AN EMPIRICAL EVALUATION OF THE ANTECEDENTS OF GREEN PROCUREMENT AND ITS IMPACT ON SUSTAINABLE PROCUREMENT PRACTICES

Daniel Kotei ✉

School of Management, University of Electronic Science and Technology of China

dkkotei@yahoo.com

Mu Yinping

School of Management, University of Electronic Science and Technology of China

muyingping@uestc.edu.cn

Abstract

The development of the global economy is challenged by several social economic and environmental factors. The consequence of this change has affected the way firms and individuals conduct production and consumption activities. To sustain production networks, firms are advised to adopt novel strategies that place emphasis on utilization of clean technologies, moving into an era of green production. Despite the relevant of green supplier network to attaining sustainable development goal research on partner and supplier selection in this domain is scare. The study attempts to fill this gap by highlighting the importance of green supply network on sustainable procurement practices from network theory and social capital perspective. The results support 2 of the hypotheses stated in the study. Thus concluded, green procurement network and supplier sustainable behavior had an influence on sustainable procurement practices. The formation of green procurement network has an influence on the sustainability practices of actors in procurement ecosystem. When actors adhere to the sustainability benchmark of green network, the probability of success increases. Although the findings of the study support 2 hypotheses, it fails to provide evidence as to the effect of natural environment CSR, buyer's knowledge of supplier past performance on sustainability practicing in the procurement sector.

Keywords: Green Procurement, Sustainability, supplier network, network theory

INTRODUCTION

The development of the global economy is challenged by several social economic and environmental factors. The consequence of this change has affected the way firms and individuals conduct production and consumption activities. To sustain production networks, firms are advised to adopt novel strategies that place emphasis on utilization of clean technologies, moving into an era of green production. For instance automobile firm Telsa Motors manufacture environmentally friendly cars as a mode to address global warming threat. It is estimated by 2050 the number of electric cars or carbon emission free vehicles will account for 65% of all automobiles. Attaining this feat will utter the cause of action in the race to curb surging atmospheric temperature. The race to dominate this emerging market has sparked a wave of green innovation activities by diverse firms, creating a green ecosystem (Konikow, 2005; Adger et al, 2003; Walker & Brammer, 2012).

Adopting sustainable means of production is currently on the agenda of every national or international organization. The Sustainable Development Goals advocates for sustainable consumption and production as a check to avert causing irreversible damage to the environment. Deliberate policies are outline to encourage the establishment of firms that adopt stringent measure to reduce carbon footprint in its production and production network (Griggs et al, 2013; Kates et al, 2005; Sachs, 2012).

To achieve production and delivery schedules, each actor within the network needs to function efficiently to maximize productivity at every stage. Supply chain network is a complex system with several movable parts. Each actor in the network contributes some form of resources, these resources accumulate into collective resources and serves as backbone for the collective social capital. Social capital in social networks is considered as the collective utilization of network knowledge and information to enrich the innovation outcome of individual actors. The performance of individual's actors in a group can be aggregated to ascertain the collective performance of such a network (Lin, 2017; Horvat & Weininger, 2003). By utilizing social capital acquired through social exchanges between actors in the network, actors gain tacit knowledge and information to enhance its absorptive capabilities. Absorptive capabilities of firm places essential role in the utilization of new technologies and knowledge to develop new products (Alder & Kwom, 2002; Inkpen & Tasng, 2005; Tsai & Ghoshal, 1998).

Survival of green production and efficient consumption rests heavily on the composition of its production and supply chain network. The selection of suppliers in a supply chain network is considered a critical step if such a network is to operate effectively. Supplier selection is a series of activities that involves several decision-making variables. Identifying the right partner

has the propensity to affect the longevity of the network (Phelps, 2010; Brass et al, 2004; Li & Barnes, 2008; Chen et al, 2006).

Previous studies have established price – based criterion and capability – based criteria as key antecedents of supplier selection for traditional supply chain networks (Amid et al, 2009; Ghodsypour & O' brien, 2001; Xia & Wu, 2007). Although these factors are crucial for achieving collective objective of network, it does not apply to the green supply chain and production ecosystem because green procurement is geared towards responsible consumption and production that emits less harmful substance on its environment. In green procurement much emphasis is place on the environmental and society aspect of product or service a firm or supplier offers.

Green supply chain network is sensitive to the amount of carbon emissions and other harmful by-products its activities release unto the environment. Keeping low carbon footprints is one of the key influencers fueling the emerging wave of clean sourcing. The concept of green sourcing arises from the need by firms to procure services and products from entities that adhere to environmental protection standards. In addition the organization's green identity influences the performance of ones green innovation performance (Srivastava, 2007; Vachon & Klassen, 2006; Sarkis, 2003).

To improve the performance of environmentally responsible firms, products and components should be sourced from responsible suppliers. Responsible suppliers are the lifeline for the survival of sustainable production and consumption. Furthermore production to consumption involves cooperation and collaboration between diverse actors in either the downstream or upstream of supply network ((Kiiver & Kodym, 2004; Rietbergen & Bolk, 2013). For green procurement to stand the test of time is critical to establish and maintain a green supplier network and that is the context of this study. Despite the relevant of green supplier network to attaining sustainable development goal research on partner and supplier selection in this domain is scares. The study attempts to fill this gap by highlighting the importance of green supply network on sustainable procurement practices from network theory and social capital perspective. Network theory allows the researcher to examine the impact of actor inter-relation, whiles social capital explains the role of collective knowledge utilization has on achieving responsible sourcing and consumption. Green supplier network is defined as a network of environmentally conscious suppliers connected by sole purpose of implementing sustainable procurement practices. The continuous interaction between these actors will led to the utilization of accumulated social capital to source and develop environmentally friendly products and services. Continuous interaction results in establishment of strong ties between actors and this impact positive the flow or diffusion of information and knowledge with the network. From this

perspective the study set out to examine the antecedents and consequences of green procurement network on sustainable procurement practices. The remainder of the study is arranged as follows, section two discuss the theory; conceptual framework and hypothesis, section 43 highlights the research methodology used for the study, section 4 present the findings and discussion of study and lastly section 5 presents the conclusion of study.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Influencers of Supplier Selection in Green Supplier Network

Supplier Sustainable Behavior- Supplier sustainable behavior is defined as processes and mechanisms that suppliers adopt to stimulate the attitude of its employees towards development of sustainable products and services. Scholars in the field of sustainable procurement have place significant emphasis on the how to attain this feat in national, international and regional levels. Firm level factors have also been examined (Preuss, 2009; Erridge&Hnnighan, 2012). Despite the contribution of these studies, it provides limited insight into how micro factors such as organizational and employee attitude shapes its conception of sustainable practices.

Employees are key facet of an organization's survival. These individuals form the bedrock for firm innovation processes. Studies in organizational science have shown that to achieve great success management should implement deliberate policies and strategies to steer the potentials and capabilities of employees (Fulmer et al, 2003; Bart et al 2001; Bowen & Ostroff, 2004). In the case of sustainable procurement management can formulate strategy that directed at generating a consensus on the merits of every individual buying into its sustainability agenda. This begins with development of sustainability roadmap to guide firm activities in such direction.

Employee and management commitment is crucial to attaining firm sustainable goals. Commitment in this regard related to the linkage management and employee has with particular strategy been implemented (Choi, 2011). The study argues that when firms are able to shape the mental model of its employees there is high probability it will achieve its sustainability targets. It further postulates that since supplier does not operate independently but rather operates in a complex social network, the overall health of the network is improved when individual actors abide by its mandate. Collectivism as a critical aspect of network formation and stability requires single actors to contribute required quota (i.e. resources, capital, etc) to maintain continuous growth and development. And this is critical if green procurement network can be maintained.

Supplier – oriented Corporate Stakeholder Responsibility & Natural Environment oriented corporate social responsibility. To measure the extent supplier – oriented corporate

Page 458

stakeholder responsibility (SoCSR) and natural environment oriented stakeholder responsibility (NEoCSR) scales established by El Akremi(2011) is adapted. This scale adopts a multi-dimensional approach to examine the triple bottom line of sustainability. In his seminal work he defined SoCSR and NEoCSR as "an organization's context-specific actions and policies designed to enhance the welfare of various stakeholder groups by accounting for the triple bottom line of economic, social, and environmental performance. Network relies on the total collaboration of every actor to run effectively especially in era of increasing innovation and fierce competition from global environment. Strategic alliance has given birth to several innovative products and services thereby making it a prerequisite tool for combating climate change and other environmental issues (Reuer & Arino, 2007; Stuart, 2000; Walker & Hampson, 2008).

To achieve the objective of green procurement network supplier must endeavor to ascertain the extent its products and activities affect its environment and society as a whole. Been conscious of environmental hazards of ones activities will encourage organizations to design and produce products that are sound socially, economically and environmentally. The entire supply network needs to be assessed for carbon footprints and other wastages that affect the natural habitat. Conducting this assessment enables member to formulate proper strategies to mitigate this risk while optimizing resource allocation in within the network. The accumulated social capital through social exchanges in social network is critical resource for assessing the topology of complex social network (Chiu et al, 2006; Nahapiet & Ghoshal, 2000). To be part of green procurement network the study argues that supplier needs to be responsible for its environment and other member by making sure it products and activities meets the triple bottom line of sustainability. Based on theory elaborate above, hypotheses are stated;

H1: Responsible supplier behavior is considered as an antecedent of green procurement network has an impact on sustainable procurement practices.

H2: The ability of supplier to design eco – friendly product utilizing recycle raw materials is a key influencer if supplier will be selected into a green procurement network.

Buyers Knowledge of Supplier past performance- In the study supplier's past performance is related to its operation performance. Operation performance of supplier is referred to as the ability of supplier to combine product development efficiency utilizing improved process that conforms to establish quality standards. In addition this supplier is able to optimize lead-time (Womanck et al, 1990). Performance of suppliers is critical for their inclusion or repetitive selection especially in green procurement. But this is practical difficult to do since most buyers do not have adequate information on supplier performance of given period. And this rises from

information asymmetry associated with unidirectional relationships (Healy & Palepu, 2001; Balakrishman & koza, 1993; Richardson, 2003).

Information flow and knowledge diffusion in network is effective due to the network density as compare with unidirectional relationship between a buyer and a supplier. Within network appropriate information is sourced from diverse stakeholders, this information is stored and serves as a sort of reference for future decision-making. Actor can refer to this available data or information capital to continuous assesses the performance of actors in order to maintain the health and reputation of such network. Furthermore, this knowledge or information bases enable proper selection of network members' bases on equity and fairness (Burt, 2017; Walker et al, 2000).

The establishment of green procurement network is not far fetch if sustainable procurement practices can be implemented effectively. The mandate of this network is to champion the green evolution agenda. And further encourage actors to adhere to standards and regulation governing the green procurement process. This network will ensure sufficient knowledge and information is diffuse among actors, resulting in the development of ties and trust between individual actor. As elaborate by several studies trust is key antecedent of information and knowledge sharing but require a collective effort to initiate. Therefore, the formation of green network provide actors the opportunity to foster together, build trust and contribute individual quota to achieving successful responsible procurement that is divulge of wastage and meets the triple bottom line (Lee, 2011; Benjaafar, Li & Daskin, 2013; Bocken & Allwood, 2012). Based on the theory above the following hypotheses are formulated;

H3: Buyer knowledge of supplier previous performance in delivery sustainable product is key influencer when it comes to supply selection in green procurement network.

H4: The topology and structure of green procurement network have positive relationship with sustainable procurement practices.

Figure 1 Conceptual Framework
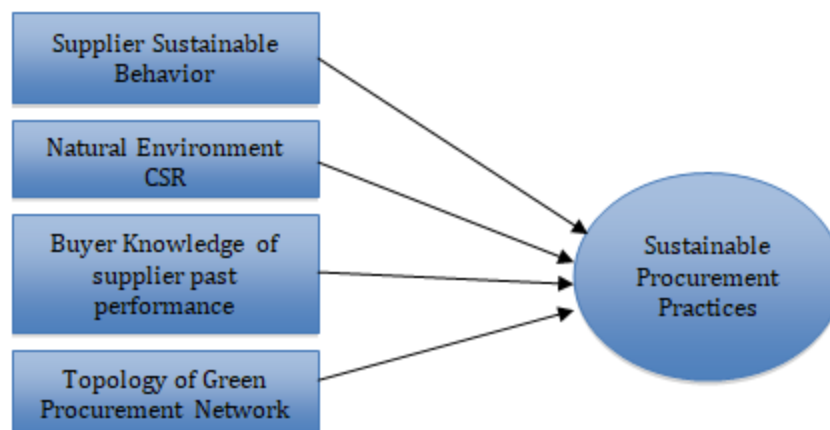
METHODOLOGY

To test the stipulated hypotheses, survey is considered appropriate research design since it permits the collection of data from a relatively large population. Data from such survey can enable us to test whether the hypothesized relationship and moderation exists.

Respondents are selected using random sampling approach across cross – section of industries/organizations in the public and private sector of Ghana. These individuals possess adequate knowledge about procurement policies and operations in the country. Procurement practitioners are estimated to be over 1000 in Ghana.

Data Collection and Response Rate

Data is collected using questionnaire. Items on the questionnaire are measured on a 5-point liket scale. Initial data source was the Ghana procurement practitioner's online portal. As at the time of the study, over 500 individuals have registered on this portal, spread across diverse industrial sectors and locations.

An online survey instrument is use to collect data in an efficient manner across diverse geographical boundaries. Questionnaire items are inputted into the platform for pilot testing first.

Data is acquired from key informants in the procurement department of several public agencies and institutions. Initial permission was sort from head of department of various agencies. In total 323 questionnaires were sent out to be filled. After a period of two (2) months response rate of 52 percent was achieved. The relative significant non-response rate is attributed to the busy schedule of these professionals.

Measures

Survey items are used to validate the model constructs. We measure the factors leading to the selection of supplier/partner in a green procurement network using the following items: Supplier Sustainable Behavior (SSB), Natural Environment Stakeholder Responsibility (NECSR), and Buyers knowledge of Supplier past performance (BKPP). These variables are the independent variables for the study.

The study argues that first these independent variable influences the selection of members of green procurement network. It further ascertains the extent green network influences the outcome of sustainable procurement practices. List of observed variables and their indicators can be found in table 1.

Table 1: Measures

Observed Variables	Indicators
Supplier Sustainable Behavior (SSB)	1. Supplier presents a positive image of sustainable procurement to other people? (SSB1). 2. Talk about sustainable procurement in positive ways? (SSB2). 3. Supplier challenges himself or herself to develop sustainable solution. (SSB3). 4. Supplier involves its organization to provide suggestions to make a specific procurement project more sustainable. (SSB4).
Supplier – Oriented Corporate Stakeholder Responsibility (SoCSR)	1. Our firm endeavors to ensure that all its suppliers and subcontractors, wherever they may be, respect and apply current labour law. (SoCSR1) 2. Our company makes sure that its suppliers respect justice rules in their own workplace. (SoCSR2). 3. Our company cares that all its suppliers and subcontractor apply labour laws wherever they may be. (SoCSR3) 4. Our company would not continue to deal with suppliers who failed to respect labour law (SoCSR4) 5. Our company helps its suppliers to improve the working conditions of their own workers (SoCSR5).
Natural Environment Corporate Social Responsibility (NECSR)	1. Our company takes action to reduce pollution related to its activities (e.g., choice of materials, eco-design, and dematerialization) (NECSR1) 2. Our company contributes toward saving resources and energy (e.g., recycling, waste management) (NECSR2). 3. Our company makes investments to improve the ecological quality of its products and services. (NECSR3). 4. Our company respects and promotes the protection of biodiversity (i.e., the variety and diversity of species). (NECSR4).
Buyers Knowledge of Supplier Past Performance (BKPP)	1. Our partner has a good grasp of our product-design performance (BKPP1) 2. Our partner has a good grasp of our process-design performance. (BKPP2). 3. Our partner has a good grasp of our product-quality performance. (BKPP3). 4. Our partner has a good estimate of the cost of the components/products we manufacture (BKPP4).
Green Procurement Network (GPN)	1. Priority is given to suppliers that offer ecological friendly products and services (GPN1). 2. Implementing sustainable practices is a good strategy for this organization (GPN2) 3. Selecting ecological friendly suppliers enhance the efficiency of sustainable procurement practices (GPN3) 4. My organization is committed to ensuring sustainable practices are attained (GPN4).

Construct Reliability and Validity

The construct reliability and validity is measured to ascertain the credibility of data acquired through field survey. Reliability of scales is measured using cronbach alpha and composite reliability techniques. These approaches are consistent with partial least square structural equation-modeling (PLS _ SEM) approach developed by Hair et al (2014). To examine the validity of constructs average variance test is conducted. Result for these tests is presented in table 2 and can be seen that all constructs met the accepted threshold for each test.

Table 2: Construct Reliability and Validity Test Outcome

Constructs	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
SSB	0.653	0.748	0.518
NECSR	0.719	0.591	0.507
BKPP	0.552	0.729	0.559
GPN	0.804	0.859	0.679
SPP	0.515	0.628	0.818

ANALYSIS

Profile of Respondents

Table 3: Profile of Respondents

	Frequency
Gender	
Male	112
Female	55
Respondents Age	
(in years)	64
21 – 30	43
31 – 40	25
41 – 50	35
> 50	
Length of Operation (in years)	
< 5	87
5 – 10	32
11 – 15	42
> 15	6

Years spent in organization	
1 – 5	93
6 – 10	18
11 – 15	37
16 – 20	16
> 20	3

Descriptive Statistics

The table 4 presents the descriptive statistics of data acquired from the survey. Descriptive properties such as mean, standard deviation, minimum and maximum data points are reported. At brief glance, can be seen variables understudy had mean scores that is above average, indicating most of these variables are considered to be of some importance in achieving sustainable procurement practices.

Table 4: Descriptive Statistics

Constructs	Mean	Standard Deviation	Min	Max
SSB	5.321	1.234	3	7
NECSR	6.018	1.784	1	7
BKPP	5.752	0.782	2	7
GPN	6.188	1.632	2	6
SPP	5.891	1.348	1	7

Factor Analysis

Exploratory factor analysis is utilized as approach for data reduction. Data reduction strategy is employed to identify indicators that can appropriately measure the construct understudy. Initial Kaiser – Meyer – Olkin measure of sample adequancy and Barttett's test of Sphericity is conducted to ascertain whether there is significant correlation among variables. Bartlett test of Sphericity (Approx: Chi – Square 1492.460, df, 703, sig .000) and KMO (value of 0.586), these results support the rationale for performing factor analysis on dataset. Variables with factor loading greater than 0.5 and an eigenvalue of 1 and above are considered to be appropriate for further analysis.

In conducting factor analysis the principal component technique is utilized to extract the requisite indicators for further empirical analysis. The varimax rotation approach is employed. In total 38 indicators are evaluated using this approach. After exploring, 9 indicators were dropped because they did not satisfy the acceptable threshold of 0.5 and above (Hair et al., 2010; 2014). The result indicated that 20 of variables loaded perfectly on the five (5) factors understudy.

The internal consistency of the variables is measured using the Cronbach's alpha coefficient. Validity of data is ascertained through discriminant validity test. Table 5 displays the outcome of exploratory factor analysis conducted.

Table 5: Result for factor loadings

	No of items	Loadings	Cronbach's Alpha
Sustainable Procurement Practices (SPP)	4		0.738
SSP1		0.597	
SSP2		0.528	
SSP3		0.660	
SSP4		0.698	
Supplier sustainable Behavior (SSB)	4		0.845
SSB1		0.636	
SSB2		0.635	
SSB3		0.579	
SSB4		0.540	
Natural Environment CSR	4		0.873
NECSR1		0.540	
NECSR2		0.673	
NECSR3		0.621	
NECSR4		0.790	
Buyer Knowledge of Supplier Past Performance	4		0.842
BKPP1		0.887	
BKPP2		0.918	
BKPP3		0.725	
BKPP4		0.747	
Green procurement Network	4		0.870
GPN1		0.728	
GPN2		0.694	
GPN3		0.570	
GPN4		0.584	

Correlation Analysis

Pearson correlation is conducted to examine the relationship between antecedents of sustainable procurement practices. Antecedent examined includes supplier sustainable

behavior, natural environment corporate social responsibility of firm, and buyer's knowledge of supplier past performance and green procurement network.

The result indicates to some degree there exist relationship between independent variable and attaining sustainability goals. Although correlation cannot be interpreted as causality, it tells the extent of relationship between variables and further aids in the identification of multicollinearity that affects the credibility of results. Table 6 presents the result obtained for correlation test.

Table 6: Result for Correlation Analysis

Variables	1	2	3	4	5
1. Sustainable Procurement Practices					
2. Supplier sustainable Behavior	.256	-			
3. Natural Environment CSR	.051	.618**	-		
4. Buyer Knowledge of Supplier Past Performance	-.029	.410**	.575**	-	
5. Green procurement Network	-.039	.189	.460**	.513**	-

$^+$P < .10, * p < .05., ** p < .01., ***p < .001

Regression Model

To investigate the influence of the independent variables on sustainable procurement practices. Independent variables included supplier sustainable behavior, natural environment CSR, and buyer's knowledge of supplier past performance and green procurement network. Controls variables include in the regression model are firm size, firm age and revenue turnover of firms.

The model 1 contains only control variables; this is done to suppress the effect of these variables on the outcome of independent variables understudy. The model 1 reported and R^2 value of 0.194. However, the model 2 had a significant R^2 value of 0.449 indicating the independent variables can explain 44 percent of the variance of sustainable procurement practices. And indicates all variables understudy can contribute to maintaining sustainable procurement practices especially in the public sector.

Table 7: Result for Regression Analysis

	Model 1	Model II
Control Variables		
Firm Size	.374 (2.038)***	.336 (1.618)
Firm Age	-. 114 (-.541)	-.097 (-.421)
Revenue Turnover	-. 114 (-.541)	-487(.629)

Independent Variables			Table 7…
Constant			
Supplier sustainable Behavior		.323 (2.983)	
Natural Environment CSR		.277 (.783)	
Buyer Knowledge of Supplier Past Performance		-.329 (.744)	
Green procurement Network		.452 (3.123)	
R^2	.194	.449	
Adjusted R^2	.193	.447	

DISCUSSION

The objective of the study is to examine the antecedents and consequence of sustainable procurement practices. Survey approach is utilized to collect data from key informants in the procurement ecosystem of Ghana, specifically in the public sector. In total 323 individuals were identified for the study. A response rate of 52 percent was achieved. Reasons are provided for the high non-response rate. Reliability and validity test is conducted. Followed by exploratory factor analysis is conducted in addition to correlation and regression analysis.

The result of empirical analysis support 2 of the hypotheses stated for the study, thus, green procurement network and supplier sustainable behavior had an influence on sustainable procurement practices. Hypotheses are judged based on the t-statistics value obtained. These hypotheses obtained a value higher than 1.96.

The formation of green procurement network has an influence on the sustainability practices of actors in procurement ecosystem. When actors adhere to the sustainability benchmark of green network, the probability of success increases. And this supports findings from studies conducted by Lee (2011) and Bocken & Allwood (2012). Green networks enable procurement practitioners to share and utilized sustainability oriented knowledge and information to boost performance of members.

Supplier sustainability behavior is crucial to enriching the sustainability process. Suppliers are at the forefront of sustainability; suppliers had the mandate to source and delivery raw material and products that meets environmental benchmark. When suppliers acquire materials and products from sustainable firms it contributes significantly to the sustainability practices of firms. The finding supports studies by Folmer et al (2003) and Bowen & Ostroff (2004) that argues the relationship between supplier sustainable behavior and sustainability practices.

Although the findings of the study support 2 hypotheses, it fails to provide evidence as to the effect of natural environment CSR, buyer's knowledge of supplier past performance on sustainability practicing in the procurement sector. And this contradicts findings from studies such as El Akremi (2011), Walker &Hampston (2008), Richardson (2003) and Healy &Palepu (2001) depicts natural environment CSR and buyer's knowledge of supplier past performance has positive impact on sustainability practices.

CONCLUSION AND FURTHER RESEARCH

The purpose of the study is to investigate the antecedents and consequence of sustainable procurement practices. Survey approach is utilized to collect data from key informants in the procurement ecosystem of Ghana, specifically in the public sector. Exploratory factor analysis is employed as data reduction techniques. Correlation and regression analysis is conducted to examine the effect of antecedents on sustainability practices in the procurement sector.

The findings of the study provided evidences to support the effect of green procurement network and supplier sustainable behavior on sustainable procurement practices. However, the findings contradicts previous findings that depicts natural environment CSR and buyer's knowledge of supplier past performance had a positive influence on sustainability practices.

Although the study makes some contribution to the field of sustainability and procurement management, findings cannot be generalized. The focus of the study is mainly on public agencies therefore limiting researcher understanding of how these factors influence sustainability practices in private sector. Future studies should endeavor to include respondents from private sector. The cognitive factors that shape individual attitude and behavior toward sustainability practices should be investigated in further studies.

REFERENCES

Adger, W. N., Huq, S., Brown, K., Conway, D., & Hulme, M. (2003). Adaptation to climate change in the developing world. Progress in development studies, 3(3), 179-195

Balakrishnan, S., & Koza, M. P. (1993). Information asymmetry, adverse selection and joint-ventures: Theory and evidence. Journal of economic behavior & organization, 20(1), 99-117.

Bart, C. K., Bontis, N., & Taggar, S. (2001). A model of the impact of mission statements on firm performance. Management decision, 39(1), 19-35.

Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. Academy of management review, 29(2), 203-221.

Burt, R. S. (2017). Structural holes versus network closure as social capital. In Social capital (pp. 31-56).Routledge.

Chen, Z. X., & Sarker, B. R. (2010). Multi-vendor integrated procurement-production system under shared transportation and just-in-time delivery system. Journal of the Operational Research Society, 61(11), 1654-1666.

Chiu, C. M., Hsu, M. H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. Decision support systems, 42(3), 1872-1888.

Choi, T.M., Li, J. and Wei, Y. (2013), "Will a supplier benefit from sharing good information with a retailer?", Decision Support Systems, Vol. 56, pp. 131-139.

Helen Walker, Stephen Brammer, (2009) "Sustainable procurement in the United Kingdom public sector", Supply Chain Management: An International Journal, Vol. 14 Issue: 2, pp.128-137,

El Akremi (2011): How Do Employees Perceive Corporate Responsibility? Development and Validation of a Multidimensional Corporate Stakeholder Responsibility Scale. Journal of Management, Vol. _, No. _, pp. _−_

Fulmer, I. S., Gerhart, B., & Scott, K. S. (2003). Are the 100 best better? An empirical investigation of the relationship between being a "great place to work" and firm performance. Personnel Psychology, 56(4), 965-993.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of accounting and economics, 31(1-3), 405-440.

Konikow, L. F., & Kendy, E. (2005). Groundwater depletion: A global problem. Hydrogeology Journal, 13(1), 317-320.

Kotabe et al. (2002): Gaining from Vertical Partnerships: Knowledge Transfer, Relationship Duration, and Supplier Performance Improvement in the U.S. and Japanese Automotive Industries. Strategic Management Journal, Vol. 24, No. 4, pp. 293–316

Lamba, S., & Choudhary, N. (2013). Impact of HRM practices on organizational commitment of employees. International Journal of Advancements in Research & Technology, 2(4), 407-423.

Lee, K. H. (2011). Integrating carbon footprint into supply chain management: the case of Hyundai Motor Company (HMC) in the automobile industry. Journal of Cleaner Production, 19(11), 1216-1223.

Lee, Y., & Kincade, D. H. (2003). US apparel manufacturers' company characteristic differences based on SCM activities. Journal of Fashion Marketing and Management: An International Journal, 7(1), 31-48.

Lin, N. (2008). A network theory of social capital. The handbook of social capital, 50(1), 69.

Nahapiet, J., & Ghoshal, S. (2000). Social capital, intellectual capital, and the organizational advantage. In Knowledge and social capital (pp. 119-157).

Reuer, J. J., & Arino, A. (2007). Strategic alliance contracts: Dimensions and determinants of contractual complexity. Strategic Management Journal, 28(3), 313-330.

Richardson, V. J. (2000). Information asymmetry and earnings management: Some evidence. Review of quantitative finance and accounting, 15(4), 325-347.

Shah/Ward (2007): Defining and developing measures of lean production. Journal of Operations Management, Vol. 25, No. 4, pp. 785-805.

Simon, G. R., & Sagoe, G. (2018). An Empirical Analysis of Predictor Influence Mechanisms of HRM Practices and Corporate Sustainability on Employee Engagement: A mediation Analysis. International Journal of Human Resource Studies, 8(2), 95-128.

Stuart, T. E. (2000). Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high-technology industry. Strategic management journal, 791-811.

Walker, D., & Hampson, K. (Eds.). (2008). Procurement strategies: A relationship-based approach. John Wiley & Sons.

Walker, G., Kogut, B., & Shan, W. (2000). Social capital, structural holes and the formation of an industry network. In Knowledge and social capital (pp. 225-254).

Womack, J. P., Womack, J. P., Jones, D. T., & Roos, D. (1990). Machine that changed the world. Simon and Schuster.