

Examining the Role of Governance and Organizational Justice on Social Capital Formation in Buyer-Supplier Relationships

¹Ofori Isaah | ²Ackah David | ³Adwapa F

^{1&3} School of Business, Kwame Nkrumah University of Technology,

²UNEM International Programme, Universidad Empresarial de Costa Rica

Email: drackah@ipmp.edu.gh

Abstract

Purpose – The aim of this study is to examine the role of governance and organizational justice on social capital formation in buyer-supplier relationship.

Design/methodology/approach - A survey of 116 firms drawn from manufacturing, service, construction and extraction firms was used to test the proposed relationships. Data was obtained using a structure online survey questionnaire developed and shared using Google forms. The data collected was analysed using Partial least squares structural equations model (PLS-SEM).

Findings - The results indicate that organizational justice and governance mechanisms are both positively related to social capital, and social capital is positively related to supply chain performance. The indirect effects estimation revealed that social capital mediates the indirect relationship between governance mechanism and supply chain performance and organizational justice and supply chain performance.

Originality/value - This study has made significant contributions to scholarly knowledge on the antecedents and performance outcomes of social capital formation in buyer-supplier relationships.

Keywords: Governance Mechanism, Justice Perception, Social Capital in Buyer-Supplier Relationship, Supply chain performance

1.0 INTRODUCTION

In Buyer-Supplier Relationships, social capital research theory suggests that increased interaction and exchange leads to the development of trust and the creation of norms and sanctions which reduce transaction costs (Erridge & Greer, 2002). To enhance these collaborative relationships, SCM scholars continue to study how social capital creates value for firms that are participating in a collaborative relationship (Alghababsheh & Gallear, 2020b; Blonska et al., 2013; Carey et al., 2011; Carey & Lawson, 2011; Roden & Lawson, 2014; Sukoco et al., 2017). Generally, it is believed that firms that move from competitive procurement practices towards more collaborative supplier relationships can obtain higher long-term benefits from the exchange relationship (Erridge & Greer, 2002).

Social capital refers to a network of resources that are embedded in interrelationships among humans (Wu & Chiu, 2018). Social capital describes the relationship between people who work in a specific society, and this enables the effective functioning of the society. Applied to the supply chain, social capital refers to a “set of social resources embedded in the relationships in a supply chain network”. Social capital is documented to minimize the potential for conflicts and promote cooperative behavior (Wu & Chiu, 2018). From the literature, three dimensions of social capital – relational, cognitive and structural social capital exist and interact to influence BSRs. Several studies have argued that social capital provides resources such as information, control, trust, and support (Bizzi, 2015; Handoko et al., 2017).

In attempting to understand the antecedents and performance outcomes of social capital in BSRs, researchers have examined the relationship between social capital and several performance outcomes, as well as antecedent factors. Following a systematic literature review, Alghababsheh & Gallear, (2020a) found that organizational justice has not received the attention of Scholars as an antecedent of social capital in BSRs even though perceived justice hugely influences subsequent behaviors and generation of social capital. In response to this call, this study examines the role of three justice dimensions as antecedents of social capital formation in buyer-supplier relationships by drawing on the organizational justice theory. In management research, the theory of organizational justice has been employed severally to explain the perceptions of fairness and equality within single organizations (Ali et al., 2016), as well as supply chains (Ziaullah, Feng, & Akhter, 2015) and how this results in performance outcomes.

Additionally, the study examines the role of governance mechanism as an antecedent of social capital in BSRs. The use of social governance mechanisms instigates trust and increases the relational rent among parties in the supply chain relationship (Carey & Lawson, 2011). Because social governance mechanisms minimize the use of contracts and instead favor the development of informal relationships between parties (Yang et al., 2012), there is a high tendency for the accumulation of social capital among the parties.

The performance outcomes of social capital formation in BSRs have also been an important consideration in the literature. While this is considered to be generally positive, the work of (Villena et al., 2011) brought attention to a potential “dark side” of social capital formation in BSRs. Accordingly, this study examines the outcome of social capital formation on firm and supply chain performance. This is an attempt to understand how the existence of cognitive, structural and relational capital affects relationship, firm-level and overall supply chain performance.

Whereas several studies on social capital formation in BSRs have been conducted over the years, this study contributes to this research stream in two ways. First, the study theorizes and empirically tests perceived justice and governance mechanism as antecedents of social capital formation, which have been sparsely explored by earlier studies (Alghababsheh & Gallear, 2020a). Second, the study presents a Sub-Saharan African perspective to the discussion on the research area. A scan of the literature reveals that research in this context, on the area of social capital in BSRs is lacking.

This is problematic because BSRs exist in all markets, and the existence of unique cultural and institutional development may affect the development of social capital and its performance outcomes. For instance, because social capital is considered a collective good, it is logical to expect social capital to be present more in “collectivist” as compared to “individualistic” societies (Hofstede, 1980). This study seeks to examine organisational justice and governance mechanism as antecedents of social capital creation in BSRs, and the performance outcomes in organisations. A theoretical model is proposed and tested to advance knowledge in this area, and to provide empirical evidence that will aid managerial decision making.

2.0 LITERATURE REVIEW

2.1 Governance

Governance refers to the organizational or structural arrangements aiming to determine and affect the conduct of organization members. Formal control stresses written monitoring processes that identify the specific duties and tasks to be performed as well as the expected outcomes (Huang et al., 2014). The use of a written contract, rules, processes, and policies to monitor, reward, and penalize a partner's behaviour or

outcomes provides protection by ensuring that the promise or responsibility to undertake specific tasks is fulfilled and that organizational goals are reached. Governance is examined in two dimensions, thus the relational and contractual governance. In the context of buyer-supplier relationships these norms indicate mutuality of interest and essentially prescribe stewardship behaviour between both buyer and supplier in relation to the conduct surrounding the exchange.

Contractual-based governance emphasizes the use of a formalized, legally binding agreement to govern the interfirm relationship. Contracts are seen as a critical instrument for controlling inter-organizational communication (Jajja et al., 2019). A written contract indicates that the exchange is significant to both parties in the relationship, laying out the exchanges ex ante elements and assisting in its supervision. Contracts integrate the expectations and obligations of actors in the connection and are defined as "the extent to which detailed and binding contractual agreements are employed to outline the roles and obligations of the parties" (Jajja et al., 2019)

Relational-based governance, by contrast, highlights the role of norms of solidarity, flexibility and information sharing in the relationship process. Rather than prescribing relevant behaviour directly, relational governance specifies forms of behaviour that are desirable or undesirable (Jajja et al., 2019). It is characterized by a set of informal norms that affect how parties behave when dealing with one another.

2.2 The Role of Governance and Organizational Justice

Social capital highlights governing exchange through constant goals and common interests (Liu et al., 2009), which increases the certainty of a partner's behaviour. Governance mechanisms serves as a function in continuance against opportunism (Huang et al., 2014). When firms invest time and resources to develop high levels of contract specificity, there is little need to develop social mechanisms of governance (Nielsen, 2010). Dyer and Singh (1998) suggest that the use of one control mechanism can obviate the use of the other. Therefore, a high level of formal control reduces the level of need for social control in buyer and seller relationships (Huang et al., 2014). In the study of social capital, organizational justice is an important factor to consider. In some situations, rational control can aggravate sentiments of bias, injustice, and unfairness, leading to a subtle type of opportunism (Huang et al., 2014). In the buyer-supplier relationship, justice, as a firm's perception of fairness, may produce problems (Liu et al., 2012). As a result, justice judgments resulting from social interactions and communications affect buyer-supplier relationships (Liu et al., 2012)

Earlier theorists (e.g., Dwyer et al., 1987; Frazier, 1983) have indicated the importance of fairness in buyer-supplier partnerships by applying the justice idea to buyer-supplier exchanges. The buyer-supplier connection is concerned not just with economic transactions, but also with social interactions that may influence corporate behaviour (Liu et al., 2012). Indeed, a buyer-supplier relationship can be understood as a series of relationship phases through which interactions take place (Dwyer et al., 1987; Frazier et al., 1988). The importance of distributive and procedural justice has been emphasized in existing empirical justice research.

2.3 Theory of Organizational Justice (TOJ)

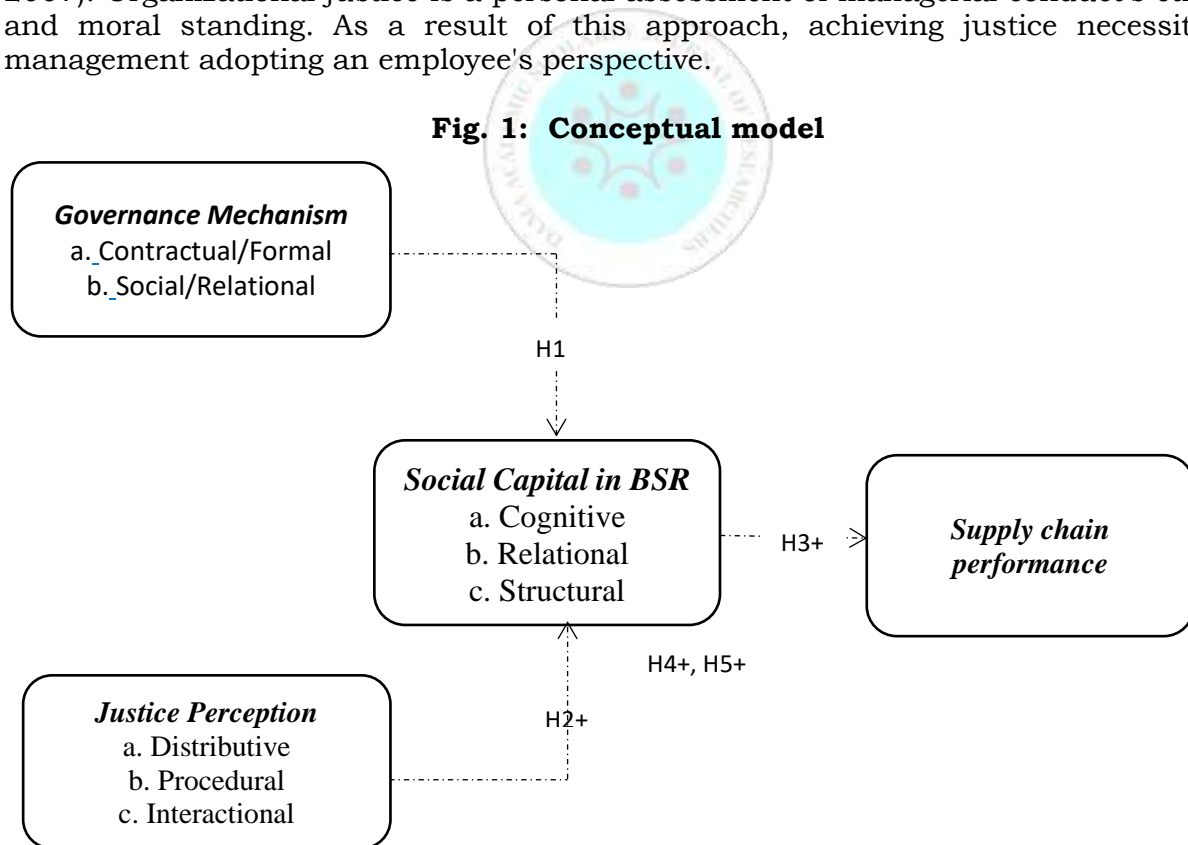
The theory of organizational justice (Greenberg, 1987) has been used extensively in the intra-organizational literature, where the traditional focus has been on the role of justice in the workplace. Employees' conceptions of justice, it is assumed, will influence their behaviour and, as a result, organizational outcomes and performance (Colquitt, 2001).

Employees who believe they are treated fairly contribute to performance by demonstrating good behaviours that are exemplars of what is known as organizational citizenship, which includes organizational commitment. Similarly, employees who believe they are being treated unfairly will engage in harmful retaliatory behaviour, which will have a detrimental influence on the organization's performance (Matopoulos et al., 2019).

Research by Ogawa and Tanaka (2013) revealed that during the global financial crisis, long term customer–supplier relationship played an important role in mitigating the shock. More recently, Soundararajan and Brammer (2018) found that during a crisis, suppliers' conceptions of fairness can shift, affecting their reactions to social sustainability requirements. Furthermore, attitudes, behaviour, and decisions are influenced by justice perceptions in a wide range of social circumstances, and they play a critical role in defining buyer-supplier relationship reaction to organizational outcomes, procedures, and decision-making processes (Lind et al., 1993).

Unlike philosophers and attorneys, managerial scientists are more concerned with what people believe to be just than with what is actually just. To put it another way, these scientists are following a descriptive agenda. They want to know why people think particular events are justified, as well as the repercussions of these judgments. In this sense, justice is a subjective and descriptive concept, capturing what people believe is right rather than an objective truth or a prescriptive moral code. (Cropanzano et al., 2007). Organizational justice is a personal assessment of managerial conduct's ethical and moral standing. As a result of this approach, achieving justice necessitates management adopting an employee's perspective.

Fig. 1: Conceptual model



2.4 Supply chain Governance and Social Capital Formation in BSR

Generally, governance mechanisms are used to manage supply chain relationships to ensure In Buyer-Supplier Relationships, social capital research theory suggests that increased interaction and exchange leads to the development of trust and the creation of norms and sanctions which reduce transaction costs (Erridge & Greer, 2002). To enhance these collaborative relationships, SCM scholars continue to study how social capital creates value for firms that are participating in a collaborative relationship (Alghababsheh & Gallear, 2020b; Blonska et al., 2013; Carey et al., 2011; Carey & Lawson, 2011; Roden & Lawson, 2014; Sukoco et al., 2017). Generally, it is believed that firms that move from competitive procurement practices towards more collaborative supplier relationships can obtain higher long-term benefits from the exchange relationship (Erridge & Greer, 2002).

Social capital refers to a network of resources that are embedded in interrelationships among humans (Wu & Chiu, 2018). Social capital describes the relationship between people who work in a specific society, and this enables the effective functioning of the society. Applied to the supply chain, social capital refers to a “set of social resources embedded in the relationships in a supply chain network”. Social capital is documented to minimize the potential for conflicts and promote cooperative behavior (Wu & Chiu, 2018). From the literature, three dimensions of social capital – relational, cognitive and structural social capital exist and interact to influence BSRs. Several studies have argued that social capital provides resources such as information, control, trust, and support (Bizzi, 2015; Handoko et al., 2017).

In attempting to understand the antecedents and performance outcomes of social capital in BSRs, researchers have examined the relationship between social capital and several performance outcomes, as well as antecedent factors. Following a systematic literature review, Alghababsheh & Gallear, (2020a) found that organizational justice has not received the attention of Scholars as an antecedent of social capital in BSRs even though perceived justice hugely influences subsequent behaviors and generation of social capital. In response to this call, this study examines the role of three justice dimensions as antecedents of social capital formation in buyer-supplier relationships by drawing on the organizational justice theory. In management research, the theory of organizational justice has been employed severally to explain the perceptions of fairness and equality within single organizations (Ali et al., 2016), as well as supply chains (Ziaullah, Feng, & Akhter, 2015) and how this results in performance outcomes.

Additionally, the study examines the role of governance mechanism as an antecedent of social capital in BSRs. The use of social governance mechanisms instigates trust and increases the relational rent among parties in the supply chain relationship (Carey & Lawson, 2011). Because social governance mechanisms minimize the use of contracts and instead favor the development of informal relationships between parties (Yang et al., 2012), there is a high tendency for the accumulation of social capital among the parties.

The performance outcomes of social capital formation in BSRs have also been an important consideration in the literature. While this is considered to be generally positive, the work of (Villena et al., 2011) brought attention to a potential “dark side” of social capital formation in BSRs. Accordingly, this study examines the outcome of social capital formation on firm and supply chain performance. This is an attempt to understand how the existence of cognitive, structural and relational capital affects relationship, firm-level and overall supply chain performance.

Whereas several studies on social capital formation in BSRs have been conducted over the years, this study contributes to this research stream in two ways. First, the study

theorizes and empirically tests perceived justice and governance mechanism as antecedents of social capital formation, which have been sparsely explored by earlier studies (Alghababsheh & Gallear, 2020a). Second, the study presents a Sub-Saharan African perspective to the discussion on the research area. A scan of the literature reveals that research in this context, on the area of social capital in BSRs is lacking. This is problematic because BSRs exist in all markets, and the existence of unique cultural and institutional development may affect the development of social capital and its performance outcomes. For instance, because social capital is considered a collective good, it is logical to expect social capital to be present more in “collectivist” as compared to “individualistic” societies (Hofstede, 1980). This study seeks to examine organisational justice and governance mechanism as antecedents of social capital creation in BSRs, and the performance outcomes in organisations. A theoretical model is proposed and tested to advance knowledge in this area, and to provide empirical evidence that will aid managerial decision making.

2.5 Social Capital in BSR and Organizational Performance

This study draws on the social capital theory (Nahapiet et al., 1998) to argue that the accumulation of social capital in the buyer-supplier relationship is a recipe for enhanced organizational outcomes. The social capital theory is one of the most useful theories for explaining the nature of cooperation among firms (Carey & Lawson, 2011). Social capital refers to a network of resources that are embedded in interrelationships among humans (Wu & Chiu, 2018). Social capital describes the relationship between people who work in a specific society, and this enables the effective functioning of the society. Social capital is a valuable asset that can help explain how buyer-supplier relationships contribute to a company's competitive advantage (Carey et al., 2011). Applied to the supply chain, social capital refers to a “set of social resources embedded in the relationships in a supply chain network”.

In the buyer-supplier relationship, social capital is the stock of goodwill built up from past experience between the buyer and supplier (Carey & Lawson, 2011). Social capital in buyer-supplier relationships can contribute to creating effective relationships through increased knowledge exchange, learning, resilience, responsiveness, and innovation (Alghababsheh & Gallear, 2020a). Social capital is documented to minimize the potential for conflicts and promote cooperative behavior (Wu & Chiu, 2018). In a buyer-supplier relationship, high levels of social capital are characterized by a shared vision, trust, belief and social ties. Generally, social capital facilitates collective actions (Alghababsheh & Gallear, 2020b), and enhances organizational outcomes. A high level of social capital in the buyer-supplier relationship manifests through increased coordination, joint knowledge creation and high levels of decision congruence that leads to the pursuit of shared goals, and enhances organizational performance.

Conversely, this study contends that buyer-supplier relationships with a low level of social capital are often conflict-laden, has poor coordination, and high probability of opportunistic behaviors all of which lead to reduced performance. The findings of Jääskeläinen et al., (2020) indicated that the availability of social capital in a buyer-supplier relationship is a relevant antecedent to successful solution provision activities. Again, Leem & Rogers, (2017) found a positive relationship between the three dimensions of social capital and firm performance.

To this end, this study hypothesizes that:

H3: Social capital in Buyer-Supplier relationships is positively to organizational performance.

2.5.1 The Mediating Role of Social Capital in the Link Between Governance and Firm Performance

This study contends that social capital accumulation in the buyer-supplier relationship acts as the mechanism through which supply chain governance influences firm performance. Governance mechanisms in buyer-supplier relationships, both contractual and social mechanisms have been shown to influence the relationship among the parties in the exchange relationships. Through norms of flexibility, solidarity and information sharing (Carey & Lawson, 2011) relational governance encourages both parties in the exchange relationship to work towards mutual benefits.

As governance enables parties to manage the relationship and elicit the compliance of each party to their respective obligations, the performance outcome manifests as a result of the social capital that accumulates among the partners. By ensuring that each party performs, governance mechanisms help to avoid conflict arising out of the relationship and moves towards the development of social capital in the form of shared vision, trust, belief, and social ties, which in turn enhances organizational performance (Lawson et al., 2008). Based on this premise, I argue that social capital accumulation acts as a conduit through which governance mechanisms influence organizational performance. There, the study hypothesizes that

H4: Social capital accumulation in buyer-supplier relationships mediates the relationship between Governance mechanisms and firm performance.

2.5.2 The Mediating Role of Social Capital in the Link Between Justice Perception and Firm performance

Justice perception in buyer-supplier relationships determines the nature of commitment a party makes to the exchange relationship. Thus, in a situation where one party believes it is treated unfairly, there is little tendency for the accumulation of social capital which manifests through reduced trust and relationship commitment. The performance outcome in such situations is reduced. Conversely, perceptions of high justice levels lead to increased social capital accumulation and subsequently higher organizational performance. To this end, social capital accumulation act as a conduit through which justice perception influences firm performance.

This study argues that the impact of justice perception on firm performance is indirect, and acts via the accumulation of social capital. According to (Ziaullah, Feng, & Ahmad, 2015), justice in supply chains lead to increased trust and results in commitment, all of which elicits higher organizational performance outcomes. This further means that when the perception of justice leads firms to act in a way that enhances social capital accumulation (through trust and commitment), organizational performance is improved. Conversely, having negative perceptions on the level of justice may lead to actions that reduce social capital accumulation in the relationship, and the result is a reduction in organizational performance. On this premise, this study proposes that

H5: Social capital accumulation in buyer-supplier relationship mediates the relationship between Justice Perception and firm performance.

3.0 METHODOLOGY

3.1 Measurement Development

Organizational justice was measured using a 14-item scale that captured the various aspects of perceived justice in the literature – distributive justice (4 items), procedural justice (5 items), and interactional justice (5 items). All items are measured on a scale of 1 to 7. The governance mechanism was measured using an 8-item construct that captures the two dimensions of governance in the literature - formal/contractual governance (4 items) and social/relational governance (4 items). All items were measured on a 7-point scale. Social capital is measured using a 14 items scale that captures three dimensions - cognitive capital (4 items), relational capital (5 items), and structural capital (5 items). All items were measured on a 7-point scale. Supply chain performance was measured using 7 items anchored on a 7-point scale.

3.2 Measurement Model

In this section, PLS-SEM was used to examine the measurement model using confirmatory factor analysis. In structural equations modelling, the measurement model refers to the relationship between the measurement indicators and the underlying constructs. The essence of the measurement model is to establish the validity of the indicators used to measure each construct (Collier, 2020). The measurement model is developed based on measurement theory and is a prerequisite to the structural model (Hair Jr et al., 2016). The use of the PLS-SEM measurement model is common in research on social capital and performance outcomes, generally due to its ability to model reflective and formative indicators and its suitability for lower sample sizes and indicator distributions that do not follow normality. Examples of studies in the area that have used PLS-SEM are (Horn et al., 2014; Jääskeläinen et al., 2020; Kumar & Rahman, 2016; Yim & Leem, 2013).

In estimating the measurement model, all the measurement items for each construct were treated as reflective indicators. To minimize the complexity of the measurement model, a single construct was generated for each one of social capital, perceived justice, and governance mechanism using all the indicators under the various dimensions. Because each of the items reflects the existence of the underlying factor, this ensured the estimation of a parsimonious model and helped to avoid using a second-order factor, for which the estimation procedure is an ongoing subject of debate.

4.0 RESULT AND DISCUSSION

4.1 Firm and Respondent Characteristics

In this section, demographic details of the nature of responding firms and their representatives are presented. Later in the path analysis, the firm-level characteristics are used as control variables to remove the confounding effect that the size of a firm, its age, ownership structure, or industry can have on social capital formation and performance outcomes. The respondent's key attributes examined are the educational level and the industry experience.

4.2 Firm-Level Characteristics

The examined firm-level characteristics include firm size, ownership status, firm age, and Industry. Table 4.1 presents details of the findings. Nearly 64% of the participating firms are in the service sector. The ownership structure is also dominated by local private companies. The average firm size is 148 employees and ranges between 3 and 800 employees. The large variance in firm size indicates that the results of the study are potentially representative of a wide range of firms, albeit firm size is controlled for in the path analysis.

Table 4. 1 Firm-level characteristics

		Count	Percentage		
Industry	Construction	14	12.1		
	Extraction	4	3.4		
	Manufacturing	24	20.7		
	Service	74	63.8		
	Total	116	100		
Ownership:	International Joint venture	10	8.6		
	Local private company	55	47.4		
	Local public company	23	19.8		
	Local private-public company	12	10.3		
	A subsidiary of a foreign firm	16	13.8		
	Total	116	100		
		Min	Max	Mean	SD
Firm size (Number of employees)		3	800	148.98	179.57
Firm Age		1	90	17.97	17.791



Table 4. 2 Measurement Model Results

Constructs	Loading	t- value
Organisational Perceived Justice (AVE = 0.624, CR = 0.937, CA = 0.924)		
DJ2. Our gain from this partnership is commensurate with the roles and responsibilities we have taken in it	0.809	19.690
DJ3. Our gain relative to our contribution to this partnership is about the same as that of other firms in similar business relationships	0.741	13.618
DJ4. Our gain relative to our contribution to this relationship is about the same as that of our partner	0.719	11.606
IJ3. This business relationship is characterized by mutual respect	0.806	22.405
IJ4. Our partner always makes us aware of important issues	0.851	28.760
IJ5. Our partner often explains the reasons behind relevant policies	0.854	32.356
PJ2. Our partner is willing to modify its policies based on feedback we provide	0.774	15.891
PJ4. Our partner is familiar with the situation we face	0.750	14.124
PJ5. Our partner has adopted consistent policies and decision-making procedures	0.794	16.333
Governance Mechanism (AVE = 0.648, CR = 0.916, CA = 0.889)		
FC2. Specific, well-detailed agreement with our key suppliers	0.703	12.399
FC3. Formal agreement that details the obligations of both our firm and key suppliers	0.697	10.693
RG1. Team building exercises	0.830	25.036
RG2. Social events	0.888	40.472
RG3. Joint events	0.868	27.417
RG4. Regular supplier conferences	0.822	21.942
Social Capital (AVE = 0.647, CR = 0.901, CA = 0.863)		
RC5. The relationship is characterized by close interaction	0.736	9.270
SC2. We have frequent communication with our major supplier	0.856	35.994
SC3. We promote a joint benefit and risk management system with our major supplier	0.752	11.109
SC4. We maintain a frequent and intensive interaction between personnel	0.844	30.010
SC5. We engage in and organise business events with our suppliers	0.827	18.532
Supply Chain performance (AVE = 0.863, CR = 0.974, CA = 0.968)		
SCP2. This organization's primary supply chain has the ability to deliver value-added services to final customers	0.905	30.434
SCP3. This organization's primary supply chain has the ability to eliminate late, damaged and incomplete orders	0.942	64.360
SCP4. This organization's primary supply chain has the ability to deliver products precisely on-time to final customers	0.953	100.941
SCP5. This organization's primary supply chain has the ability to minimize all types of waste throughout the supply chain	0.935	45.502
SCP6. This organization's primary supply chain has the ability to quickly respond to and solve problems of the final customers	0.936	50.218
SCP7. This organization's primary supply chain Is able to meet special customer specification requirements	0.903	23.696

T-values are evaluated at 2.65, two -tailed test.

Source: Field study, 2021.

4.3 Reliability and Validity

The reliability of the measurement items are assessed using the Cronbach's alpha (CA) statistic and composite reliability (CR) scores. The generally agreed threshold in the literature is that that CA values above 0.7 indicate good internal consistency (Hair et al., 2019) and CR values above 0.7 are preferable (Malhotra et al., 2017). From table 7.4, all the CA and CR values are above 0.7, which is an indication of internal consistency among the measurement indicators of the various constructs. Thus, the constructs used in this study demonstrate an acceptable level of reliability.

Convergent validity measures the extent to which the scale correlates positively with other measures of the same construct (Malhotra et al., 2017). According to Anderson and Gerbing, (1988), convergent validity can be examined by establishing a significant loading of each indicator on the underlying factor (construct). Two main ways of establishing convergent validity in the literature are the existence of significant, unidimensional factor loadings and the use of AVE values. From table 4.7, all the indicators are significantly related to their underlying constructs and the loadings are sufficiently high (above 0.7).

Again, the indicators are unidimensional as the load significantly on their theorized factors only. Further, the AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators (Hair Jr et al., 2016). Thus, according to Fornell and Larcker, (1981) obtaining an AVE value of 0.5 and above is an indication of convergent validity when evaluating structural models. From table 4.7, all the AVE values associated with the constructs are above 0.5. This is an indication that the constructs have demonstrated significant convergent validity.

Whiles convergent validity (as established in section 4.4.2) seeks to test whether the measurement indicators converge and explain a single underlying concept, discriminant validity seeks to test if constructs are unrelated and/or can be distinguished from the other constructs (Collier, 2020). To establish discriminant validity, one must prove that a construct is distinct from all the other constructs by empirical standards (Hair Jr et al., 2016). For a PLS-SEM analysis, measures of discriminant validity include cross-loading analysis, the Fornell-Lacker criterion, and the heterotrait-monotrait ratio (Hair Jr et al., 2016).

In this study, the Fornell-lacker criterion is used to establish discriminant validity. As established by Fornell and Larcker, (1981) discriminant validity is established via this method by comparing the AVE values of the constructs to the shared variances. The acceptance criteria is that the AVE value of a construct should be greater than the highest of its shared variance (the square of its correlation coefficient) with another construct. The table below presents the correlation coefficient of the measurement constructs (in the lower diagonal) the AVE values (along the diagonal) and the shared variances (in the upper diagonal) for examination of discriminant validity using the Fornell-Lacker criterion.

Table 4. 3 Fornell- Lacker criterion

	1	2	3	4
1. Justice	0.624	0.244	0.405	0.102
2. Governance Mechanism	.494	0.648	0.370	0.052
3. Social capital	.637	.609	0.647	0.063
4. Supply chain performance	.320	.230	.251	0.863

Source: Field study, 2021.

From table 4.8, the AVE values (as shown in the diagonal) for each construct is higher than the highest of the construct's shared variance with other constructs. This indicates that the constructs demonstrate discriminant validity.

4.4 Structural Model – PLS Path Analysis

In structural equations modeling, the structural model examines the relationships among the latent constructs (Collier, 2020). The structural model is examined using PLS-SEM.

4.4.1 Model Fit Results

Model fit criteria for PLS-SEM models is still evolving (Dash & Paul, 2021), and researchers have been cautioned to tread carefully when using fit results from PLS models (Benitez et al., 2020). Because a comprehensive assessment has yet to be conducted, all guidelines should be treated as tentative (Hair *et al.*, 2019). Following these developments, this study follows Benitez *et al.*, (2020) to use the standardized root mean residual (SRMR) as a measure of model fit. The rule of thumb is to obtain an SRMR Value less than .08. The SRMR for this study's model was .060, indicating a good fit with the data.

The model quality criteria was assessed using the R^2 . Generally, R^2 is used to assess the goodness of fit in regression analysis (Benitez et al., 2020). The R^2 measures the variance, which is explained in each of the endogenous constructs and is, therefore, a measure of the model's explanatory power (J. Hair et al., 2019). The results indicate that R^2 values for social capital and supply chain performance (both acting as dependent variables at a point in the model) are 0.773 and 0.124 respectively and both are significant at 5%. This indicates that the model has sufficient explanatory power.

4.4.2 Analysis of direct paths

The direct paths in the model are assessed and the details are presented in the table below. The path coefficients (β) and the t-values are examined to establish the significance of the paths. All the estimated paths were controlled for firm size, firm age, ownership status and industry type. The results indicated that none of the control variables was significantly related to the dependent variables – supply chain performance. Significance tests of the results are implemented using bootstrapping of 1000 subsamples implemented in the PLS algorithm. Details of the results are presented in Table 4.9

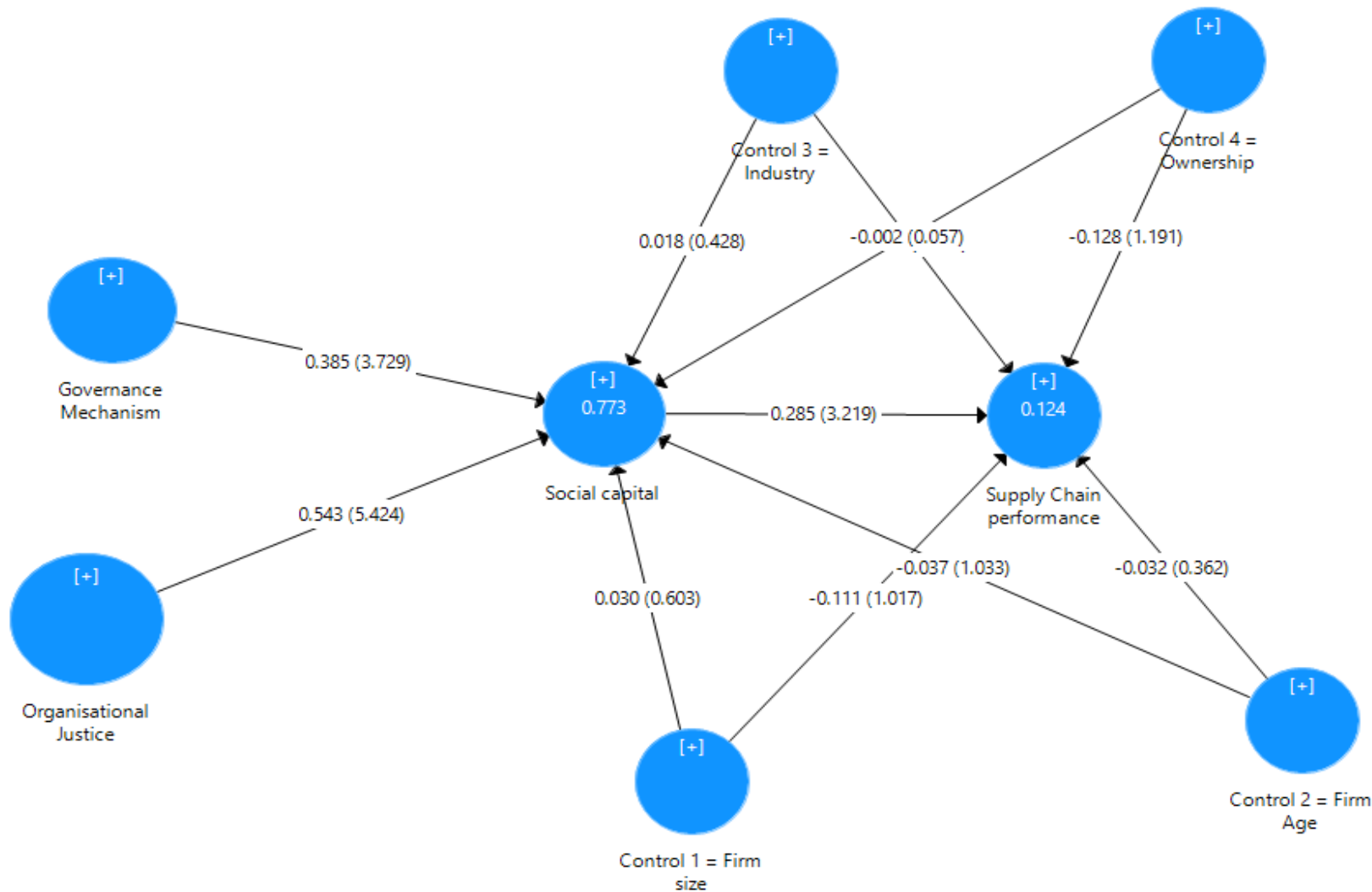


Figure 4. 1 PLS-SEM Path Analysis

Table 4. 4 Direct effects

	<i>Outcome = Social Capital</i>			<i>Outcome = Supply chain performance</i>		
	β	<i>t</i>	<i>Sig (p)</i>	β	<i>t</i>	<i>Sig (p)</i>
Control Variables						
Firm size	0.030	0.603	0.546	-0.111	1.056	0.291
Firm Age	-0.037	1.033	0.302	-0.032	0.359	0.720
Industry	0.018	0.428	0.668	-0.123	1.694	0.091
Ownership	-0.002	0.057	0.955	-0.128	1.141	0.254
Main Variables						
Governance -> Social capital (H1)	0.384	3.785	0.000			
Justice -> Social capital (H2)	0.540	5.486	0.000			
Social capital -> SC performance (H3)				0.285	3.297	0.001

From table 4.9, the control variables firm size, firm age, ownership structure and industry have no significant relationship with either social capital or supply chain performance. All relationships are evaluated at a 5% significance level for two-tailed tests. The results indicate that supply chain governance is positively related to social capital formation ($\beta = .384, t = 3.785$). *This provides support for hypothesis one of this study.* From this result, the existence of a governance mechanism in the supply chain may likely influence the development and sustenance of social capital among supply chain members.

Again, the results also show that perceived organizational justice is positively related to social capital formation ($\beta = .540, t = 3.785$). *Hypothesis two of the study is supported.* There is evidence to support the proposition that a higher perception of justice will lead to the accumulation of social capital in the supply chain. The results also indicate that there is a positive relationship between social capital in BSRs and supply chain performance ($\beta = .285, t = 3.297$). *This provides support for hypothesis three of the study.* Social capital accumulation increases the level of trust and cooperation among supply chain partners and may contribute towards an improvement in supply chain performance.

4.5 Analysis of indirect Paths

Hypothesis four and five of the study proposed potential moderating effects of social capital in the link between organizational justice and governance mechanism on supply chain performance. The indirect effect is evaluated using the bootstrapping algorithm in SMART PLS, and the results are presented in the table below.

Table 4. 5 Indirect effect results.

	β	SE	<i>t</i>	<i>Sig (p)</i>
--	---------	----	----------	----------------

Control Paths

Ownership -> Social capital -> SC performance	-0.001	0.012	0.054	0.957
Industry -> Social capital -> SC performance	0.005	0.013	0.411	0.681
Firm size -> Social capital -> SC performance	0.008	0.014	0.597	0.550
Firm Age -> Social capital -> SC performance	-0.011	0.011	0.990	0.322

Hypothesized paths

Governance -> Social capital -> SC performance (H4)	0.110	0.044	2.468	0.014
Justice -> Social capital -> SC performance (H5)	0.155	0.058	2.662	0.008

In estimating the indirect effects, four control paths were estimated to account for the potential confounding effects of the control variables – firm size, firm age, industry and ownership. In all, the control variables were used as antecedents to model social capital as mediators and supply chain performance as the dependent variable. The results indicate that none of the control variables significantly acts as antecedents of social capital. The results further show that the indirect relationship between governance mechanism and supply chain performance via social capital is positive and significant ($\beta = 0.110$, $t = 2.468$). This *provides support for hypothesis four of the study*, that social capital mediates the relationship between governance mechanism and supply chain performance.

Again, the results show that the indirect relationship between justice and supply chain performance via social capital is positive and significant ($\beta = 0.115$, $t = 2.662$). *Hypothesis five of the study is supported*, as social capital mediates the relationship between organizational justice and supply chain performance.

4.6 Summary of Hypothesis Test results

This section presents a summary of the results from testing the study's five propositions. The summary is presented in Table 4.11 below.

Table 4. 5 Hypothesis testing and findings

Hypothesis	Relationship	Beta Value	T value	P value	Remarks
H1	Governance -> Social capital	0.384	3.785	0.000	Supported
H2	Justice -> Social capital	0.540	5.486	0.000	Supported
H3	Social capital -> SC performance	0.285	3.297	0.001	Supported
H4	Governance -> Social capital -> SC performance	0.110	2.468	0.014	Supported
H5	Justice -> Social capital -> SC performance	0.155	2.662	0.008	Supported

As proposed in hypothesis one, this study finds support for the positive relationship between supply chain governance and social capital formation. This is in line with the findings of Carey and Lawson, (2011) and the theoretical standpoints of transaction cost economics (TCE) and the relational view (RV) make it plausible to expect such a relationship. According to TCE, organizations seek to minimize transaction costs using governance mechanisms such as formal contracting. It is reasonable to expect that the existence of a governance mechanism will lead to better organization of the buyer-supplier relationship in which each party is aware of, and has full knowledge of what is required of them (Huang et al., 2014). Governance

mechanisms are used to manage the relationship to ensure that each party performs as expected (Anin et al., 2016).

The relational view echoes a similar standpoint, where using relational mechanisms can get parties to perform as expected of them to ensure the relationship works to achieve the intended targets. Overall, the existence of governance mechanisms enables the achievement of certainty in rules and responsibilities, all of which increase the level of trust and coordination among supply chain members over time. Thus, it is not surprising that governance mechanism is positively related to social capital accumulation in the buyer-supplier relationship. Again, because governance mechanisms seek to achieve the long term goal of keeping each partner focused on what is expected of them in the buyer-supplier relationship, proper use of governance mechanisms promotes the good relationship among the partners (Huang et al., 2014) and this improves social capital accumulation (Carey & Lawson, 2011).

In hypothesis two, the study finds a positive relationship between justice perception and social capital in the buyer-supplier relationship. It is reasonable to expect, from the organizational justice theory perspective that perception of fairness improves the relationship among partners in the exchange relationship. When a party believes that the treatment it receives from the other party is fair in terms of procedures, interactions and distribution of earnings, then there is a good reason to expect that each party will be committed to maintaining the relationship (Matopoulos et al., 2019). Because social capital is an accumulation of goodwill, trust and commitment over time, one key antecedent should be the perception of justice.

This is because perceptions of unfairness or opportunism on the part of one party may lead to retaliation on the part of the other party and damage to the relationship (Ziaullah, Feng, & Ahmad, 2015). In supply chain management, fair dealing with supply chain partners is often considered one of the means of keeping the chain vibrant and productive. This is because exploiting other partners in the supply chain or behaving opportunistically hurts overall supply chain performance as the aggrieved partners seeks to deliver suboptimal performance, or seek to employ retaliatory tactics over time (Y. Liu et al., 2012).

The results obtained support hypothesis three, which proposed that social capital is positively associated with supply chain performance. The relationship between social capital and performance has been a subject of keen interest. Whereas Villena, Revilla, and Choi, (2011) warns of a potential dark side to social capital, the majority of studies have tested and often obtained a positive relationship between social capital and performance measures (See e.g. (Gelderman et al., 2016; Leem & Rogers, 2017; C. H. Liu, 2017; Son et al., 2016; Zhang et al., 2020). From the perspective of social capital theory, these findings are not surprising as social capital in the buyer-supplier relationship manifests in the form of “intangible asset” (Nahapiet & Ghoshal, 1998) that aids relationship development and resource deployment to enhance performance outcomes. This has important practical implications as companies are becoming more and more embedded in a complex network of relationships (Son et al., 2016). Again, formal and informal collaboration and coordination, as well as interaction between colleagues, units and departments, create spillover effects that can improve working conditions and organizational performance (Leem & Rogers, 2017).

As a contribution to this stream of literature, this study finds that social capital mediates the relationship between governance mechanism and supply chain performance. This result provides an extension to the work of Carey and Lawson, (2011), and further responds to calls for examining the mechanism through which governance mechanisms influence supply chain performance. Conceptually, the propositions of the TCE and social capital theory make it certain to expect this kind of relationship. As governance mechanisms increase the certainty with which parties

perform their obligations, it is expected that their relationships will improve and the social capital will increase. An increment in social capital is expected then to be associated with increased commitment and attention and resources to developing the exchange relationship and the resultant increase in supply chain performance.

The study also found support for hypothesis five, which proposed that social capital mediates the relationship between organizational justice and supply chain performance. Similar to hypothesis four, combining the theory of organizational justice with the social capital theory provides a theoretical basis for expecting this relationship. First, the buyer-supplier relationship is built on the economic exchange expectations, where each partner expects to obtain a befitting reward for its offering. Thus, a party's perception of whether or not they have been treated in fairness by the other party has a significant impact on the nature of future dealings, and subsequently social capital accumulation.

Thus, justice perception can influence supply chain performance via the creation of social capital. In this case, it is expected that high perceptions of justice in the supply chain promote trust among the supply chain partners and this increases the commitment to deliver what is expected of them in the supply chain, leading to improved performance. Overall, this study has shown that organizational justice and governance mechanism are antecedents of social capital formation in buyer-supplier relationships and that supply chain performance may be improved by the level of social capital.

5.0 Theoretical Implication

This study has made significant contributions to scholarly knowledge on the antecedents and performance outcomes of social capital formation in buyer-supplier relationships. First, the study responds to calls to examine governance mechanism and organizational justice as antecedents to social capital formation in buyer-supplier relationships. By so doing, this study extends the theories of organizational justice and transaction cost economics as potent standpoints of explaining the mechanism of social capital accumulation in supply chains.

Second, this study has proposed and tested the indirect effects of governance mechanism and organizational justice on supply chain performance via the accumulation of social capital. This study is one of the few in the literature that simultaneously seeks to examine the antecedents and performance outcome of social capital formation in buyer-supplier relationships.

Third, while social capital formation in buyer-supplier relationships has been a topic of interest among academicians, there is a dearth of studies on this research stream in Sub-Saharan Africa. This contributes to this discussion from this context and offers empirical evidence on the proposed relationships.

5.1 Conclusion

Drawing on the organizational justice theory, transaction cost economics, and social capital theory, this study has examined the organizational justice perception and governance mechanism as antecedents of social capital formation, and the performance outcome thereof. Using a sample of 116 responding firms drawn from Accra, the study has developed and tested five propositions on the nature of the relationships among the variables using PLS-SEM implemented in SMART PLS 3. The study has shown that organizational justice and governance are positively related to social capital formation in the buyer-supplier relationships and that social capital is positively related to supply chain performance. Again, the study has tested and proven that social capital mediates the relationship between organizational justice and supply chain performance and that social capital also mediates the relationship between governance mechanism and supply chain performance.

5.2 Limitations of the Study

This study examines the relationship between perceived justice, social capital, governance mechanism and firm performance. Despite providing important contributions towards a theoretical understanding of the antecedents and performance outcomes of social capital in buyer-supplier relationships, some limitations are outlined here. First, the study uses cross-sectional data, and this limits the ability of the study to make causal inferences on the relationships among the variables. Whereas cross-sectional studies can determine associations, its ability to make inferences is limited and longitudinal studies are preferred in that respect. Second, the study uses data from a single country context and this makes it difficult to generalize the findings to other countries in the African region. Third, several other antecedents of social capital in buyer-supplier relationships are worthy of study. However, this study only considers organizational justice and governance mechanisms.

5.3 Recommendation for Further Studies

This study has made a significant contribution to the literature on social capital formation in buyer-supplier relationships. However, there are still limitations and opportunities for further research that should be considered in the future. First, whereas the use of multiple industries in this study has offered higher grounds for generalizing the results, the nature of social capital formation may differ among industries. Thus, future studies need to conduct industry-specific comparative studies to advance knowledge on the nature of social capital formation in different industries. Second, this study has revealed important relationships between organizational justice, governance mechanism, social capital, and supply chain performance.

However, since this is a cross-sectional study, its ability to infer causality is limited. Thus, future studies should undertake longitudinal research in the area to provide more concrete evidence of causality among the variables. Third, future studies should test the current model in other parts of the country or even better undertake a large-scale survey of firms in Ghana to provide further insights into the relationship. Fourth, future studies may modify the current model to include other important mediators and/or moderators that can enhance the explanatory power of the model. One such promising area is testing the potency of organizational distance as an antecedent of social capital formation.

Finally, due to limited sample size and quest to achieve model parsimony, the analysis was done at the first-order factor level. Future studies should consider the various dimensions of governance, justice, and social capital at individual levels to advance knowledge in this area.

REFERENCES

Ackah, D., Ackah, E., Agboyi, M. R., & Obiri-Yeboah, (2016). "The Effects of Applied Business Ethics on Consumers' Perceptions in the Fast-Moving Consumers' Goods (FMCG) Sector, Dama International Journal of Researchers (DIJR), Volume 1, Issue 1, pp. 20-40

Ackah, D., & Obiri-Yeboah, H., (2016). "Total Quality Management in the Energy Sector in Ghana, Dama International Journal of Researchers (DIJR), Volume 1, Issue 2, pp. 67-86

Ackah, D., & Agboyi, A., R., (2016). "The survey on the current state of Procurement Practice & Development in Organisations across Africa, Dama International Journal of Researchers (DIJR), Volume 1, Issue 2, pp. 85-128

Ackah, D., Agboyi, A., R., & Obiri-Yeboah, H., (2016). "Assessing Trade Scam in Tracking down Activities in Public Sector Organization, Dama International Journal of Researchers (DIJR), Volume 1, Issue 1, pp. 47-69, 2016

Ackah, D., Ackah, E., Agboyi, M. R., & Obiri-Yeboah, (2016). "Procuring Computers & Accessories Using Competitive Tendering, Dama International Journal of Researchers (DIJR), Volume 1, Issue 1, pp. 9-35

Adomako, S., Danso, A., Boso, N., & Narteh, B. (2018). Entrepreneurial alertness and new venture performance: Facilitating roles of networking capability. *International Small Business Journal: Researching Entrepreneurship*, 36(5), 453–472. <https://doi.org/10.1177/0266242617747667>

Alghababsheh, M., & Gallear, D. (2020a). Social capital in buyer-supplier relationships: A review of antecedents, benefits, risks, and boundary conditions. *Industrial Marketing Management*, 91(September 2019), 338–361. <https://doi.org/10.1016/j.indmarman.2020.10.003>

Alghababsheh, M., & Gallear, D. (2020b). Socially Sustainable Supply Chain Management and Suppliers' Social Performance: The Role of Social Capital. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04525-1>

Ali, H. A. Al, Elanain, H. M. A., & Ajmal, M. M. (2016). Knowledge-sharing behaviour as a mediator of the relationship between organisational justice and organisational performance in the UAE. *Int. J. Applied Management Science*, 8(4), 290–312.

Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice : A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411–423.

Anin, E. K., Essuman, D., & Sarpong, K. O. (2016). The Influence of Governance Mechanism on Supply Chain Performance in Developing Economies: Insights from Ghana. *International Journal of Business and Management*, 11(4), 252. <https://doi.org/10.5539/ijbm.v11n4p252>

Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information and Management*, 57(2), 103168. <https://doi.org/10.1016/j.im.2019.05.003>

Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*.

Bizzi, L. (2015). Social Capital in Organizations. In *International Encyclopedia of Social & Behavioral Sciences* (Second Edi, Vol. 22). Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.73108-4>

Blonska, A., Storey, C., Rozemeijer, F., Wetzels, M., & de Ruyter, K. (2013). Decomposing the effect of supplier development on relationship benefits: The role of relational capital. *Industrial Marketing Management*, 42(8), 1295–1306. <https://doi.org/10.1016/j.indmarman.2013.06.007>

Bryman, A. (2012). *Social Research Methods* (4th ed.). Oxford University Press.

- Butt, A. S. (2019). Absence of personal relationship in a buyer-supplier relationship: case of buyers and suppliers of logistics services provider in Australia. *Heliyon*, 5(6), e01799. <https://doi.org/10.1016/j.heliyon.2019.e01799>
- Carey, S., & Lawson, B. (2011). Governance and social capital formation in buyer-supplier relationships. *Journal of Manufacturing Technology Management*, 22(2), 152–170. <https://doi.org/10.1108/17410381111102199>
- Carey, S., Lawson, B., & Krause, D. R. (2011). Social capital configuration, legal bonds and performance in buyer-supplier relationships. *Journal of Operations Management*, 29(4), 277–288. <https://doi.org/10.1016/j.jom.2010.08.003>
- Cho, M., Bonn, M. A., Giunipero, L., & Jaggi, J. S. (2017). Contingent effects of close relationships with suppliers upon independent restaurant product development: A social capital perspective. *International Journal of Hospitality Management*, 67(August), 154–162. <https://doi.org/10.1016/j.ijhm.2017.08.009>
- Collier, J. E. (2020). Applied Structural Equation Modeling Using AMOS. *Applied Structural Equation Modeling Using AMOS*. <https://doi.org/10.4324/9781003018414>
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12TH ed.). McGraw-Hill.
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of Management Perspectives*, 21(4), 34–48. <https://doi.org/10.5465/AMP.2007.27895338>
- Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J., & Owusu-Yirenkyi, D. (2019). Stakeholder integration, environmental sustainability orientation and financial performance. *Journal of Business Research*, 119, 652–662. <https://doi.org/10.1016/j.jbusres.2019.02.038>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173(August), 121092. <https://doi.org/10.1016/j.techfore.2021.121092>
- Dyer, J. H., & Singh, H. (1998). The Relational View: Cooperative strategy and Sources of Interorganizational competitive advantage. *Academy of Management Review*, 23(4), 660–679. <https://doi.org/10.7880/abas.13.77>
- Erridge, A., & Greer, J. (2002). Partnerships and public procurement: Building social capital through supply relations. *Public Administration*, 80(3), 503–522. <https://doi.org/10.1111/1467-9299.00315>
- Fornell, C., & Larcker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *American Marketing Association*, 18(1), 39–50.
- Gelderman, C. J., Semeijn, J., & Mertschuweit, P. P. (2016). The impact of social capital and technological uncertainty on strategic performance: The supplier perspective. *Journal of Purchasing and Supply Management*, 22(3), 225–234. <https://doi.org/10.1016/j.pursup.2016.05.004>

Greenberg, J. (1987). A Taxonomy of Organizational Justice Theories. *Academy of Management Review*, 12(1), 9–22. <https://doi.org/10.5465/amr.1987.4306437>

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th Editio). Cengage Learning.

Hair, J., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>

Hair Jr, J., Hult, G. T., Ringle, C., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). In *Sage*.

Handoko, I., Bresnen, M., & Nugroho, Y. (2017). Knowledge exchange an social capital in Supply Chains. *International Journal of Production and Operations Management*, 34(1), 1–5.

Hofstede, G. H. (1980). *Culture's Consequences, International Differences in Work-related Values*. Sage.

Horn, P., Scheffler, P., & Schiele, H. (2014). Internal integration as a pre-condition for external integration in global sourcing: A social capital perspective. *International Journal of Production Economics*, 153, 54–65. <https://doi.org/10.1016/j.ijpe.2014.03.020>

Hornibrook, S., Fearne, A., & Lazzarin, M. (2009). Exploring the association between fairness and organisational outcomes in supply chain relationships. *International Journal of Retail & Distribution Management*, 37(9), 790–803. <https://doi.org/10.1108/09590550910975826>

Huang, M. C., Cheng, H. L., & Tseng, C. Y. (2014). Reexamining the direct and interactive effects of governance mechanisms upon buyer-supplier cooperative performance. *Industrial Marketing Management*, 43(4), 704–716. <https://doi.org/10.1016/j.indmarman.2014.02.001>

Jääskeläinen, A., Schiele, H., & Aarikka-Stenroos, L. (2020). Getting the best solution from a supplier – A social capital perspective. *Journal of Purchasing and Supply Management*, 26(5), 100648. <https://doi.org/10.1016/j.pursup.2020.100648>

Jajja, M. S. S., Asif, M., Montabon, F., & Chatha, K. A. (2019). Buyer-supplier relationships and organizational values in supplier social compliance. *Journal of Cleaner Production*, 214, 331–344. <https://doi.org/10.1016/j.jclepro.2018.12.289>

Kim, K. T., Lee, J. S., & Lee, S.-Y. (2017). The effects of supply chain fairness and the buyer's power sources on the innovation performance of the supplier: a mediating role of social capital accumulation. *Journal of Business&Industrial Marketing*, 34(1), 1–5.

Kumar, D., & Rahman, Z. (2016). Buyer supplier relationship and supply chain sustainability: Empirical study of Indian automobile industry. *Journal of Cleaner Production*, 131, 836–848. <https://doi.org/10.1016/j.jclepro.2016.04.007>

Lawson, B., Tyler, B. B., & Cousins, P. D. (2008). Antecedents and consequences of

social capital on buyer performance improvement. *Journal of Operations Management*, 26(3), 446–460. <https://doi.org/10.1016/j.jom.2007.10.001>

Lee, S.-Y. (2015). The Effects of Green Supply Chain Management on the Supplier's Performance through. *Supply Chain Management: An International Journal*, 20(1), 42–55.

Leem, B. H., & Rogers, K. J. (2017). The moderating effect of supply chain role on the relationship between social capital and performance. *International Journal of Services and Operations Management*, 26(1), 18–48. <https://doi.org/10.1504/IJSOM.2017.080676>

Liu, C. H. (2017). The relationships among intellectual capital, social capital, and performance - The moderating role of business ties and environmental uncertainty. *Tourism Management*, 61, 553–561. <https://doi.org/10.1016/j.tourman.2017.03.017>

Liu, Y., Huang, Y., Luo, Y., & Zhao, Y. (2012). How does justice matter in achieving buyer-supplier relationship performance? *Journal of Operations Management*, 30(5), 355–367. <https://doi.org/10.1016/j.jom.2012.03.003>

Luo, Y., Liu, Y., Yang, Q., Maksimov, V., & Hou, J. (2015). Improving performance and reducing cost in buyer-supplier relationships: The role of justice in curtailing opportunism. *Journal of Business Research*, 68(3), 607–615. <https://doi.org/10.1016/j.jbusres.2014.08.011>

Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing Research: An Applied Approach* (5th Editio).

Matopoulos, A., Didonet, S., Tsanasidis, V., & Fearn, A. (2019). The role of perceived justice in buyer-supplier relationships in times of economic crisis. *Journal of Purchasing and Supply Management*, 25(4), 100554. <https://doi.org/10.1016/j.pursup.2019.100554>

Min, S., & Kim, S. K. (2008). Developing Social Identity and Social Capital. *Journal of Business*, 29(1), 283–304.

Miocevic, D. (2016). The antecedents of relational capital in key exporter-importer relationships: an institutional perspective. *International Marketing Review*, 32(2). <https://doi.org/https://doi.org/10.1108/IMR-02-2015-0022>

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital and the Organisational Advantage. *Academy of Management Review*, 23(2), 242–266. https://doi.org/10.1007/978-1-4614-5013-9_3

Nahapiet, J., Stopford, J., Moran, P., Hansen, M., Pascale, R., Boisot, M., Tsai, W.-P., Nohria, N., Willman, P., Hopwood, A., Ambler, T., & Waldenstrom, M. (1998). Social Capital, Intellectual Capital and the Organisational Advantage. *Academy of Management Review*, 23(2), 242–266.

Petersen, K. J., Handfield, Robert B. Lawson, B., & Cousins, P. D. (2008). Buyer Dependency and Relational Capital Formation: the Mediating Effects of Socialisation Process and Supplier Integration. *Journal of Supply Chain Management*, 44(4), 53–65.

Roden, S., & Lawson, B. (2014). Developing social capital in buyer-supplier relationships: The contingent effect of relationship-specific adaptations. *International Journal of Production Economics*, 151, 89–99. <https://doi.org/10.1016/j.ijpe.2014.01.008>

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for business students* (Fifth). Pearson Education Limited.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students*. <https://doi.org/10.1108/qmr.2000.3.4.215.2>

Sekaran, U. (2003). *Research Methods for Business : A skill Building Approach* (4th ed.). John Wiley and Sons.

Son, B. G., Kocabasoglu-Hillmer, C., & Roden, S. (2016). A dyadic perspective on retailer-supplier relationships through the lens of social capital. *International Journal of Production Economics*, 178, 120–131. <https://doi.org/10.1016/j.ijpe.2016.05.005>

Sukoco, B. ., Hardi, H., & Qomariyah, A. (2017). Social Capital , Relationship Learning , and Performance of Suppliers. *Asia Pacific Journal of Marketing and Logistics*,.

Villena, V. H., Revilla, E., & Choi, T. Y. (2011). The dark side of buyer-supplier relationships: A social capital perspective. *Journal of Operations Management*, 29(6), 561–576. <https://doi.org/10.1016/j.jom.2010.09.001>

Whipple, J. M., Wiedmer, R., & Boyer, K. K. (2015). A Dyadic investigation of collaborative competence, social capital, and performance in buyer-supplier relationships. *Journal of Supply Chain Management*, 51(2), 3–21. <https://doi.org/10.1111/jscm.12071>

Williamson, O. E. (1993). Transaction Cost Economics and Organization Theory. *Industrial and Corporate Change*, 2(1), 107–156. <https://doi.org/10.1093/icc/2.1.107>

Wu, I. L., & Chiu, M. L. (2018). Examining supply chain collaboration with determinants and performance impact: Social capital, justice, and technology use perspectives. *International Journal of Information Management*, 39(December 2017), 5–19. <https://doi.org/10.1016/j.ijinfomgt.2017.11.004>

Yang, Z., Su, C., & Fam, K. S. (2012). Dealing with institutional distances in international marketing channels: Governance strategies that engender legitimacy and efficiency. *Journal of Marketing*, 76(3), 41–55. <https://doi.org/10.1509/jm.10.0033>

Yim, B., & Leem, B. (2013). The effect of the supply chain social capital. *Industrial Management & Data Systems*, 113(3), 324–349. <https://doi.org/10.1108/02635571311312640>

Zelbst, P. J., Green, K. W., Sower, V. E., & Reyes, P. (2009). Impact of supply chain linkages on supply chain performance. *Industrial Management and Data Systems*, 109(5), 665–682. <https://doi.org/10.1108/02635570910957641>

Zhang, Q., Pan, J., Jiang, Y., & Feng, T. (2020). The impact of green supplier

integration on firm performance: The mediating role of social capital accumulation. *Journal of Purchasing and Supply Management*, 26(2), 100579. <https://doi.org/10.1016/j.pursup.2019.100579>

Ziaullah, M. (2015). Exploring the Relationship between Justice and Supply Chain Process Integration through Linkage of Trust-An Empirical Study of Pakistan. *Research in Business and Management*, 2(1), 89–101. <https://doi.org/10.5296/rbm.v2i1.6825>

Ziaullah, M., Feng, Y., & Ahmad, S. (2015). An Investigation of Justice in Supply Chain Trust and Relationship Commitment - An Empirical Study of Pakistan. *Journal of Competitiveness*, 7(1), 71–87. <https://doi.org/10.7441/joc.2015.01.05>

Ziaullah, M., Feng, Y., & Akhter, S. N. (2015). The synergistic and Complementary effects of supply chain justice and integration practices on supply chain performance: A conceptual framework and research propositions. *SAJEMS*, 18(4), 519–533.

Zikmund, W. ., Babin, B. ., Carr, J. ., & Griffin, M. (2010). *Business Research Methods* (8th ed.). Cengage Learning.

Zimmermann, A., Oshri, I., Lioliou, E., & Gerbasi, A. (2018). Sourcing in or out: Implications for social capital and knowledge sharing. *Journal of Strategic Information Systems*, 27(1), 82–100. <https://doi.org/10.1016/j.jsis.2017.05.001>

