduction of environmental incidents as well as enhancing health of community (Eltayeb *et al.*, 2011; Yildiz Çankaya *et al.*, 2018). To going green is the addition to the enhancement of atmospheric performance by managing wastages produced by firms (Azevedo *et al.*, 2011; Lee *et al.*, 2009;). Studies demonstrates that green implementations positively affect natural performance by reduction of production wastes (Sajid and Ali, 2018; Roussel et al., 2021; Audi et al. 2021; Famiyeh *et al*., 2018; Kung *et al.*, 2012; Audi et al. 2021; Audi et al. 2021; Audi et al. 2021; Audi and Naeem, 2017; Ali, 2011; Zhu and Sarkis, 2004; Rao 2002, Tukker *et al.*, 2001, Shrivastava 1995). Top managers dedication to sustainable environment is a robust motivating power for enhancing environmental performance (Sarah Yang Spencer *et al.*, 2013). According to some researchers, market share and profitability through attaining productivity or being lean based on environmental management (King and Lenox, 2001; Rothenberg *et al.*, 2001; Porter and van der Linde, 1995). Research indicates that greening the business actors positively affects environmental performance (Chiou, T. Y. *et al.*, 2011; Crowe and Brennan, 2007; Rao, 2005; Rao, 2002; Tukker *et al*., 2001). Green supply chain management (GSCM) practices as well as collaboration and reciprocity can be essential for green innovation to attain environmental performance (Zhu *et al.*, 2017). Manufacturing practices that have ultimate objective is to decrease utilization of

energy and CO2 (carbon dioxide) outflows, noxious and squanders leads to positive effect on ecological performance (Duflou *et al.*, 2012; Evans *et al*., 2009; Sarkis, 2001). Green supply chain management (GSCM) have certain effect on export as well as environmental performance (Al-Ghwayeen *et al*., 2018). The tendency moving from a reactive methodology to the execution of dynamic tactics and orientations of firms with a concentration on ecological and social issues leads to improve environmental performance (Stadtler and Lin, 2017; Hart, 1997). Green supply chain management (GSCM) leads to enhance atmospheric performance especially when environmental cooperation with customers (Green *et al.*, 2012). Life Cycle examination conveys an association with a strategy to analyze and perceive the impact of its procedures on atmosphere through their life cycle and enhances natural performance (Matos and corridor, 2007). On the one hand point is that the environmental performance is guided by a firms' social liabilities (Marshall *et al.*, 2005; Florida, 1996).

IV. KEY ANTECEDENTS OF ENVIRONMENTAL PERFORMANCE

In this section, researchers found the key antecedents through mapping on the central construct which is environmental performance.

1. GREEN SUPPLY CHAIN MANAGEMENT (GSCM)

GSCM expounds that combining environmental considerations into supply chain management such as material handling, production procedures, product delivery to end user, product design and end-of-life management after usage of the product. The starting point to end point including from supplier to customer transactions with respect to green context these activities are generally external Green supply chain management (GSCM) practices (Zhu *et al.*,2008). Green purchasing approaches green technologies which ultimately decrease costs in the perspective of Green supply chain management (GSCM) literature as well as improve environmental performance (Mitra and Datta, 2014). Moreover, it is a way to control the operations including manufacturing and raw material by considering environmental aspects such as global warming and wastages through Green supply chain management (GSCM) (Ageron *et al.*, 2012). Managerial activities that handle ecological issues to confirm consistency in climate and advance capability throughout the supply chain by ensuring Green supply chain management (GSCM) practices (Lee, 2015). Green supply chain management (GSCM) practices is a strategy to increase environmental sustainability by producing eco products through operations on customer requirement (Green *et al.*, 2012). Mostly researcher argued the Green supply chain management (GSCM) role in order to enhance environmental performance (Inman *et al.*, 2018; Ali, 2018; Ali and Bibi, 2017; Sinni Laari *et al.*, 2018; Audi and Ali, 2018; Ali et al., 2021; Wafaa Shihadeh Al-Ghwayeen and Ayman Bahjat Abdullah, 2018; Feng *et al.*, 2018; Zhu *et al.*, 2017; Yu *et al.*, 2017; de Sousa Jabbour *et al.*, 2017; Dubey *et al.*, 2017; Audi and Ali, 2017Kumar *et al.*, 2017; Ali and Audi, 2016; Diab *et al.*, 2015; Haider and Ali, 2015; Chin *et al.*, 2015; Tate *et al*., 2014; Bhattacharya *et al.*, 2014; Audi et al., 2020; Ali and Senturk, 2019; Ali and Ahmad, 2014; Shi *et al.*, 2012; Arimura *et al.*, 2011; Zhu *et al.*, 2010; Shahid and Ali, 2015; Senturk and Ali, 2021; Nawrocka *et al.*,2009; Nawrocka, 2008; Hsu and Hu, 2008; Darnall *et al.*, 2009; Handfield *et al.*, 2005).

2. EXTERNAL AND INTERNAL GREEN PRACTICE

Both external and internal green practices including (eco-design, internal environmental management, investment recovery and external green supply chain management). These are the four major areas that represent external and internal functions and activities regarding supply chain management of the firm (Zhu and Sarkis, 2004). According to Zhu *et al.*, (2013) external as well as internal green practices lead to increase the performance of environment, whereas major part of literature underpin the efficacious impact of green practices on environmental performance (Yang *et al.*, 2013; Zhu and Sarkis, 2004). Many researchers argued the association among green practices and environmental performance (Vanalle *et al.*, 2017; Tachizawa *et al.*, 2015; Mitra and Datta, 2014; Yang *et al.*, 2013; Zhu and Sarkis, 2004). Concerns about environment have attracted the whole world. Organizations are embracing internal as well as external green practices. According to environmental management point of view, the environmental performance is crucial pointer to assess the effects of green practices on the performance (Zhu *et al.*, 2012).

3. ECO-DESIGN

Eco-design is defined as integrating environmental considerations into the process of product design and taking consideration of the flow of product throughout its entire supply chain (Hanim Mohamad Zailani *et al.*, 2012). Zhu and Sarkis (2004) argued there is positive association among eco-design and environmental performance and found in the investigation in Chinese manufacturing firms. However, Eco- design as a source of environmental performance which decreases production wastages, squanders, hazardous materials and frequency of accidents in natural environment (Geyer and Jackson, 2004; Zhu and Sarkis, 2004).

4. REGULATION AND INCENTIVE

Strategic choice theory grapples that the organizational strategies direct its performance. However, performance is regulated by strategies. Particularly, strategic choice theory is pertinent for environmental area (Starik and Marcus, 2000). Organizational environmental strategies are intrinsically intricated because of complexity and legal administrations related with environmental regulation and incentive. Strategic choice theory could help management to deploy the framework for disorganized environment. Regulation and Incentive is operationally as standards, rules and legislation that incorporate imposing and forcing components, set by the national and foreign governmental bodies, parent firms, worldwide organizations that can impact manufacturing firms to embrace green supply chain initiates (Hanim Mohamad Zailani *et al.*, 2012). By implementing regulation and incentive which drives stimulation as well as spectacular on firms (Scott, 2001), which thus goes to environmental performance.

5. CUSTOMER PRESSURES

Customer pressures exhibit coercive procedure that apply imposing or forcing elements on firms to embrace green supply chain initiates, however these imposing and forcing components affectations appear as client requests or bearings to set ecological guidelines, the arrangement of motivators and supportive gestures to embrace green production network activities, and client dismissal of products that contain perilous components or lacking recyclable or usable substance (Hanim Mohamad Zailani *et al.*, 2012). Customer pressures influence rules and inducements that affect environmental issues (Maxwell *et al.*, 1998).

6. GREEN PURCHASING

Selecting the right supplier leads to environmental performance because after choosing supplier, process should be managed as Pulraj (2011) stated that choosing and managing the supplier leads to the assessment of supplier whether the supplier meets the environmental criteria. The purchasing procedure can show the company's ecological tendency as it incorporates green purchasing standards (Saghiri, and Hill, 2014). Green purchasing can be defined as combining issues in environment and relate to raw material procedure (Rao and Halt, 2005) and based on the amalgamation of atmospheric consciousness and procurement processes of the organization (Carter *et al.*, 2000).

7. GREEN MANUFACTURING

Green manufacturing is a strategy of the firm that needs minimization of resources in production which leads to lessening the pollution in environment (Gao *et al.*, 2009). Thus, Green manufacturing as a way to implement and plan the operations which need less resources as well as energy usage in production which in turn reduce contamination and continuously improve the operations and enhance environmental performance. In addition, green production particularly concentrates on environment friendly productions with least resources as well as wastages (Routroy, 2009).

8. GREEN PACKAGING

Green packaging improves environment due to environmentally conscious to pack the product that eliminates pollution and the activities are associated with supply chain partners. Green packaging involves compliance (e.g., governmental requirements), cost (e.g., material and shipping), convenience (e.g., easily use), performance (e.g., sufficient safety of product) and environmental effects (Lin *et al.*, 2013; Liu *et al.*, 2013). Green packaging is crucial for the organization, because it is associated with inside and outside of the firm that eliminates excess of packaging' raw material and make simple usage which directly impacts on environmental performance (kung *et al.*, 2012; Sarkis, 2003).

9. GREEN DISTRIBUTION

Distribution plays key role in market because of in time need of the manufactured products. In this way, the environment requires eco-friendly distribution. The main factor in distribution is transportation, such as (modes of transport, fuel, operations and infrastructure) are the key factors to build green distribution (Al-Odeh and Smallwood, 2012). Green distribution comprises of activities such as decrease or remove detriment and wastages in environment throughout delivery process (Gao *et al*, 2009). However, the frequency of consumption of fuel utilized by transports for distribution impact on green distribution (Sarkis, 2003).

10. GREEN MARKETING

Al-Odeh and Smallwood (2012) explained the concept of green marketing that the sustainability of marketing requires ecological balance and give more consideration towards environmental protection. The marketing activities of the firm which makes positive impact and diminish negative impact of a certain product on the environment (Nimawat and Namdev, 2012). Green marketing is a way to reduce negative effect on the

environment as well as achievement of desires of humans (Singh and Pandey, 2012). Moreover, it suggests to design, advertise, rates and distribution of products that is environment friendly (Ferrell, 1993).

11. INVESTMENT RECOVERY

The more common aspect that is investment recovery are usually inspected dimensions in green supply chain management studies investigated in the studies. Investment recovery is a source to recover the value from old finished and completed items (Aryes *et al*., 1997), and it aims at to recover the investment by selling inventory and it is traditional business practice (Zhu and Sarkis, 2004), which ultimately leads to environmental performance.

12. INTERNAL ENVIRONMENTAL MANAGEMENT (IEM)

The argument of resource-based view of the firm (theory) links the connection of environmental practices and environmental performance. IEM is created by own's organization safety policies or strategies to consider the aspects of environment as ensuring the safety (Chan *et al.*, 2012). Environmental practices based on middle as well as top level managers who ensure the integration of departments and environmental performance and positioning the IEM system (Zhu *et al.*, 2005).

13. ENVIRONMENTAL EDUCATION

There are twofold purposes for environmental education. The training and development of employees regarding environmental policies of the organization and establishing behaviors of employees for the sake of long-lasting as well as responsible association with the environmental concerns (Sammalisto and Brorson, 2008). Environmental education is realized as crucial aspect for employees of the firm that helps to sustainable development of society (Agenda 21, 1992, chapter 36). Present research validates and stressed the significance of education for green management for success of organizations (Sarkis *et al.*, 2010; Sammalisto and Brorson, 2008).

14. TECHNOLOGICAL SOLUTIONS

The impact of latest technology is twofold. The first is to clean and decreasing air pollution as well as hazardous symptoms (Lund and Clark, 2008) and the second is the transformation of eco-friendly fuel types (Tegart and Jolley, 2001). Information and communication technology manage and utilize more broadly the distribution systems which lead to increase the environmental performance (Janelle, 1997), and better planning as well as choice of modes of transportation (Casalegno and Chiu, 2008).

15. SOCIO-ECONOMIC AND POLITICAL SOLUTIONS

Both political and socio-economic solutions are set by government officials according to geographical standards as well as global contracts. Freight of transport is managed or conducted by public authorities with high level decision making, in which the performance is directly affected to long- and short-term perspectives by transport companies (Bakker and Jacob, 2013). Governments' policies in term of charges or taxes can optimize the movements of transportation industry (Stelling, 2014). Duties on fuel (Agrawal *et al*., 2014), highway and paths (Kabashi *et al.*, 2011), and Inducement structures (Santos *et al*, 2010) which goes to environmental performance with environment friendly transport system.

16. CULTURAL AND BEHAVIORAL SOLUTIONS

Some patterns such as habits and behaviors impact on the frequency of the service. Transportation mode is crucial factor for the environment in which sometimes transport purchasers may sometime have wrong habits or behaviors because of these people are not familiar with social as well as environmental effects of their decisions and choices. Cultural and behavioral solutions refer to concentrate on informing all freight transportation stakeholders (Koroneous and Nanaki, 2007) of the significance of social as well as environmental influences. Both behavioral and cultural solutions indicate the discussion on transportation services and sharing which associate between supplier or purchaser to control the frequency of transport and services or freight (Browne *et al.*, 2012).

17. INFRASTRUCTURE IMPROVEMENT SOLUTIONS

The extent in which the better use of land matters in the light of infrastructure improvement solutions (Macario and Marques, 2008), that refer the optimized capacity and improve the services of transport. Develop better paths alleviate accidents as well as traffic choking (Stelling, 2014). Optimum paths decrease the traffic blockages as well as accidents or mishaps (Stelling, 2014). Optimizing the structure of firms (Akerman and Hojer, 2006), then upgrade the vehicle routes and decrease overcrowding in urban regions

18. TOP MANAGEMENT'S COMMITMENT TO ENVIRONMENTAL SUSTAINABILITY

No organization can consider the environmental concerns without the top-level management. However, reporting about environment in organization and the environmental management system has positive impact (Annandale *et al*., 2004). The burden from vendors, customers, society, business or economical culture drives to top management's commitment to environmental sustainability (Roy *et al.*, 2001). The devotion of employees towards excellence and top managerial dedication to sustainable environment (Jackson, 2004), refers to the improvement of atmospheric performance.

19. THE ADOPTION OF A SOPHISTICATED ENVIRONMENTAL INFORMATION SYSTEM

A wide application of information system offers to the external environment (Chenhall *et al.*, 1986). The adoption of a sophisticated environmental information system is considered as a system transmitting the impact of best administration's commitment to natural sustainability on enhancing environmental performance (Yang *et al.*, 2013). The choice, constraints, aggregation and incorporation comprise management accounting system information in order to quantify sophisticated environmental information system (Chenhall *et al.*, 1986), to the extent of environment.

20. GREEN INNOVATION

Green innovation is defined as the design of the product and its use, procedures, advertising activities, capacities, facilities and structures of the firm emerge enhancement of environment rather than traditional approaches (Schiederig *et al*., 2012). Green innovation comprises of the green innovative production, procedures and green managerial novelty that arises the performance of environment. Some scholars argued the relationship of green innovation and environmental performance (Khaksar *et al*., 2016; Chiou *et al.*, 2011; Chen *et al*., 2006). Several notions, jargons and explanations stated for innovation that emphasizes constructive impact to decrease emissions in atmosphere can be found in prior research of the field (Iraldoe *et al*., 2009).

21. GREENING THE SUPPLIER

According to Rao (2002), organizations prefer or eager for green supply chains by adopting such techniques that builds strong networks as well as relationships. In study of Hammer (2006) discovered that purchasers can increase environmental performance by enlightening the suppliers and implement environmental management system as well. Firms should confirm their suppliers act are according to environmental standards or criteria against to the prevention of accidents entire the supply chain (paulraj, 2011; Reuter *et al*, 2010). Many researchers studied the impact of greening the supplier on environmental performance (Khkasar *et al*., 2016; Chiou *et al.*, 2016; Large and Thompson, 2011; Bai and Sarkis, 2010; Lee *et al.*, 2009).

22. CUSTOMER RELATIONAL GOVERNANCE

Customer relational governance which brings impact through casual associations with clients, for example, trust and collaboration, might be considerably more critical to accomplish win-win chances among suppliers and customers (Zhu *et al.*, 2017). Organizations in developing countries like China attained the certification of ISO 14001 as attempt of Green supply chain management (GSCM) actions primarily because of transnational clients (Zhu *et al.*, 2012b) and accomplish environmental performance through Green supply chain management (GSCM) practices firms require customer relational governance (Chung *et al.*, 2005).

23. SUSTAINABLE MANUFACTURING PRACTICES

Sustainable manufacturing is the capability to utilize natural resources in production optimally against to save excess of resources for the enhancement of environment and quality of life as well (Garetti and taisch, 2012). Environmental effects discover from manufacturing, processes and ejection are straight results of the made at design stage (handfield *et al.*, 2001). Manufacturing practices aim to decrease eco utilization, emanations and wastage as a consequence of production will lead to environmental performance (Duflou *et al*., 2012; Evans *et al.*, 2009; Sarkis, 2001).

24. TECHNOLOGY ORIENTATION

This objective is feasible just if organizations commit notable devotion regarding accomplishing the specialized and informative resources required for another way out in planning for upcoming items, tasks, and procedures identified with green activities (Dangelico *et al.*, 2017; Song and Yu, 2017). Previous studies showed that technology- oriented organizations along with the concentration of environment accomplish environmental performance (Chen *et al.*, 2014; Horbach, 2008). R&D focused organizations ealiy meet rules and regulations of environment by decreasing wastes and gain the advantages originating from technological advancements (Cole *et al.*, 2005; Arora and Cason, 1996). However, some scholars argued negative association among ecological technology-oriented approach as well as accomplishment of better environmental performance (Alkemade and Suurs, 2012; Sagar and van der Zawaan, 2006).

25. MARKET ORIENTATION

Market orientation implies following and reacting to the frequently evolving expectations and needs of customers (Jaworski and Kohli, 1993). Clients' worries about the climate are developing, thus their pressure for nature convivial business affairs (Dangelico and Pujari, 2010; Oltra and Saint Jean, 2009). Clients better assess capable organizations and enhancing environmental performance which plays its own part in this contribution to this assessment, and more market-oriented organizations as well (Pekovic *et al.*, 2016). Organizations that are customer-centric and their products are environment friendly that actually involve in environmentally friendly behaviors (Kammerer, 2009). Better environmental performance organizations as they have one of the key sources is implementation of eco-friendly strategies as well as novelties (Jansson *et al.*, 2017). Market oriented strategy improves organizations' eagerness to meet with emanations from production and rules, hence to comply reduce the intensity of emissions and wastages (Chen *et al.*, 2015; Green *et al.*, 2015).

26. ENVIRONMENTAL MANAGEMENT ORIENTATION

According to zobel (2016), the effect of the ISO 14001 certification and environmental management system on the frequency of enhancement of atmospheric performance in diverse areas such as air or water pollutions and natural resources consumption found no statistically significance variances among non-certified or certified organizations. The adoption of environmental management system is likely to depends on environmental management orientation (Klassen, 2001), which probably lead to enhanced environmental performance. variations may be recognized among various environmental performance measures; water utilization and waste are more certainly positive impact while introducing environmental management system and eco-consumption appears not be influenced (Daddi *et al.*, 2011). Testa *et al.* (2014) argued in the study of Italian firms, the effect of eco management and audit scheme and ISO 14001 certifications decrease emanations from productions and positive impact of certified environmental management system on environmental performance. Moreover, Hertin *et al.* (2008) found positive effect by adopting environmental management system on environmental performance in three out of five organizations.

27. INTERNAL AND EXTERNAL ENVIRONMENTAL STRATEGY

If organizations focus the strategic procedures on environmental problems as a pressure from customer or society by considering natural resource-based view of the organization to gain competitive advantage as a result they can reduce pressure (Chan, 2005). Both natural resource-based view of the organization and Green supply chain management (GSCM) can enhance the ability of organizations through environmental strategy as interaction between operational management as well as environmental concerns to make productive abilities of firms (Banerjee, 2001; Hart, 1995). Thus, they postulated that environmental strategy drives to high environmental performance (Sharma and Vredenburg, 1998; Judge and Douglas, 1998).

28. MANGER'S ENVIRONMENTAL EMPOWERMENT

The function of authorization in firm's environmental concerns are realized as positive in current years and personnel participation is mentioned as a vital element of environmental management achievement (Daily *et al.*, 2007; Govindarajulu and Daily, 2004; Rothenberg, 2003; Fernandez *et al.*, 2003; Zutshi and Sohal, 2003; Ramus, 2002, 1997; Daily and Huang, 2001; Forman and Jorgensen, 2001; Hanna *et al.*, 2000; May and Flannery, 1995). They postulated the positive association among managerial empowerment and performance in their results (Kirkman *et al.*, 2004; Kirkman and Rosen, 1999). The way toward permitting change and development, the managerial certainty level, and inspiration to accomplish environmental objectives all impact the environmental performance of the organization (Ramus, 2002; Ramus and Steger, 2000). It is up to the management in which way they successfully they deal with environmental concerns (Ramus, 1997). Authorized management can change as well as control conditions about environmental concerns (Daily *et al.*, 2007; Matthews *et al.*, 2003; Ramus 2002; Daily and Haung, 2001). Ramus (2002) recommends similarly both management as well as employees exchange the liabilities of environmental performance.

29. MANAGER'S ENVIRONMENTAL TRAINING

The execution of effective environmental training programs can facilitate through knowledge and awareness (Daily *et al.*, 2007), which ultimately helps low cost production and safe and sound work atmosphere as well (Ramus, 1997). Both managers and employees can rigorously cooperate through training about environmental concerns and objectives (Cramer and Roes, 1993). Scholars propound training is fruitful for environmental performance (Perron *et al.*, 2005; Garavan, 1997; Ramus, 1997; Cramer and Roes, 1993). There is need for environmental resolution by training of managers (Yoxon, 1996).

30. EMPLOYEE'S ENVIRONMENTAL TRAINING

The definition is directly pertinent to environmental training for employees "A planned and systematic effort to modify or develop, knowledge, skills and attitudes through learning experiences, to achieve effective

performance in an activity or a range of activities" (Garavan, 1997, p.41). They postulated a positive association among employees and environmental training (Daily *et al.*, 2007; Marks, *et al.*, 2000). Current results recommend that a total quality management teams' triumph based on training of employee's level in Mexican' s maquilas (Jun *et al.*, 2006).

31. SUPPLIER RELATIONSHIP MANAGEMENT

Cooperative partnership among supply web members increase coordination which in turn, decreases bull-whip effect in a network (Lee *et al.*, 1997). Collaborative supply chain occurs when common goals are accomplished through shared efforts (Cannella and Ciancimino, 2010). Supply chain Green aims can be accomplished through supplier relationship management entire the supply chain (vanden Broek and vanden Broek-Serlé, 2010; Aberdeen Group, 2008), and contributes toward the supply chain network while implementation of green practices (van Hoof and Lyon, 2013; Ku *et al*., 2010; Bai and Sarkis, 2010; Testa and Iraldo, 2010; Bai and Sarkis, 2010; Hsu and Hu, 2009; Vachon and Klassen, 2006; Bierma and Waterstraat, 1999).

32. TOTAL QUALITY MANAGEMENT

Total quality management is way to ensure quality products and services to customers and incessant of enhancement for entire organization including individuals as well as groups of people by encompassing core concepts such as cycle of continuous improvement, prevention, make quality by people, team collaboration, measurement, customer satisfaction, and all work is process. Scholars postulated the role of total quality management to accomplish green goals and decreasing production wastes and recycling wastes (Wiengarten and Pagell, 2012; Prajogo *et al.*, 2012; Pereira-Moliner *et al.*, 2012; Gavronski *et al.*, 2011)

33. ENVIRONMENTAL MANAGEMENT PRACTICES

The adoption of environmental management practices leads to improve the environmental performance by quantifying noxious releases (King *et al.*, 2005). Environmental performance is improved by environmental management practices alike environmental programs (Lee *et al.*, 2012). According to Tung *et al.* (2014), implementation of environmental management practices' manufacturing found in Australian industry accomplished environmental performance. The successful and efficacious environmental management practices help in the sustainability of environmental aspects (Sroufe, 2003) and also Hertin *et al*. (2008) in their research found positive relationship between them in six industrial sectors. Thus, environmental management practices have positive association with environmental performance and enhanced as well (Beske and Seuring, 2014; Zhu and Sarkis, 2007, 2004; Melnyk *et al.*, 2003; Rao, 2002).

34. REDUCED COST AND IMPROVED QUALITY, DELIVERY AND FLEXIBILITY

Many researchers revealed the significant association among operational performance indicators (e.g., cost, quality, delivery and flexibility) and environmental improvement. The researchers postulated that operation functions have an important role to increase environmental performance (Rothenberg *et al.*, 2001; Curkovic *et al.*, 2000; Montabon *et al.*, 2000; Hanna *et al.*, 2000; Tibor and Feldman, 1996; Klassen and Mclaughlin, 1996; Bonifant, 1994) and many scholars argued the impact of environmental performance on organization competitive cost (Corbett and Kirsch, 2001; Tibor and Feldman, 1996; Sayre, 1996). Both delivery performance and environmental performance has positive impact (Sroufe, 2000).

35. IT-ENABLED PRODUCTION CONTROL AND COORDINATION

IT transformative program helps to reduce resource light economy and carbon (EU-SUST, 2011). Environmental performance improvement is depending upon IT through reducing energy consumption and changing employee's behavior as for organizational sustainability (Jenkin *et al.*, 2011). IT inculcates employees' behavior through clear indicators by emphasizing firms' commitment to sustainable activities (Bengtsson and Agerfalk, 2011). Green information system leads to positive impact on green purchasing, firm's collaboration with clients, nature friendly design (Green *et al.*, 2012 a, b).

36. LEAN PRACTICES

Lean practices is perceived as a paradigm in which to enhance quality as well as productivity to better utility of resources by reducing waste and improve environment. Prior research showed the lean practices can enhance business as well as environmental performance with coherence (Duarte and Cruz-Machado, 2015; Wadhwa, 2014; Sobral *et al.*, 2013; Wiengarten *et al.*, 2013; Dues *et al*., 2013; Larson and Greenwood, 2004). However, according to the literature review study of Negrao *et al.* (2017), on lean practices is meager. Lean practices are the method of operational management that determine to diminish wastages (Chauhan and Singh, 2012) and compliance with green aspects (Garza-Reyes, 2015). Scholars argued lean practices can be effective while implementation of green practice for enhancing environmental performance (Dues *et al.*, 2013; Bergmiller and McCright, 2009; Larson and Greenwood, 2004, King and Lenox, 2001). To explore on performance of supply

chain measures has gone to the other side of investigation and improvement of techniques to measure their commitment to performance (Duarte and Cruz-Machado, 2015; Garza-Ryes, 2015). Scholars tend to research on lean practices' impacts by adopting diverse indicators such as environmental performance (Wiengarten *et al*., 2013; Dues *et al.*, 2013).

37. SOCIAL RESPONSIBLE MANAGEMENT

Environmental performance could be achieved when the social responsible practices within the organization. Firms actors' training and involvement are positively associated with corporate social responsible responsibility management (Florida, 1996). More corporate sustainability management can improve environmental performance (Kolk, 2016). Some researchers argued the association between social responsibility and environmental performance (Wang *et al.*, 2018; Wang and Dai, 2018; Marshall *et al.*, 2005; Florida, 1996).

38. SUPPLIER MONITOR AND ASSESSMENT

Transaction cost is key factor to choose the mode of transaction and suppliers. Some suppliers behave unethically and do not consider the social and environmental responsibility which in turn, the firm needs to reduce these risks by considering the mechanism of monitoring and assessment of the suppliers. Organizations use monitoring and assessment methods to decrease risks and improve environment. of Supplier monitoring as well as evaluation has efficacious effect on environmental performance (Gimenez, 2013).

39. SUPPLIER COLLABORATION

According to Lamming and Hampson (1996), collaboration of the suppliers comprises of many levels (e.g., strategy, operations, information etc.). Good corporation helps to develop trust for one another and establishing sustainability (Pagell *et al.*, 2009). The environmental performance can enhance through intangible resources like common knowledge as well as comprehending the customer and nature (Carter and Rogers, 2008) and significance of collaboration amid supply chain partners can create trust and more corporate consciousness awareness lead to sustainability (smith, 2008). Cooperation among supply chain partners can develop value creation rather than temporary targets (Vachon and Klassen, 2006).

40. CORPORATE ENVIRONMENTAL INNOVATIVENESS

Corporate environmental innovativeness bothered about the improvement and appropriation of new atmospheric management practices to enhance the productivity and adequacy of firms' ecological insurance endeavors (Fong and Chang, 2012). Ecological management abilities need the endeavors and capability of organizations to deal with uncertainties in supply network that have environmental effects (Carter and Rogers, 2008). Roy *et al*. (2004) postulated Corporate environmental innovativeness is related to industrial and supply network efforts to start, create, apply innovative environmental management practices.

41. ENVIRONMENTAL SUPPLY CHAIN MANAGEMENT PRACTICES

Firms deploy environmental supply chain management practices to measure and their effects on the environment. Environmental supply chain management comprises reducing wastages, reprocessing and material alternative (Narasimhan and Carter, 1998). Many researchers investigated environmental supply chain management with diverse indicators (Montabon *et al.*, 2007; Hervani *et al*., 2005; Zhu and Sarkis, 2004; Sroufe, 2003; Hall, 2000; Beamon, 1999; Hart, 1995) which improves environmental performance by managing harmful effects.

V. OUTCOMES OF ENVIRONMENTAL PERFORMANCE

In this section, researchers found the outcomes through mapping on the central construct which is environmental performance.

1. SOCIAL PERFORMANCE

Social performance measurement was inspected as far as practices, for example, social projects, advantage of stakeholders as well as learning chances for all personnel. Environmental performance impacts on social performance such as smog or pollution in atmosphere escalate as consequence of stuffy atmosphere (Janic, 2011; Colvilea *et al.*, 2004). Stuffy atmosphere escalating sound as well use of oil (Kreutzberger *et al.*, 2003) which influence the quality of life in terms of social disasters.

2. COMPETITIVE ADVANTAGE

Competitive advantage is the degree in which firm outperforms its rivals or competitor. Firms may addition in a value through key corporate programs to apply effective environmental programs (Hansman and Claudia, 2001). Organizations can make a good image by improving environmental performance through Green supply chain management (GSCM) practices, which drives novel business prospects as well as competitive advantage (Chen,

2008). Rao (2002) argued in his study in south east firm that there is no association but, the study in north U.S companies through survey founded the positive impact of environmental performance on competitive advantage (Vachon and Klassen, 2008).

3. EXPORT PERFORMANCE

Export performance is miscellaneous as well as can incorporate the sales percentages gained from exports, export program' countries and the contribution of exports to the new pursuit's benefits, and management's fulfillment with the company's achievement in exporting. Organizations improve environmental performance in their products by lessening the ecological effects as well as lean practices and enlarge market (Demirci, 2014). Improving environmental performance is accommodating to viable the Chinese firms in exporting (Christmann and taylor, 2001). International business enhances to improve the environmental performance by green practices in manufacturing (Chen, 2006). Boost organization's position as well as growth of market share derives marketing edge through environmental improvements (Zhu *et al.*, 2013).

4. FINANCIAL PERFORMANCE

As executing contaminated technologies which leads to improve environmental performance by controlling hazardous substances that means cost reduction for pollution control (Klassen and McLaughlin, 1996). Environmental performance diminishes especially gas or radiation, source reduction as well as treatment of occurrence of waste is related with higher financial performance (King and Lenox, 2002; Hart and Ahuja, 1996). Enhancements of environmental performance based on consisting effective societal performance can increase market value of organizations (Luo and Bhattacharya, 2009; Russo and Fouts, 1997). Major quantitative and measurable benefits by enhancing efficiency of energy, approach to endowment as well as reduction of taxes (Evangelista *et al.*,2017; Evangelista, 2014; Lieb and Lieb, 2010). However, atmospheric compliance decreases expenses such as attorney fees, permits, payments related to eliminate an asset from service and contingent obligations linked with buisness fortunes clientage contempt as well as legal action (Yadav et al., 2017). Hence, organization must consider the determinants of environmental problems and enforce required amendments (Perez-Valls *et al.*, 2016). Those organization that contain social and environmental performance have better position with stakeholders as well as clients (Pagell, 2009), which is in turn leads to cost effectiveness.

5. OPERATIONAL PERFORMANCE

Operational performance is an imperative indicator of the efficacy and productivity of production firms and reflects the capability with which information assets are overseen and used for encouraging procedure advancement endeavors and organizational product. Merely three of researchers (Lee 2013; Green *et al.*, 2012; Inman *et al.*,2018) investigated the effect of environmental performance on operational performance and (Lee, 2013; Inman *et al.*, 2018) argued there is positive association between them.

6. ECONOMIC PERFORMANCE

Organization's environmental operations are vital resources for industries. Companies can compare with competitors and are able to accomplish eco-efficiency, environmental protection and well reputation. In this way, organizations can establish higher social and environmental performance. Those resources are intangible assets vital resources for any firm which satisfy consumer as well as stakeholder and attain cost-effectiveness. Wang *et al.* (2018) postulated the effect of environmental performance on economic performance and founded the positive outcome.

7. BUSINESS PERFORMANCE

Better environmental performance surely affects business performance through improving customer loyalty as well as customer satisfaction (Luo and Bhattacharya, 2006; King and Lenox, 2002). An organization's brand position affect business performance by enhanced communally liable environmental accountability (Yang *et al.*, 2011; Luo and Bhattacharya, 2009; Klassen and McLaughlin, 1996). For instance, an organization publicize conservational concerns which result in community recognition as well as their trust and market expansion that improve sales growth level.

VI. THEORETICAL UNDERPINNING IN THE AREA OF ENVIRONMENTAL PERFORMANCE

Scholars argued for the improvement of environmental performance the impact of resource dependence theory on Green supply chain management (GSCM) (de Sousa Jabbour *et al.*, 2017) and Diffusion of innovation theory (Sarkis *et al.*, 2011) but difficult for small organizations to adopt Green supply chain management (GSCM) practices according to stakeholder theory (De Brito *et al.*, 2008), intuitional theory (Suhaiza Hanim Mohamad Zailani, 2012; Riverta *et al.*, 2006) as well. Sibel Yildez Cankaya and Bulent Sezen (2018) postulated that there is need to develop theory for Green supply chain management (GSCM) which ultimately goes to environmental performance. The research of Yang Spencer *et al.* (2013) found that there is research gap to meet environmental

performance while considering contingency theory. Dubey *et al*., (2015) argued intuitional theory supports Green supply chain management (GSCM) practices, and resource-based view theory enhance organizational performance (Lockett and Thompson, 2001; Barney, 1991). The adoption of Green supply chain management (GSCM) practices depends upon relational view theory (Dyer and Singh, 1998). Complementarity theory consistent with Green supply chain management (GSCM) and lean practices enhance environmental performance (Inman and Green, 2018). Organizational performance is based on sustainable supply chain management through transactional cost and resource-based view theory (Wang and Dai, 2018). Environmental information integration improves supply chain by drawing dynamic capability theory (Wong, 2013). Table 1. Showed the overview of the theories which are associated with environmental performance. All the underpinning theories, their source, their adopters, antecedents, outcomes covered under that particular theory is given in Table 1.

VII. CONCLUSIONS AND DISCUSSION

This study highlighted the importance of environmental performance and aimed to distinguish and review the factors that effect on environmental performance based on systematized literature review due the blurring boundaries and rapid change in climate. Moreover, this paper addressed the determinants of environmental performance and scope adopted by scholars. This is a novel contribution in the field of supply chain management considering environmental aspects as the literature on environmental performance is quite fragmented, without distinction of financial or economic performance versus environmental performance, nevertheless embracing environmental performance often leads to financial or economic performance. In addition, the proposed work of systematic review of literature contributes to the theory development regarding conceptualizations and understandings in the literature a well as the emerging perspectives on environmental performance. The core contribution of this work helps to shape methods and models in future in the area of quantitative modelling across the supply chains. This study is one of the initial research to cope with environmental performance' comprehensive overview which is trending issue nowadays, as well as it is recognized as a key triumph aspect to be competitive and accomplishment of financial performance (Boyer and Hult, 2005). All dimensions lead to a number of key findings whereas additional inference arise from the standardized evaluation of research. The developing body of literature is still at fragmented stage and cumulative requisites will be needed in the future. A limited consistency was identified in the literature in diversified research. Researchers often tended to same environmental categories notwithstanding espoused heterogeneous measures with extremely constrained proof of thought adopted by scholars. The governments such as regulatory authorities can effectively contributes in term of subsidize or tax free towards escalating environment. The review distinguished that a comprehensive assessment of the environmental performance is rare by now, with researchers concentrating on limited set of pointers that address explicit environmental aspects. Concern for the performance of sustainable supply chain is still driven by the financial performance searching for win-win situations with the environmental performance. The downside of concentrating on a partial range of supply chain shows up especially extreme in the existing competitive environment where worldwide supply chains with numerous levels are the standard (Kovács, 2008), as meager environmental performance of a solitary level may cause ecologically unsustainable behavior of the whole supply chain (Miemczyk *et al.*, 2012). Environmentally sustainable supply chains can't be accomplished by working just with first-level allies (Genovese *et al.*, 2013). The key challenge for researchers is to identify the mechanism to conquer the existing limited supply chain. This work requires an extension of the supply chain activities secured by Green supply chain management (GSCM) performance measurement techniques to achieve true efficient supply chain environmental affect and a few studies on lean practices also need to be consider. Future research needs to give careful consideration to the downstream system, which is at present neglected contrasted with the upstream system because of the limited liability of organizations for the behavior of their clients (Kovács, 2008). To sum up the words, this would eventually prompt a progressively far reaching assessment of the environmental performance of the supply chain and reducing strategic distances from true environmental performance because of limited approach. Thus, the key challenges for researchers and practitioners are then to understand how to embrace environmental performance throughout entire supply chain.

Table 1: Theories used for environmental performance research

Theories	Source of theory	Studies	Antecedents	Outcomes
Resource Dependence Theory Resource dependence theory is the investigation of how external resources of firms influence the behavior of the firm.	Pfeffer and Salancik, (1978)	de Sousa Jabbour *et al.*, (2017)	• External GSCM practices • Green Purchasing • Cooperation with customers	
Stakeholder Theory Stakeholder theory is the study of business ethics and organizational behavior management that encompasses virtuous as well as values like associated with social contract, market economy and corporate social responsibility.	Ian Irving Mitroff, (1983)	Wang, Z. (2018)	• Customer Drivers • Cost Drivers • External Green Practices • Internal Green Practices	
Contingency Theory Contingency theory state that there is no most ideal approach to sort out an organization to lead corporation or to decide. Rather, the optimal way of action is fortuitous upon the inward and outer circumstance.	Joan Woodward, (1958)	Sarah Yang Spencer *et al.*, (2013)	• The adoption of a sophisticated environmental information system • Top management's commitment to environmental sustainability	
Generalizability Theory Generalizability theory is a statistical factual structure for conceptualizing, researching and planning solid examination. It is utilized to decide the reliability of measures. It is especially valuable for evaluating the reliability of performance assessments	Lee Joseph Cronbach, Nagasweri, R., and Gleser, G.C, (1963)	Gimenez *et al.*, (2015)	• Environmental programs • IT-enabled production control and coordination	
Complementarity Theory Complementarity theory is a holistic view of firms' variables and their associations to control the constraints of contingency theory.	Lemke and Howson, (1963)	Inman *et al.*, (2018)	• Lean manufacturing practices • GSCM practices	• Operational Performance
Transaction Cost Theory Transaction cost theory discusses about corporations comprehended as the arrangement of standards in a general public, are key in the assurance of exchange costs. In this way, organizations that encourage low exchange costs, support financial development.	Douglass Cecil North, (1992)	Wang, J., and Dai, J. (2018)	• Internal Management • External Management	
Relational view Theory The relational view theory proposes that connection-explicit resources, knowledge sharing schedules, integral assets and capacities and viable administration between alliance consociate can decide interfirm	Dyer and Singh, (1998)	Chin *et al.*, (2015)	• GSCM practices • Environmental Collaboration	

competitive advantage.				
Diffusion of Innovation Theory Diffusion of innovation theory describes about when, where, why and what condition new technology and idea disperse.	Everett Rogers, (1962)	Wang, Z. (2018)	• Customer Drivers • Cost Drivers • External Green Practices • Internal Green Practices • Eco Design • Regulation and Incentive • Customer Pressure • Total quality management • Leadership • Institutional pressure • Supplier relationship management • Green Purchasing • Green Manufacturing • Green Marketing • Green Distribution • Green Packaging • Internal Environmental Management • Investment Recovery • Lean manufacturing practices • GSCM practices	Operational Performance
Institutional Theory Institutional theory a developing point of view in organizational theory and sociology, which they term the 'new institutionalism', as dismissing the rational-actor models of Classical economics. Rather, it looks for psychological and social clarifications of social and corporation's facts by assessing the properties of supra-singular units of investigation that can't be decreased to conglomerations or direct results of people's qualities or thought processes.	DiMaggio and Powel, (1983)	Suhaiza Hanim Mohamad Zailani, (2012); Dubey *et al.*, (2015)		
Resource Based View Theory Resource based view of the firm describes that utilizing resources in a particular way, firm can achieve competitive advantage.	Jay Barney, (1991)	Yildiz Çankaya *et al.*, (2018)		
Resource Advantage Theory Resource advantage theory seeks to describe organizational diversity and variances among market-based as well as command economies on the measures of effectiveness, efficiency and creativeness.	Hunt and Morgan, (1995)	Inman *et al.*, (2018)		
Dynamic Capability Theory Dynamic capability theory is the organization's capacity to incorporate, form, and reconfigure inner and outside abilities to explain escalating changes in environment.	David Teece, Gary Pisano and Amy Shuen, (1997)	Wong, C. W. (2013)	• Environmental information integration • Environmental management capabilities	

VIII. MANAGERIAL IMPLICATIONS

From managerial perspective, managers are the key part of an organizations that they play an important role to gain competitive advantage by adopting such practices which helps to enhance environmental performance. It is significant for organizations that build capabilities to design the promulgation of green practices across the supply chain like 'Green supply chain management (GSCM) activities and lean manufacturing' to enhance environmental performance which is caused by global warming, increase of transportation, productions in the form of emissions in air or water or wastes that helps to rapid change in environment and at present customers are very conscious about green product, as a consequence it will be very difficult for those firms to survive in market in the future. Moreover, organizations should hire expert that can select and analyze the data and turned the information into knowledge regarding environmental impacts. The top management must evaluate the strategies and practices in the light of green concept in order to better size and opportunities generated by supply and demand. Furthermore, these ideologies must clearly share with all employees as well as supply chain partners. Managers should also conduct environmental awareness campaigns and programs. This study calls for standardization of trending perspectives from academicians and practitioners in the future to further increase environmental aspects. Scholars in the future can foster the development of environmental aspects particularly based on firms' pressures influenced by internal or external matters. Scholars should converge in future models these points of view all together not just to get a comprehensive assessment of the environmental performance yet in addition to keep away from a limited way to deal with improvement of the performance. Further research requires standardized strategic indicators to operational measures for environmental performance.

REFERENCES

Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: a systematic review. *International Journal of Management Reviews*, *18*(2), 180-205.

Agenda 21 (1992), "Promoting education, public awareness and training", The United Nations, Rio de Janeiro, Chapter 36, available at: http://sedac.ciesin.columbia.edu/entri/texts/a21/a21-36- education.html (accessed July 21, 2013).

Ageron, B., Gunasekaran, A., & Spalanzani, A. (2012). Sustainable supply management: An empirical study. *International journal of production economics*, *140*(1), 168-182.

Agrawal, A. W., Dill, J., & Nixon, H. (2010). Green transportation taxes and fees: A survey of public preferences in California. *Transportation Research Part D: Transport and Environment*, *15*(4), 189-196.

Åkerman, J., & Höjer, M. (2006). How much transport can the climate stand? Sweden on a sustainable path in 2050. *Energy policy*, *34*(14), 1944-1957.

Al-Ghwayeen, W. S., & Abdallah, A. B. (2018). Green supply chain management and export performance: The mediating role of environmental performance. *Journal of Manufacturing Technology Management*, *29*(7), 1233-1252.

Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. *Policy Brief-Department of Economics, PU, Lahore*. 2017 (1), 1-6.

Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.

Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.

Ali, A. and Bibi, C. (2017). Determinants of Social Progress and its Scenarios under the role of Macroeconomic Instability: Empirics from Pakistan. *Pakistan Economic and Social Review* 55 (2), 505-540.

Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, *22*(2), 218-224.

Ali, A., & Audi, M. (2016). The Impact of Income Inequality, Environmental Degradation and Globalization on Life Expectancy in Pakistan: An Empirical Analysis. *International Journal of Economics and Empirical Research (IJEER)*, *4*(4), 182-193.

Ali, A., & Senturk, I. (2019). Justifying the Impact of Economic Deprivation, Maternal Status and Health infrastructure on Under-Five Child Mortality in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, *8*(3), 140-154.

Ali, A., Audi, M., & Roussel, Y. (2021). Natural Resources Depletion, Renewable Energy Consumption and Environmental Degradation: A Comparative Analysis of Developed and Developing World. *International Journal of Energy Economics and Policy*, *11*(3), 251-260.

Alkemade, F., & Suurs, R. A. (2012). Patterns of expectations for emerging sustainable technologies. *Technological Forecasting and Social Change*, *79*(3), 448-456.

Al-Odeh, M., & Smallwood, J. (2012). Sustainable supply chain management: Literature review, trends, and framework. *International Journal of Computational Engineering & Management*, *15*(1), 85-90.

Annandale, D., Morrison-Saunders, A., & Bouma, G. (2004). The impact of voluntary environmental protection instruments on company environmental performance. *Business strategy and the environment*, *13*(1), 1-12.

Aoe, T. (2007). Eco-efficiency and ecodesign in electrical and electronic products. *Journal of Cleaner Production*, *15*(15), 1406-1414.

Arimura, T. H., Darnall, N., & Katayama, H. (2011). Is ISO 14001 a gateway to more advanced voluntary action? The case of green supply chain management. *Journal of environmental economics and management*, *61*(2), 170-182.

Arora, S., & Cason, T. N. (1996). Why do firms volunteer to exceed environmental regulations? Understanding participation in EPA's 33/50 program. *Land economics*, 413-432.

Audi, M. Ali, A. & Roussel, Y. (2021). Aggregate and Disaggregate Natural Resources Agglomeration and Foreign Direct Investment in France. *International Journal of Economics and Financial Issues*, 11(1), 147-156.

Audi, M. Sadiq, A. Ali, A. and Roussel, Y. (2021). Performance Evaluation of Islamic and Non-Islamic Equity and Bonds Indices: Evidence from Selected Emerging and Developed Countries. *Journal of Applied Economic Sciences*, 16(73), 251– 269.

Audi, M., & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.

Audi, M., & Ali, A. (2018). Determinants of environmental degradation under the perspective of globalization: a panel analysis of selected MENA nations. *Journal of Academy of Business and Economics*, 18(1), 149-166.

Audi, M., Ali, A., & Kassem, M. (2020). Greenhouse Gases: A Review of Losses and Benefits. *International Journal of Energy Economics and Policy*, *10*(1), 403.

Audi, M., Ali, A., & Roussel, Y. (2021). Aggregate and Disaggregate Natural Resources Agglomeration and Foreign Direct Investment in France. *International Journal of Economics and Financial Issues*, *11*(1), 147-156.

Audi, M., Ali, A., & Roussel, Y. (2021). The Advancement in Information and Communication Technologies (ICT) and Economic Development: A Panel Analysis. *International Journal of Innovation, Creativity and Change*, 15(4), 1013-1039.

Ayres, R., Ferrer, G., & Van Leynseele, T. (1997). Eco-efficiency, asset recovery and remanufacturing. *European Management Journal*, *15*(5), 557-574.

Azevedo, S. G., Carvalho, H., & Machado, V. C. (2011). The influence of green practices on supply chain performance: a case study approach. *Transportation research part E: logistics and transportation review*, *47*(6), 850-871.

Bai, C., & Sarkis, J. (2010). Green supplier development: analytical evaluation using rough set theory. *Journal of Cleaner Production*, *18*(12), 1200-1210.

Bai, C., Sarkis, J., & Dou, Y. (2015). Corporate sustainability development in China: review and analysis. *Industrial Management & Data Systems*, *115*(1), 5-40.

Bakker, S. and Jacob Trip, J. (2013), "Policy options to support the adoption of electric vehicles in the urban environment", *Transportation Research Part D: Transport and Environment*, Vol. 25 No. 0, pp. 18-23.

Banerjee, S. B. (2001). Managerial perceptions of corporate environmentalism: Interpretations from industry and strategic implications for organizations. *Journal of management studies*, *38*(4), 489-513.

Beamon, B. M. (1999). Designing the green supply chain. *Logistics information management*, *12*(4), 332-342.

Bengtsson, F., & Ågerfalk, P. J. (2011). Information technology as a change actant in sustainability innovation: Insights from Uppsala. *The Journal of Strategic Information Systems*, *20*(1), 96-112.

Bergmiller, G. G., & McCright, P. R (2009) Are Lean and Green Programs Synergistic?.

Beske, P., & Seuring, S. (2014). Putting sustainability into supply chain management. *Supply Chain Management: an international journal*, *19*(3), 322-331.

Bhattacharya, A., Mohapatra, P., Kumar, V., Dey, P. K., Brady, M., Tiwari, M. K., & Nudurupati, S. S. (2014). Green supply chain performance measurement using fuzzy ANP-based balanced scorecard: a collaborative decision-making approach. *Production Planning & Control*, *25*(8), 698-714.

Bhattacharya, C. B., & Polman, P. (2017). Sustainability Lessons From the Front Lines. *MIT Sloan Management Review*, *58*(2), 71.

Bierma, T. J., & Waterstraat, F. L. (1999). Cleaner production from chemical suppliers: understanding shared savings contracts. *Journal of Cleaner Production*, *7*(2), 145-158.

Bonifant, B. (1994). *Competitive implications of environmental regulation of chlorinated organic releases in the pulp and paper industry* (No. 676.2 B715c). Sl: Management Institute for Environment and Business.

Bowen, F. E., Cousins, P. D., Lamming, R. C., & Farukt, A. C. (2001). The role of supply management capabilities in green supply. *Production and operations management*, *10*(2), 174-189.

Boyer, K. K., & Hult, G. T. M. (2005). Extending the supply chain: integrating operations and marketing in the online grocery industry. *Journal of Operations Management*, *23*(6), 642-661.

Browne, M., Allen, J., Nemoto, T., Patier, D. and Visser, J. (2012), "Reducing Social and Environmental Impacts of Urban Freight Transport: A Review of Some Major Cities", *Procedia - Social and Behavioral Sciences*, Vol. 39 No. 0, pp. 19-33.

Cannella, S., & Ciancimino, E. (2010, April). Up-to-date supply chain management: The coordinated (S, R) order-up-to. In *International Heinz Nixdorf Symposium* (pp. 175-185). Springer, Berlin, Heidelberg.

Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International journal of physical distribution & logistics management*, *38*(5), 360-387.

Carter, C. R., Kale, R., & Grimm, C. M. (2000). Environmental purchasing and firm performance: an empirical investigation. *Transportation Research Part E: Logistics and Transportation Review*, *36*(3), 219-228.

Casalegno, F. and Chiu, D. (2008), "White Paper on Sustainable Transportation", MIT Mobile Experience Lab.

Chan, R. Y. (2005). Does the natural-resource-based view of the firm apply in an emerging economy? A survey of foreign invested enterprises in China. *Journal of management studies*, *42*(3), 625-672.

Chan, R. Y., He, H., Chan, H. K., & 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), 621-630.

Chandra Shukla, A., Deshmukh, S. G., & Kanda, A. (2009). Environmentally responsive supply chains: learnings from the Indian auto sector. *Journal of Advances in Management Research*, *6*(2), 154-171.

Chauhan, G., & Singh, T. P. (2012). Measuring parameters of lean manufacturing realization. *Measuring Business Excellence*, *16*(3), 57-71.

Chen, Y. S. (2008). The driver of green innovation and green image–green core competence. *Journal of business ethics*, *81*(3), 531-543.

Chen, Y. –S., Lai, S. –B. and Wen, C. –T. (2006) 'The influence of green innovation performance on corporate advantage in Taiwan.' *Journal of Business Ethics*, Vol. 67, No. 4, pp. 331-339.

Chen, Y., Tang, G., Jin, J., Li, J., & Paillé, P. (2015). Linking market orientation and environmental performance: The influence of environmental strategy, employee's environmental involvement, and environmental product quality. *Journal of Business Ethics*, *127*(2), 479-500.

Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEO s' Transformational Leadership and Product Innovation Performance: The Roles of Corporate Entrepreneurship and Technology Orientation. *Journal of Product Innovation Management*, *31*, 2-17.

Chenhall, R. H., & Morris, D. (1986). The impact of structure, environment, and interdependence on the perceived usefulness of management accounting systems. *Accounting Review*, 16-35.

Chiou, T. Y., Chan, H. K., Lettice, F., & Chung, S. H. (2011). The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan. *Transportation Research Part E: Logistics and Transportation Review*, *47*(6), 822-836.

Christmann, P., & Taylor, G. (2001). Globalization and the environment: Determinants of firm self-regulation in China. *Journal of international business studies*, *32*(3), 439-458.

Chung, S. S., Fryxell, G. E., & Lo, C. W. (2005). Corporate environmental policy statements in mainland China: to what extent do they conform to ISO 14000 documentation?. *Environmental Management*, *35*(4), 468-482.

Cole, M. A., Elliott, R. J., & Shimamoto, K. (2005). Industrial characteristics, environmental regulations and air pollution: an analysis of the UK manufacturing sector. *Journal of environmental economics and management*, *50*(1), 121-143.

Colvile, R. N., Kaur, S., Britter, R., Robins, A., Bell, M. C., Shallcross, D., ... & Co-investigators, D. P. (2004). Sustainable development of urban transport systems and human exposure to air pollution. *Science of the Total Environment*, *334*, 481-487.

Corbett, C. J., & Kirsch, D. A. (2001). International diffusion of ISO 14000 certification. *Production and operations management*, *10*(3), 327-342.

Coskun, S., Ozgur, L., Polat, O., & Gungor, A. (2016). A model proposal for green supply chain network design based on consumer segmentation. *Journal of Cleaner Production*, *110*, 149-157.

Cramer, J. M., & Roes, B. (1993). Total employee involvement: measures for success. *Environmental Quality Management*, *3*(1), 39-52.

Cristina Gimenez, Vicenta Sierra, Juan Rodon and Jorge Andres Rodriguez, (2015),"The role of information technology in the environmental performance of the firm", Academia Revista Latinoamericana de Administración, Vol. 28 Iss 2 pp. 273 – 291.

Crowe, D., & Brennan, L. (2007). Environmental considerations within manufacturing strategy: an international study. *Business Strategy and the Environment*, *16*(4), 266-289.

Curkovic, S., Vickery, S., & Dröge, C. (2000). Quality-related action programs: Their impact on quality performance and firm performance. *Decision Sciences*, *31*(4), 885-902.

Daddi, T., Magistrelli, M., Frey, M., & Iraldo, F. (2011). Do environmental management systems improve environmental performance? Empirical evidence from Italian companies. *Environment, Development and Sustainability*, *13*(5), 845-862.

Daily, B. F., & Huang, S. C. (2001). Achieving sustainability through attention to human resource factors in environmental management. *International Journal of operations & production management*, *21*(12), 1539-1552.

Daily, B. F., Bishop, J. W., & Massoud, J. A. (2012). The role of training and empowerment in environmental performance: A study of the Mexican maquiladora industry. *International Journal of Operations & Production Management*, *32*(5), 631-647.

Daily, B. F., Bishop, J. W., & Steiner, R. (2007). The mediating role of EMS teamwork as it pertains to HR factors and perceived environmental performance. *Journal of applied business research*, *23*(1), 95.

Dangelico, R. M., & Pujari, D. (2010). Mainstreaming green product innovation: Why and how companies integrate environmental sustainability. *Journal of business ethics*, *95*(3), 471-486.

Dangelico, R. M., Pujari, D., & Pontrandolfo, P. (2017). Green product innovation in manufacturing firms: A sustainability-oriented dynamic capability perspective. *Business Strategy and the Environment*, *26*(4), 490-506.

Darnall, N., Jolley, G. J., & Handfield, R. (2008). Environmental management systems and green supply chain management: complements for sustainability?. *Business strategy and the environment*, *17*(1), 30-45.

De Bakker, F., & Nijhof, A. (2002). Responsible chain management: a capability assessment framework. *Business Strategy and the Environment*, *11*(1), 63-75.

Demirci, U. (2014). Green Supply Chain Management Case: Turkish Automotive Industry by practices, pressures and performance.

Diab, S. M., Al-Bourini, F. A., & Abu-Rumman, A. H. (2015). The impact of green supply chain management practices on organizational performance: a study of Jordanian food industries. *J. Mgmt. & Sustainability*, *5*, 149.

Duarte, S., & Cruz-Machado, V. (2015). Investigating lean and green supply chain linkages through a balanced scorecard framework. *International Journal of Management Science and Engineering Management*, *10*(1), 20-29.

Dubey, R., Gunasekaran, A., & Papadopoulos, T. (2017). Green supply chain management: theoretical framework and further research directions. *Benchmarking: An International Journal*, *24*(1), 184-218.

Dües, C. M., Tan, K. H., & Lim, M. (2013). Green as the new Lean: how to use Lean practices as a catalyst to greening your supply chain. *Journal of cleaner production*, *40*, 93-100.

Duflou, J. R., Sutherland, J. W., Dornfeld, D., Herrmann, C., Jeswiet, J., Kara, S., ... & Kellens, K. (2012). Towards energy and resource efficient manufacturing: A processes and systems approach. *CIRP Annals-Manufacturing Technology*, *61*(2), 587-609.

EU-SUST (2011), Greening Europe Forum (GEF) Rountable Opportunities and Challenges of Greening ICT, Friends of Europe, Brussels.

Evangelista, P. (2014). Environmental sustainability practices in the transport and logistics service industry: An exploratory case study investigation. *Research in Transportation Business & Management*, *12*, 63-72.

Evangelista, P., Colicchia, C., & Creazza, A. (2017). Is environmental sustainability a strategic priority for logistics service providers? *Journal of Environmental Management*, *198*(1), 353–362.

Evans, S., Gregory, M., Ryan, C., Bergendahl, M. N., & Tan, A. (2009). *Towards a sustainable industrial system: With recommendations for education, research, industry and policy*. University of Cambridge, Institute for Manufacturing.

Fernández, E., Junquera, B., & Ordiz, M. (2003). Organizational culture and human resources in the environmental issue: a review of the literature. *International Journal of Human Resource Management*, *14*(4), 634-656.

Florida, R. (1996). Lean and green: the move to environmentally conscious manufacturing. *California management review*, *39*(1), 80-105.

Fong, C. M., & Chang, N. J. (2012). The impact of green learning orientation on proactive environmental innovation capability and firm performance. *African Journal of Business Management*, *6*(3), 727-735.

Forman, M., & Jorgensen, M. S. G. (2001). The social shaping of the participation of employees in environmental work within enterprises-experiences from a Danish context. *Technology Analysis & Strategic Management*, *13*(1), 71-90.

Gao, Y., Li, J., & Song, Y. (2009, August). Performance evaluation of green supply chain management based on membership conversion algorithm. In *Computing, Communication, Control, and Management, 2009. CCCM 2009. ISECS International Colloquium on* (Vol. 3, pp. 237-240). IEEE.

Garavan, T. N. (1997). Training, development, education and learning: different or the same?. *Journal of European industrial training*, *21*(2), 39-50.

Garetti, M., & Taisch, M. (2012). Sustainable manufacturing: trends and research challenges. *Production planning & control*, *23*(2-3), 83-104.

Garza-Reyes, J. A. (2015). Green lean and the need for Six Sigma. *International Journal of Lean Six Sigma*, *6*(3), 226-248.

Gavronski, I., Klassen, R. D., Vachon, S., & do Nascimento, L. F. M. (2011). A resource-based view of green supply management. *Transportation Research Part E: Logistics and Transportation Review*, *47*(6), 872-885.

Geng, Y., Zhang, P., Côté, R. P., & Fujita, T. (2009). Assessment of the national eco-industrial park standard for promoting industrial symbiosis in China. *Journal of Industrial Ecology*, *13*(1), 15-26.

Genovese, A., Lenny Koh, S. C., Kumar, N., & Tripathi, P. K. (2014). Exploring the challenges in implementing supplier environmental performance measurement models: a case study. *Production Planning & Control*, *25*(13-14), 1198-1211.

Geyer, R., & Jackson, T. (2004). Supply loops and their constraints: the industrial ecology of recycling and reuse. *California Management Review*, *46*(2), 55-73.

Gimenez, C., & Sierra, V. (2013). Sustainable supply chains: Governance mechanisms to greening suppliers. *Journal of Business Ethics*, *116*(1), 189-203.

Govindarajulu, N., & Daily, B. F. (2004). Motivating employees for environmental improvement. *Industrial management & data systems*, *104*(4), 364-372.

Green Jr, K. W., Zelbst, P. J., Bhadauria, V. S., & Meacham, J. (2012b). Do environmental collaboration and monitoring enhance organizational performance?. *Industrial Management & Data Systems*, *112*(2), 186-205.

Green Jr, K. W., Zelbst, P. J., Meacham, J., & Bhadauria, V. S. (2012). Green supply chain management practices: impact on performance. *Supply Chain Management: An International Journal*, *17*(3), 290-305.

Gualandris, J., & Kalchschmidt, M. (2014). Customer pressure and innovativeness: Their role in sustainable supply chain management. *Journal of Purchasing and Supply Management*, *20*(2), 92-103.

Guang Shi, V., Lenny Koh, S. C., Baldwin, J., & Cucchiella, F. (2012). Natural resource based green supply chain management. *Supply Chain Management: An International Journal*, *17*(1), 54-67.

Gunasekaran, A., & Spalanzani, A. (2012). Sustainability of manufacturing and services: Investigations for research and applications. *International Journal of Production Economics*, *140*(1), 35-47.

Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. *International Journal of Economics and Empirical Research*, 3(11), 550-560.

Hall, J. (2000). Environmental supply chain dynamics. *Journal of Cleaner Production*, 8(6), 455-471.

Hamner, B. (2006). Effects of green purchasing strategies on supplier behaviour. In *Greening the supply chain* (pp. 25-37). Springer, London.

Handfield, R. B., Melnyk, S. A., Calantone, R. J., & Curkovic, S. (2001). Integrating environmental concerns into the design process: the gap between theory and practice. *IEEE transactions on Engineering Management*, *48*(2), 189-208.

Handfield, R., Sroufe, R., & Walton, S. (2005). Integrating environmental management and supply chain strategies. *Business strategy and the environment*, *14*(1), 1-19.

Hanim Mohamad Zailani, S., Eltayeb, T. K., Hsu, C. C., & Choon Tan, K. (2012). The impact of external institutional drivers and internal strategy on environmental performance. *International Journal of Operations & Production Management*, *32*(6), 721-745.

Hanim Mohamad Zailani, S., Eltayeb, T. K., Hsu, C. C., & Choon Tan, K. (2012). The impact of external institutional drivers and internal strategy on environmental performance. *International Journal of Operations & Production Management*, *32*(6), 721-745.

Hanna, M. D., Rocky Newman, W., & Johnson, P. (2000). Linking operational and environmental improvement through employee involvement. *International journal of operations & production management*, *20*(2), 148-165.

Hansmann, K. W., & Claudia, K. (2001). Environmental management policies. *Green manufacturing and operations: From design to delivery and back*, 192-204.

Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of management review*, *20*(4), 986-1014.

Hart, S. L. (1997). Beyond greening: strategies for a sustainable world. *Harvard business review*, *75*(1), 66-77.

Hasan, M. (2013). Sustainable supply chain management practices and operational performance. *American Journal of Industrial and Business Management*, *3*(1), 42.

Hertin, J., Berkhout, F., Wagner, M., & Tyteca, D. (2008). Are EMS environmentally effective? The link between environmental management systems and environmental performance in European companies. *Journal of environmental planning and management*, *51*(2), 259-283.

Hervani, A.A., Helms, M.M., Sarkis, J. (2005). Performance measurement for green supply chain management. Benchmarking: *An International Journal*, 12(4), 330-353.

Horbach, J. (2008). Determinants of environmental innovation—New evidence from German panel data sources. *Research policy*, *37*(1), 163-173.

Hsu, C. W., & Hu, A. H. (2008). Green supply chain management in the electronic industry. *International Journal of Environmental Science & Technology*, *5*(2), 205-216.

Hsu, C. W., & Hu, A. H. (2009). Applying hazardous substance management to supplier selection using analytic network process. *Journal of Cleaner production*, *17*(2), 255-264.

Intergovernmental Panel on Climate Change (IPCC) (2013), "IPCC WGII AR5 Glossary", www.ipcc.ch/pdf/assessment-report/ar5/wg2/drafts/fd/WGIIAR5 Glossary_FGD.pdf

Iraldo, F., Testa, F., & Frey, M. (2009). Is an environmental management system able to influence environmental and competitive performance? The case of the eco-management and audit scheme (EMAS) in the European Union. *Journal of Cleaner Production*, *17*(16), 1444-1452.

Jackson, P. R. (2004). Employee commitment to quality: Its conceptualisation and measurement. *International Journal of Quality & Reliability Management*, *21*(7), 714-730.

Janelle, D. G. (1997), "Sustainable transportation and information technology: suggested research issues", *Journal of Transport Geography*, Vol. 5 No. 1, pp. 39-40.

Janic, M. (2011). Assessing some social and environmental effects of transforming an airport into a real multimodal transport node. *Transportation Research Part D: Transport and Environment*, *16*(2), 137-149.

Jansson, J., Nilsson, J., Modig, F., & Hed Vall, G. (2017). Commitment to sustainability in small and medium-sized enterprises: The influence of strategic orientations and management values. *Business Strategy and the Environment*, *26*(1), 69-83.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of marketing*, *57*(3), 53-70.

Jenkin, T. A., Webster, J., & McShane, L. (2011). An agenda for 'Green'information technology and systems research. *Information and Organization*, *21*(1), 17-40.

Judge, W. Q., & Douglas, T. J. (1998). Performance implications of incorporating natural environmental issues into the strategic planning process: an empirical assessment. *Journal of management Studies*, *35*(2), 241-262.

Jun, M., Cai, S., & Shin, H. (2006). TQM practice in maquiladora: Antecedents of employee satisfaction and loyalty. *Journal of operations management*, *24*(6), 791-812.

Kabashi, S., Bekteshi, S., Ahmetaj, S., Kabashi, G., Blinc, R., Zidanšek, A., & Šlaus, I. (2011). Greenhouse gas and air pollution emissions and options for reducing from the Kosovo transportation sector-dynamic modelling. *Management of Environmental Quality: An International Journal*, *22*(1), 72-88.

Kammerer, D. (2009). The effects of customer benefit and regulation on environmental product innovation.: Empirical evidence from appliance manufacturers in Germany. *Ecological Economics*, *68*(8-9), 2285-2295.

Kim, B., Park, K., & Swink, M. (2014). Consumers' preferences for facets of green supply chain management. *International Journal of Services and Operations Management*, *18*(1), 74-98.

King, A. A., & Lenox, M. J. (2001). Lean and green? An empirical examination of the relationship between lean production and environmental performance. *Production and operations management*, *10*(3), 244-256.

King, A. A., Lenox, M. J., & Terlaak, A. (2005). The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Academy of management journal*, *48*(6), 1091-1106.

King, A., & Lenox, M. (2002). Exploring the locus of profitable pollution reduction. *Management Science*, *48*(2), 289-299.

Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management journal*, *42*(1), 58-74.

Kirkman, B. L., Rosen, B., Tesluk, P. E., & Gibson, C. B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, *47*(2), 175-192.

Klassen, R. D. (2001). Plant-level environmental management orientation: the influence of management views and plant characteristics. *Production and Operations Management*, *10*(3), 257-275.

Klassen, R. D., & McLaughlin, C. P. (1996). The impact of environmental management on firm performance. *Management science*, *42*(8), 1199-1214.

Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, *51*(1), 23-34.

Koroneos, C., & Nanaki, E. (2007). Environmental assessment of the Greek transport sector. *Energy Policy*, *35*(11), 5422-5432.

Kovács, G. (2008). Corporate environmental responsibility in the supply chain. *Journal of Cleaner Production*, *16*(15), 1571-1578.

Kreutzberger, E., Macharis, C., Vereecken, L., & Woxenius, J. (2003, June). Is intermodal freight transport more environmentally friendly than all-road freight transport? A review. In *Nectar conference* (No. 7, pp. 13-15).

Ku, C. Y., Chang, C. T., & Ho, H. P. (2010). Global supplier selection using fuzzy analytic hierarchy process and fuzzy goal programming. *Quality & Quantity*, *44*(4), 623-640.

Kumar, A., Cantor, D. E., Grimm, C. M., & Hofer, C. (2017). Environmental management rivalry and firm performance. *Journal of Strategy and Management*, *10*(2), 227-247.

Kung, F. H., Huang, C. L., & Cheng, C. L. (2012). Assessing the green value chain to improve environmental performance: Evidence from Taiwan's manufacturing industry. *International Journal of Development Issues*, *11*(2), 111-128.

Kurdve, M., Zackrisson, M., Wiktorsson, M., & Harlin, U. (2014). Lean and green integration into production system models–experiences from Swedish industry. *Journal of Cleaner Production*, *85*, 180-190.

L. Tate, W., M. Ellram, L., & J. Dooley, K. (2014). The impact of transaction costs and institutional pressure on supplier environmental practices. *International Journal of Physical Distribution & Logistics Management*, *44*(5), 353-372.

Lai, K. H., Wong, C. W., & Cheng, T. C. E. (2012). Ecological modernisation of Chinese export manufacturing via green logistics management and its regional implications. *Technological Forecasting and Social Change*, *79*(4), 766-770.

Lamming, R. and Hampson, J. (1996), "The environment as a supply chain management issue", British Journal of Management, Vol. 7 No. S1, pp. S45-S62.

Large, R. O., & Thomsen, C. G. (2011). Drivers of green supply management performance: Evidence from Germany. *Journal of Purchasing and Supply Management*, *17*(3), 176-184.

Larson, T., & Greenwood, R. (2004). Perfect complements: synergies between lean production and eco-sustainability initiatives. *Environmental Quality Management*, *13*(4), 27-36.

Lee, A. H., Kang, H. Y., Hsu, C. F., & Hung, H. C. (2009). A green supplier selection model for high-tech industry. *Expert systems with applications*, *36*(4), 7917-7927.

Lee, D. H. (2013). The role of Triple-A in green supply chain management practices and organizational performance.

Lee, H. L., Padmanabhan, V., & Whang, S. (1997). The bullwhip effect in supply chains. *Sloan management review*, *38*, 93-102.

Lee, K. H. (2009). Why and how to adopt green management into business organizations? The case study of Korean SMEs in manufacturing industry. *Management Decision*, *47*(7), 1101-1121.

Lee, S. M., Tae Kim, S., & Choi, D. (2012). Green supply chain management and organizational performance. *Industrial Management & Data Systems*, *112*(8), 1148-1180.

Lee, S. Y. (2015). The effects of green supply chain management on the supplier's performance through social capital accumulation. *Supply Chain Management: An International Journal*, *20*(1), 42-55.

Lieb, K. J., & Lieb, R. C. (2010). Environmental sustainability in the third-party logistics (3PL) industry. *International Journal of Physical Distribution and Logistics Management*, *40*(7), 524–533.

Lin, C., Kuei, C. H., & Chai, K. W. (2013). Identifying critical enablers and pathways to high performance supply chain quality management. *International Journal of Operations & Production Management*, *33*(3), 347-370.

Liu, H., Ke, W., Kee Wei, K., & Hua, Z. (2013). Effects of supply chain integration and market orientation on firm performance: Evidence from China. *International Journal of Operations & Production Management*, *33*(3), 322-346.

Liu, Q., Li, H. M., Zuo, X. L., Zhang, F. F., & Wang, L. (2009). A survey and analysis on public awareness and performance for promoting circular economy in China: A case study from Tianjin. *Journal of Cleaner Production*, *17*(2), 265-270.

Lund, H., & Clark II, W. W. (2008). Sustainable energy and transportation systems introduction and overview. *Utilities Policy*, *16*(2), 59-62.

Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of marketing*, *70*(4), 1-18.

Luo, X., & Bhattacharya, C. B. (2009). The debate over doing good: Corporate social performance, strategic marketing levers, and firm-idiosyncratic risk. *Journal of Marketing*, *73*(6), 198-213.

Lupp, G., Heuchele, L., Renner, C., Syrbe, R. U., Konold, W., & Siegrist, D. (2016). Motivations and attitudes to (not) take action for climate change adaptation in protected areas. *International Journal of Climate Change Strategies and Management*, *8*(3), 356-374.

Macario, R. and Marques, C. F. (2008), "Transferability of sustainable urban mobility measures", *Research in Transportation Economics*, Vol. 22 pp. 146-156.

Marks, M. A., Zaccaro, S. J., & Mathieu, J. E. (2000). Performance implications of leader briefings and team-interaction training for team adaptation to novel environments. *Journal of applied psychology*, *85*(6), 971.

Marshall, R. S., Cordano, M., & Silverman, M. (2005). Exploring individual and institutional drivers of proactive environmentalism in the US wine industry. *Business Strategy and the Environment*, *14*(2), 92-109.

Mathiyazhagan, K., Govindan, K., NoorulHaq, A., & Geng, Y. (2013). An ISM approach for the barrier analysis in implementing green supply chain management. *Journal of Cleaner Production*, *47*, 283-297.

Matos, S., & Hall, J. (2007). Integrating sustainable development in the supply chain: The case of life cycle assessment in oil and gas and agricultural biotechnology. *Journal of Operations Management*, *25*(6), 1083-1102.

Matthews, R. A., Michelle Diaz, W., & Cole, S. G. (2003). The organizational empowerment scale. *Personnel Review*, *32*(3), 297-318.

Maxwell, J.W., Lyon, T.P. and Hackett, S.C. (1998), "Self-regulation and social welfare: the political economy of corporate environmentalism", Nota di Lavoro 55.98, Fondazione Eni Enrico Mattei, Milano.

May, D. R., & Flannery, B. L. (1995). Cutting waste with employee involvement teams. *Business Horizons*, *38*(5), 28-39.

McKinsey. 2010. The next environmental issue for business: McKinsey Global Survey results. Quarterly Aug.

Melnyk, S. A., Sroufe, R. P., & Calantone, R. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operations Management*, *21*(3), 329-351.

Menguc, B., Auh, S., & Ozanne, L. (2010). The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's performance. *Journal of Business Ethics*, *94*(2), 279-298.

Miemczyk, J., Johnsen, T. E., & Macquet, M. (2012). Sustainable purchasing and supply management: a structured literature review of definitions and measures at the dyad, chain and network levels. *Supply Chain Management: An International Journal*, *17*(5), 478-496.

Mitra, S., & 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), 2085-2107.

Montabon, F., Melnyk, S. A., Sroufe, R., & Calantone, R. J. (2000). ISO 14000: assessing its perceived impact on corporate performance. *Journal of Supply Chain Management*, *36*(1), 4-16.

Montabon, F., Sroufe, R., & Narasimhan, R. (2007). An examination of corporate reporting, environmental management practices and firm performance. *Journal of operations management*, *25*(5), 998-1014.

Narasimhan, R., & Carter, J. R. (1998). *Environmental supply chain management*. Center for Advanced Purchasing Studies.

Nawrocka, D. (2008). Inter-organizational use of EMSs in supply chain management: some experiences from Poland and Sweden. *Corporate social responsibility and environmental management*, *15*(5), 260-269.

Nawrocka, D., Brorson, T., & Lindhqvist, T. (2009). ISO 14001 in environmental supply chain practices. *Journal of Cleaner Production*, *17*(16), 1435-1443.

Negrão, L. L. L., Godinho Filho, M., & Marodin, G. (2017). Lean practices and their effect on performance: a literature review. *Production Planning & Control*, *28*(1), 33-56.

Nimawat, D., & Namdev, V. (2012). An overview of green supply chain management in India. *Research Journal of Recent Sciences*, *1*(6), 77-82.

Nouira, I., Hammami, R., Frein, Y., & Temponi, C. (2016). Design of forward supply chains: Impact of a carbon emissions-sensitive demand. *International Journal of Production Economics*, *173*, 80-98.

Oltra, V., & Saint Jean, M. (2009). Sectoral systems of environmental innovation: an application to the French automotive industry. *Technological Forecasting and Social Change*, *76*(4), 567-583.

Omar, B., Hiyassat, M., Sweis, G. J., Abdallah, A. B., Saleh, R., & Sweis, R. J. (2016). Evaluation of green building awareness in the construction industry: the case of Jordan. *Interdisciplinary Environmental Review*, *17*(3-4), 209-231.

Pagan, R., & Lake, M. (1999). A while of life approach to sustainable food production. *Industry and Environment (France)*, 22(2–3), 13–17.

Pagell, M., & Gobeli, D. (2009). How plant managers' experiences and attitudes toward sustainability relate to operational performance. *Production and Operations Management*, *18*(3), 278-299.

Pagell, M., & 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), 37-56.

Paulraj, A. (2011). Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. *Journal of Supply Chain Management*, *47*(1), 19-37.

Paulraj, A. (2011). Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. *Journal of Supply Chain Management*, *47*(1), 19-37.

Pekovic, S., Rolland, S., & Gatignon, H. (2016). Customer orientation and organizational innovation: the case of environmental management practices. *Journal of Business & Industrial Marketing*, *31*(7), 835-848.

Pereira-Moliner, J., Claver-Cortés, E., Molina-Azorín, J. F., & Tarí, J. J. (2012). Quality management, environmental management and firm performance: direct and mediating effects in the hotel industry. *Journal of Cleaner Production*, *37*, 82-92.

Perez-Valls, M., Cespedes-Lorente, J., & Moreno-Garcia, J. (2016). Green practices and organizational design as sources of strategic flexibility and performance. *Business Strategy and the Environment*, *25*(8), 529–544.

Perron, G. M., Côté, R. P., & Duffy, J. F. (2006). Improving environmental awareness training in business. *Journal of Cleaner Production*, *14*(6-7), 551-562.

Porter van der Linde, M. E. (1995). Green and competitive. *Harvard Business Review*, *73*, 120-134.

Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *Journal of economic perspectives*, *9*(4), 97-118.

Prajogo, D., Chowdhury, M., Yeung, A. C., & Cheng, T. C. E. (2012). The relationship between supplier management and firm's operational performance: A multi-dimensional perspective. *International journal of production economics*, *136*(1), 123-130.

Pride, W. M., & Ferrell, O. C. (1993). *Marketing: Study Guide, 1993*. Houghton Mifflin School.

Ramus, C. A. (1997). Employee empowerment at GE Plastics: An example of a successful environmental change process. *Corporate Environmental Strategy*, *4*(3), 38-47.

Ramus, C. A. (2002). Encouraging innovative environmental actions: what companies and managers must do. *Journal of world business*, *37*(2), 151-164.

Rao, P. (2002). Greening the supply chain: a new initiative in South East Asia. *International Journal of Operations & Production Management*, *22*(6), 632-655.

Rao, P., & Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? *International journal of operations & production management*, *25*(9), 898-916.

Reuter, C., Foerstl, K. A. I., Hartmann, E. V. I., & Blome, C. (2010). Sustainable global supplier management: the role of dynamic capabilities in achieving competitive advantage. *Journal of Supply Chain Management*, *46*(2), 45-63.

Rothenberg, S. (2003). Knowledge content and worker participation in environmental management at NUMMI. *Journal of management studies*, *40*(7), 1783-1802.

Rothenberg, S., Pil, F. K., & Maxwell, J. (2001). Lean, green, and the quest for superior environmental performance. *Production and operations management*, *10*(3), 228-243.

Roussel, Y., Ali, A., & Audi, M. (2021). Measuring the Money Demand in Pakistan: A Time Series Analysis. *Bulletin of Business and Economics (BBE)*, *10*(1), 27-41.

Routroy, S. R. I. K. A. N. T. A. (2009). Antecedents and drivers for green supply chain management implementation in manufacturing environment. *ICFAI Journal of Supply Chain Management*, *6*(1), 20-35.

Roy, M. J., Boiral, O., & Lagacé, D. (2001). Environmental commitment and manufacturing excellence: a comparative study within Canadian industry. *Business Strategy and the Environment*, *10*(5), 257-268.

Roy, S., Sivakumar, K., & Wilkinson, I. F. (2004). Innovation generation in supply chain relationships: A conceptual model and research propositions. *Journal of the Academy of marketing Science*, *32*(1), 61-79.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of management Journal*, *40*(3), 534-559.

Sagar, A. D., & Van der Zwaan, B. (2006). Technological innovation in the energy sector: R&D, deployment, and learning-by-doing. *Energy Policy*, *34*(17), 2601-2608.

Saghiri, S., & Hill, A. (2014). Supplier relationship impacts on postponement strategies. *International Journal of Production Research*, *52*(7), 2134-2153.

Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE),* 7(3), 97-109.

Salwa Hanim Hanim Abdul-Rashid Novita Sakundarini Raja Ariffin Raja Ghazilla Ramayah Thurasamy , (2017)," The impact of sustainable manufacturing practices on sustainability performance: empirical evidence from Malaysia ", International Journal of Operations & Production Management, Vol. 37 Issue 2.

Sammalisto, K., & Brorson, T. (2008). Training and communication in the implementation of environmental management systems (ISO 14001): a case study at the University of Gävle, Sweden. *Journal of Cleaner Production*, *16*(3), 299-309.

Samuel Famiyeh, Ebenezer Adaku, Kwasi Amoako-Gyampah, Disraeli Asante-Darko, Charles Teye Amoatey, (2018) "Environmental management practices, operational competitiveness and environmental performance: Empirical evidence from a developing country", Journal of Manufacturing Technology Management.

Santos, G., Behrendt, H., Maconi, L., Shirvani, T., & Teytelboym, A. (2010). Part I: Externalities and economic policies in road transport. *Research in transportation economics*, *28*(1), 2-45.

Sarah Yang Spencer, Carol Adams, Prem W.S. Yapa (2013), "The mediating effects of the adoption of an environmental information system on top management's commitment and environmental performance", Sustainability Accounting, Management and Policy Journal Vol. 4 No. 1, 2013 pp. 75-102.

Sarkis, J. (2001). Manufacturing's role in corporate environmental sustainability-Concerns for the new millennium. *International Journal of Operations & Production Management*, *21*(5/6), 666-686.

Sarkis, J. (2003). A strategic decision framework for green supply chain management. *Journal of cleaner production*, *11*(4), 397-409.

Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management*, *28*(2), 163-176.

Sayre, D.A. (1996). INSDE ISO 14000: *The Competitive Advantage of Environmental Management*, CRC Press and St Lucie Press, Delray Beach, FL.

Schiederig, T., Tietze, F., & Herstatt, C. (2012). Green innovation in technology and innovation management–an exploratory literature review. *R&d Management*, *42*(2), 180-192.

Scott, W.R. (2001), Institutions and Organizations, 2nd ed., Sage, Thousand Oaks, CA.

Şenturk, I. and Ali, A. (2021). Socioeconomic Determinants of Gender-Specific Life Expectancy in Turkey: A Time Series Analysis. *Sosyoekonomi*, 29(49), 85-111.

Shahid, M., & Ali, A. (2015). The Impact of Decentralized Economic Affairs Expenditures on Economic Growth: A Time Series Analysis of Pakistan. *Bulletin of Business and Economics (BBE)*, *4*(3), 136-148.

Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic management journal*, *19*(8), 729-753.

Shen, L., Olfat, L., Govindan, K., Khodaverdi, R., & Diabat, A. (2013). A fuzzy multi criteria approach for evaluating green supplier's performance in green supply chain with linguistic preferences. *Resources, Conservation and Recycling*, *74*, 170-179.

Shrivastava, P. (1995). Environmental technologies and competitive advantage. *Strategic management journal*, *16*(S1), 183-200.

Sibel Yildiz Çankaya, Bulent Sezen, (2018) "Effects of green supply chain management practices on sustainability performance", Journal of Manufacturing Technology Management.

Singh, P. B., & Pandey, K. K. (2012). Green marketing: policies and practices for sustainable development. *Integral Review*, *5*(1), 22-30.

Smith, B. G. (2007). Developing sustainable food supply chains. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *363*(1492), 849-861.

Sobral, M. C., Sousa Jabbour, A. B. L. D., & Chiappetta Jabbour, C. J. (2013). Green benefits from adopting lean manufacturing: a case study from the automotive sector. *Environmental Quality Management*, *22*(3), 65-72.

Song W, Yu H. 2017. Green Innovation Strategy and Green Innovation: The Roles of Green Creativity and Green Organizational Identity. *Corporate Social Responsibility and Environmental Management*. https://doi.org/10.1002/csr.1445.

Srivastava, S. K. (2007). Green supply-chain management: a state-of-the-art literature review. *International journal of management reviews*, *9*(1), 53-80.

Sroufe, R. (2000). "Environmental management systems: implications for operations management and firm performance", PhD dissertation, *Michigan State University*, East Lansing, MI.

Sroufe, R. (2003). Effects of environmental management systems on environmental management practices and operations. *Production and Operations Management*, *12*(3), 416-431.

Stadtler, L., & Lin, H. (2017). Moving to the next strategy stage: examining firms' awareness, motivation and capability drivers in environmental alliances. *Business Strategy and the Environment*, *26*(6), 709-730.

Starik, M., & Marcus, A. A. (2000). Introduction to the special research forum on the management of organizations in the natural environment: A field emerging from multiple paths, with many challenges ahead. *Academy of Management Journal*, *43*(4), 539-547.

Stelling, P. (2014). Policy instruments for reducing CO2-emissions from the Swedish freight transport sector. *Research in Transportation Business & Management*, *12*, 47-54.

Tegart, G., & Jolley, A. (2001). Sustainable transport for Asia-Pacific megacities. *foresight*, *3*(5), 419-427.

Testa, F., & Iraldo, F. (2010). Shadows and lights of GSCM (Green Supply Chain Management): determinants and effects of these practices based on a multi-national study. *Journal of Cleaner Production*, *18*(10-11), 953-962.

Testa, F., Rizzi, F., Daddi, T., Gusmerotti, N. M., Frey, M., & Iraldo, F. (2014). EMAS and ISO 14001: the differences in effectively improving environmental performance. *Journal of Cleaner Production*, *68*, 165-173.

Tibor, T., & Feldman, I. (1996). ISO 14000: a guide to the new environmental management standards.

Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, *14*(3), 207-222.

Tseng, M. L., Lin, Y. H., Tan, K., Chen, R. H., & Chen, Y. H. (2014). Using TODIM to evaluate green supply chain practices under uncertainty. *Applied Mathematical Modelling*, *38*(11-12), 2983-2995.

Tseng, M. L., Tan, K. H., Lim, M., Lin, R. J., & Geng, Y. (2014) b. Benchmarking eco-efficiency in green supply chain practices in uncertainty. *Production Planning & Control*, *25*(13-14), 1079-1090.

Tseng, M.L., Tan, K., Chiu, A.S.F., (2015). Identifying the competitive determinants of firms' green supply chain capabilities under uncertainty. *Clean Technologies and Environmental Policy*. 1-16.

Tukker, A., Eder, P., Charter, M., Haag, E., Vercalsteren, A., & Wiedmann, T. (2001). Eco-design: the state of implementation in Europe–conclusions of a state of the art study for IPTS. *The Journal of Sustainable Product Design*, *1*(3), 147-161.

Tung, A., Baird, K., & Schoch, H. (2014). The association between the adoption of an environmental management system with organisational environmental performance. *Australasian journal of environmental management*, *21*(3), 281-296.

Vachon, S., & Klassen, R. D. (2006). Extending green practices across the supply chain: the impact of upstream and downstream integration. *International Journal of Operations & Production Management*, *26*(7), 795-821.

Vachon, S., & Klassen, R. D. (2008). Environmental management and manufacturing performance: The role of collaboration in the supply chain. *International journal of production economics*, *111*(2), 299-315.

Van den Broek, F., & Van den Broek-Serlé, N. (2010). Green supply chain management, marketing tool or revolution. *NHTV, Breda*.

van Hoof, B., & Lyon, T. P. (2013). Cleaner production in small firms taking part in Mexico's Sustainable Supplier Program. *Journal of Cleaner Production*, *41*, 270-282.

Viswanathan, N., Jhana, S., & Robert, S. (2009). Supply chain network design: architecting a green future. *Aberdeen, Group*.

Wadhwa, R. S. (2014, September). Synergizing lean and green for continuous improvement. In *IFIP International Conference on Advances in Production Management Systems* (pp. 154-161). Springer, Berlin, Heidelberg.

Wafaa Shihadeh Al-Ghwayeen, Ayman Bahjat Abdallah, (2018) "Green supply chain management and export performance: The mediating role of environmental performance", Journal of Manufacturing Technology Management.

Wagner, M. (2005). Sustainability and competitive advantage: empirical evidence on the influence of strategic choices between environmental management approaches. *Environmental Quality Management*, *14*(3), 31-48.

Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link?. *Strategic Management Journal*, *33*(8), 885-913.

Wang, J., & Dai, J. (2018). Sustainable supply chain management practices and performance. *Industrial Management & Data Systems*, *118*(1), 2-21.

Wang, J., Huili, Y., & Goh, M. (2018). Empirical study of sustainable food supply chain management practices in China. *British Food Journal*, (just-accepted), 00-00.

Wang, Z., Wang, Q., Zhang, S., & Zhao, X. (2018). Effects of customer and cost drivers on green supply chain management practices and environmental performance. *Journal of Cleaner Production*, *189*, 673-682.

Wiengarten, F., & Pagell, M. (2012). The importance of quality management for the success of environmental management initiatives. *International Journal of Production Economics*, *140*(1), 407-415.

Wiengarten, F., Fynes, B., & Onofrei, G. (2013). Exploring synergetic effects between investments in environmental and quality/lean practices in supply chains. *Supply Chain Management: An International Journal*, *18*(2), 148-160.

Wilburn Green, K., Toms, L. C., & Clark, J. (2015). Impact of market orientation on environmental sustainability strategy. *Management Research Review*, *38*(2), 217-238.

Wilburn Green, K., Toms, L. C., & Clark, J. (2015). Impact of market orientation on environmental sustainability strategy. *Management Research Review*, *38*(2), 217-238.

Wisner JD, Tan K-C, Leong GK (2012). Supply chain management: a balanced approach. 3rd ed. Canada: South-Western Cengage Learning.

Wong, C. W. (2013). Leveraging environmental information integration to enable environmental management capability and performance. *Journal of Supply Chain Management*, *49*(2), 114-136.

Yadav, P. L., Han, S. H., & Kim, H. (2017). Sustaining competitive advantage through corporate environmental performance. *Business Strategy and the Environment*, *26*(3), 345–357.

Yang Spencer, S., Adams, C., & Yapa, P. W. (2013). The mediating effects of the adoption of an environmental information system on top management's commitment and environmental performance. *Sustainability Accounting, Management and Policy Journal*, *4*(1), 75-102.

Yang, M. G. M., Hong, P., & Modi, S. B. (2011). Impact of lean manufacturing and environmental management on business performance: An empirical study of manufacturing firms. *International Journal of Production Economics*, *129*(2), 251-261.

Yildiz Çankaya, S., & Sezen, B. (2018). Effects of green supply chain management practices on sustainability performance. *Journal of Manufacturing Technology Management*.

Yoxon, M. (1996). Reducing the Risk in Developing Environmental Training Provision: An Approach for Training Organisations. *Greener Management International*, 97-105.

Zhu, Q., & 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), 265-289.

Zhu, Q., & Sarkis, J. (2007). The moderating effects of institutional pressures on emergent green supply chain practices and performance. *International journal of production research*, *45*(18-19), 4333-4355.

Zhu, Q., Feng, Y., & Choi, S. B. (2017). The role of customer relational governance in environmental and economic performance improvement through green supply chain management. *Journal of Cleaner Production*, *155*, 46-53.

Zhu, Q., Geng, Y., Fujita, T., & Hashimoto, S. (2010). Green supply chain management in leading manufacturers: Case studies in Japanese large companies. *Management Research Review*, *33*(4), 380-392.

Zhu, Q., Sarkis, J., & Geng, Y. (2005). Green supply chain management in China: pressures, practices and performance. *International Journal of Operations & Production Management*, *25*(5), 449-468.

Zhu, Q., Sarkis, J., & Lai, K. H. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International journal of production economics*, *111*(2), 261-273.

Zhu, Q., Sarkis, J., & Lai, K. H. (2012). Examining the effects of green supply chain management practices and their mediations on performance improvements. *International journal of production research*, *50*(5), 1377-1394.

Zhu, Q., Sarkis, J., & 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), 106-117.

Zhu, Q., Tian, Y., & Sarkis, J. (2012) b. Diffusion of selected green supply chain management practices: an assessment of Chinese enterprises. *Production Planning & Control*, *23*(10-11), 837-850.

Zobel, T. (2016). The impact of ISO 14001 on corporate environmental performance: a study of Swedish manufacturing firms. *Journal of Environmental Planning and Management*, *59*(4), 587-606.

Zutshi, A., & Sohal, A. S. (2003). Stakeholder involvement in the EMS adoption process. *Business Process Management Journal*, *9*(2), 133-148.