Exploring the role of social capital in public procurement

Role of social capital

Received 10 September 2022

Revised 17 December 2022 18 April 2023

Accepted 9 May 2023

Jad EL Bizri, Elina Karttunen and Katrina Lintukangas School of Business, LUT University, Lappeenranta, Finland

Abstract

Purpose – This study aims to build on social capital theory (SCT) and its dimensions by examining the role of social capital in the public procurement process and by identifying related contingencies that may influence procurement performance.

Design/methodology/approach — A systematic literature review and a thematic analysis regarding social capital in procurement are conducted. The antecedent—behaviour—consequence (ABC) model is used for illuminating linkages between social capital, contingencies and procurement performance.

Findings – The dimensions of social capital are investigated in the procurement process; however, the extent of social capital role can vary between the phases of the process. It is concluded that the contingencies of social dynamics are linked with social capital and may influence the outcomes and performance of the procurement process.

Practical implications – Social capital can ease interactions between public buyers and private suppliers by contributing to effective tendering, improving social interaction in negotiations and balancing rigidity in contract management, supporting the interests of both parties. The provided framework helps decision makers to comprehend the social dynamics in public procurement.

Social implications – Improving social dynamics and solutions in public procurement.

Originality/value – This study extends social capital research in the field of public procurement and creates a framework connecting social capital and prevailing contingency factors to procurement process performance.

Keywords Public procurement, Social capital, Performance

Paper type Literature review

1. Introduction

Public procurement has gained attention as an effective tool of policymakers to advance innovations, develop well-functioning markets and drive sustainability initiatives (Grandia and Meehan, 2017). Thus, the objective of public procurement is to create value for society, and this can be achieved through efficient procurement practices and collaboration between different stakeholders (Malacina *et al.*, 2022). Public procurement has been researched extensively through operational and practical research topics and empirical studies, but theory-building and frameworks for academic research in this context have been scarce (Patrucco *et al.*, 2017). In particular, social capital theory (SCT), a relatively new theory, and the role of social capital in public procurement have not yet been well established in this context (Erridge and Greer, 2002).

© Jad EL Bizri, Elina Karttunen and Katrina Lintukangas. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

Journal of Public Procurement Vol. 23 No. 2, 2023 pp. 221-244 Emerald Publishing Limited 1535-0118 DOI 10.1108/JOPP-09-2022-0044 Social capital can be broadly defined as the collective actions of individuals or potential resources embedded in or derived from certain networks that facilitate business and management processes (Nahapiet and Ghoshal, 1998). By having social capital within business relationships, competitive advantages can be achieved, because social capital fosters cooperative behaviour, reduces opportunism and aids relationship building in supply chains (Autry and Griffis, 2008). This definition is intriguing because it embodies both management and sociological perspectives, prompting a multidisciplinary approach that links social attributes with management traditions (Alghababsheh and Gallear, 2021; Girdwichai et al., 2019; Lee, 2009).

Studies from the private sector have shown that social capital significantly contributes to buyer—supplier relationships (BSR; Jääskeläinen et al., 2020; Wang et al., 2013; Whipple et al., 2015), supply chain resilience from a marketing perspective (Gölgeci and Kuivalainen, 2020), humanitarian supply chains (Jeble et al., 2020) and green supply chain management (Rashid et al., 2019). However, more research is needed to clarify the role of social capital in forming BSR in public procurement and which conditions contribute to the development of social capital in public organisations (Erridge and Greer, 2002). In addition, there is a call to develop models of how social capital influences the adaptation of sustainable public procurement by organisational stakeholders (Bohnenkamp et al., 2020) and how it facilitates procurement from local suppliers (Bohnenkamp et al., 2020). For example, social capital embedded in the procurement process may contribute to sustainability initiatives among the local community (Rodriguez-Plesa et al., 2022).

A lack of social capital increases uncertainty, opportunism and operational risks related to suppliers, which hinders the development of relational gains (Chowdhury et al., 2019). Because public procurement is a mechanism that delivers goods and services for public use and has a limited budget, its relational capabilities and social capital should be used effectively to achieve value for society (Malacina et al., 2022). This requires understanding the social dynamics manifested in different procurement functions (tendering, negotiations, contract formation and management), as well as identifying the contingencies that may cause conflicting outcomes. By identifying social capital antecedents, possible contingency factors and their relations to procurement performance, our aim is to increase understanding of how social capital can be used in public procurement. In addition, different social capital dimensions may create diverse performance outcomes, consequences and social conditions, and their extent may vary in different phases of procurement. Therefore, it is important to uncover how social capital is tied to the public procurement process and what role social capital has in different public procurement functions.

This study conducts a systematic literature review of 81 articles. The findings follow an antecedent–behaviour–consequence (ABC) framework (Sulaiman et al., 2021) that shows the relations of social capital and contingencies with procurement functions. The findings propose relationships between antecedents of social capital, contingency factors and possible outcomes of procurement performance. Hence, the aim of this study is theory building (Makadok et al., 2018) in addition to thematic analysis. This study contributes to SCT by showing the links between contingencies and public procurement. The findings advance procurement research by providing a framework for future studies and a managerial decision-making guide for practitioners.

2. Social capital theory

SCT is a multidimensional theory "central to our understanding of institutional dynamics, innovation and value creation" (Chowdhury *et al.*, 2017; Nahapiet and Ghoshal, 1998). This theory is rooted in social dynamics, and this orientation facilitates the investigation of

collaboration and opportunism (Putnam, 1993). The earliest development of the concept of social capital (SC) is attributed to Coleman (1988), Bourdieu (1986), operating in the field of sociology. Putnam (1993) popularised the SC concept, introducing social features – particularly trust, norms and networks that improve collaborative actions and support mutual benefits. SC gained a prominent position in the social sciences, conceptualising relationships at diverse levels, including micro, meso and macro levels (Alghababsheh and Gallear, 2020). Furthermore, SC takes many forms, characterised by an internal or external analysis of organisational relations (Polyviou *et al.*, 2019) and acting as a mediator or moderator factor (Rashid *et al.*, 2019). Research on SC is prevalent in the BSR literature; SC is used to elucidate buyers' or suppliers' behaviours (Villena *et al.*, 2011) and extends to supply network levels (Sukoco *et al.*, 2018).

However, few studies, such as the one conducted by Erridge and Greer (2002), recognise SC as an effective theoretical lens to interpret the social dynamics between the public and private sectors, along with their impact on public procurement functions. This systematic review reflects upon that theory and analyses the social dynamics in tendering, negotiations and contract formation and management. Tendering is the primary phase of procurement, as it enables buyers to evaluate and select appropriate suppliers. Negotiations describes open communication for developing and managing contracts. Contract formation and management set the terms and conditions that govern public–private partnership (PPP) and procurement performance.

2.1 Social capital dimensions

Gittell and Vidal (1998) primarily conceptualise SC as bonding and bridging. Bonding refers to the strong relational ties manifested in an exclusive network, whereas bridging implies an inclusive approach, describing weak relations between diverse cultural groups. Woolcock (1998) identifies a third element, linkage, characterised by norms of respect and trust across institutionalised power. Few scholars have limited the scope of SC dimensions to relationship structures (Burt, 1992). Other scholars suggest a dual perspective. For instance, Norman Uphoff (2000) claimed that SC can be understood through structural and cognitive capital, emphasising the expectations of reciprocity as a norm. However, such an interpretation of SC perspectives may be abstract and subject to criticism, as it neglects the relational attributes. For instance, Villena et al. (2011) suggests a darker side to SC in BSR characterised by opportunism and inverted relational capital. Furthermore, the quality of communication and social interaction amongst buyers and suppliers' networks is undermined, necessitating an investigation of relational ties, Accordingly, Nahapiet and Ghoshal (1998) assert the need for three dimensions that bring forth a holistic approach: structural, relational and cognitive. Structural refers to the patterns of networks, relational to the nature of a relationship and cognitive to the collective values and goals embedded within a system (Nahapiet and Ghoshal, 1998). These SC dimensions may be interconnected. For instance, structural capital may drive cognitive and relational capital in a case in which geographically approximate networks develop shared goals and trust (Chumnangoon et al., 2021). Contrarily, the relational and cognitive dimensions may encourage strong network development (Li et al., 2014). Li et al. (2014) also propose a reciprocal relationship between the relational and cognitive dimensions.

These dimensions of SC (relational, cognitive and structural) are specifically chosen in our study for two main reasons. Firstly, they enable the researcher to synthesise and elucidate complex social relations within a specific context, as in our case of public procurement functions. Secondly, they provide a profound interpretation of social relations, particularly within and amongst network of buyers and suppliers.

2.1.1 Cognitive capital. Cognitive capital reflects the collective values of individuals, embodying a shared representation of goals, visions and norms (Nahapiet and Ghoshal, 1998). In procurement, it shapes public and private actors' perceptions, entailing a homogeneous understanding of expected behaviours and actions. Nahapiet and Ghoshal (1998) describe cognitive capital as shared language, codes and narratives, whereas Inkpen and Tsang (2005) perceive shared cultural values and shared goals as components of cognitive capital. Shared cultural values represent a mutual set of norms and languages that governs the quality of social behaviours. Shared goals can be conceptualised as the development of a mutual "understanding of network tasks and outcomes" (Inkpen and Tsang, 2005).

If such elements of cognitive capital differ among actors, they may cultivate false expectations. Alternatively, a high degree of cognitive capital can evoke adverse outcomes, such as the development of excessively homogeneous thinking (Villena *et al.*, 2011). This may prompt compliance to the group's expectations and traditional norms. Such traditional norms may restrict innovation, for example, in a buyers' group or extended across multiple tiers of suppliers. In terms of public procurement, cognitive capital facilitates common understanding of the roles, procedures and goals of each procurement function.

In tendering, cognitive capital enables public buyers to find potential suppliers with similar expectations (Holma *et al.*, 2020). It cultivates credibility and transparency of information between buyers and suppliers (van der Valk and Rozemeijer, 2009). Communication issues arise if such expectations and goals differ extensively. Consequently, public buyers strictly mandate their own specifications and neglect suppliers' innovative capabilities (Uyarra *et al.*, 2014; Holma *et al.*, 2020).

In negotiations, cognitive capital creates congruency in expectations to overcome conflicts (Kumar and Worm, 2003). A shared understanding of contractual goals drives an honest dialogue and brings forward solutions that satisfy both parties' needs (Keränen, 2017). Cultural similarities improve the interaction process, allowing better outcomes in negotiations (Jääskeläinen *et al.*, 2020). Conversely, negotiations may be rendered ineffective when cultural differences, power dependencies and uncertainties emerge (Schiele *et al.*, 2015).

In contract formation and management, cognitive capital may refer to the clear understanding of risk shared between the public and private sectors (Likhitruangsilp *et al.*, 2017). For instance, when the perceived risk is high, both partners have a greater tendency to build trust and collaborate for mutual goals (Grudinschi *et al.*, 2014). However, such collaboration is ineffective when one partner perceives their risk to be higher than that of the other, inducing opportunistic behaviour (Likhitruangsilp *et al.*, 2017).

2.1.2 Relational capital. Relational capital describes the quality of a relationship (Nahapiet and Ghoshal, 1998). It encompasses strong relational attributes, such as trust, reciprocity and identification (Nahapiet and Ghoshal, 1998). Trust refers to the willingness of actors to collaborate and share knowledge (Inkpen and Tsang, 2005). Reciprocity represents a party's commitment to another (Kumar and Worm, 2003). Identification or solidarity determines the collectivist mindset of individuals within a group (Kroll et al., 2019). Such aspects of relational capital promote informal relations and accelerate innovation (Onofrei et al., 2020).

However, excess relational capital may result in opportunistic behaviour (Villena *et al.*, 2011). For instance, buyers may become vulnerable to opportunism when they deeply trust their suppliers and lower monitoring mechanisms (Wuyts and Geyskens, 2005). Furthermore, excessive trust may prevent buyers from seeking alternative suppliers (Coviello *et al.*, 2018). Extensive reciprocity may create a false sense of obligation, resulting

in one party committing to another without retrieving an equal reward (Villena *et al.*, 2011). Thus, relational capital must be applied moderately to avoid exploitation and opportunistic behaviour. In public procurement, relational capital governs the quality of social mechanisms in PPP and allows both sectors to closely examine their relationship position.

According to Elfenbein and Zenger (2017), relational capital governs behavioural patterns between buyers and suppliers in tendering. It also encourages the alignment of goals and better understanding of suppliers' motives before proposing any specifications (Holma *et al.*, 2020). However, it becomes challenging to create long-term collaboration due to the strict bureaucracies in competitive tendering (Erridge and Greer, 2002).

In negotiations, relational capital may aspire negotiators to pursue intangible benefits beyond economic efficiencies. Such benefits strengthen personal interactions between negotiators, allowing timely and clear communication of knowledge (Kumar and Worm, 2003). Negotiations may fail when the public sector keeps its private partner at arm's length and offers shorter contract durations (Erridge and Greer, 2002).

In contracting, relational capital is observed through contractual forms, such as relational contracting, which improves the sharing of risk and the private sector's mobilisation of resources (Alam *et al.*, 2014). Furthermore, it reduces the transaction costs of the contracting, monitoring and adaptation of suppliers through trust-based governance contracts (Bernstein, 2015). However, such relational contracts provoke opportunistic behaviour when one actor invests more in a relationship, warranting formal contractual governance (Carev and Lawson, 2011).

2.1.3 Structural capital. Structural capital represents the configuration of networks linking all nodes together and facilitating the flow of information and resources (Nahapiet and Ghoshal, 1998). It enables flexible access to resources and improves organisational performance (Tantardini and Kroll, 2015). Social interaction is one element of structural capital that depicts the degree of social exchange between buyers and suppliers (Roden and Lawson, 2014). Other elements describe linking social patterns, which relate to the density, centrality and hierarchical structure of a network (Burt, 1992; Nahapiet and Ghoshal, 1998).

Notably, social interactions amongst networks highlight the value of information received. As illustrated by Burt (1992) and Villena *et al.* (2011), excessive interactions may generate a confined circle of networks with a saturation of information exchange. Under such circumstances, suppliers' capability to innovate and buyers' tendency to acquire new knowledge are restricted by the existing information available to them. On the other hand, a stable network of interactions into which new buyers or suppliers are accepted increases information and learning capabilities.

During tendering processes, structural capital enables buyers to seek suppliers with strong, overlapping networks (Shao and Sun, 2021). It allows them to structure an adequate network of ties that encourages long-term relationships and flexible access to resources (Erridge and Greer, 2002). However, such networks may be subject to the nature of social interactions. A dense network with strong social ties may assure security and the accessibility of resources in uncertain times (Burt, 1992), but it may limit the integration of newer, innovative suppliers.

In negotiations, structural capital relates to the capability of both buyers' and suppliers' to connect with and penetrate the other's network (Kumar and Worm, 2003). It allows speculation on the strength of the ties and the interconnectedness that facilitate the negotiation process. This can allow either party to understand and anticipate the social dynamics in the other party's network. However, such negotiations may be limited when social ties and interconnectedness are perceived to be weak.

In contract management, structural capital may function as a network-based contract, governing the roles, social interactions and patterns of networks (Bernstein, 2015). In relation to PPP, structural capital enables public sector actors to diversify their supplier base and increase their access to information (Narasimhan and Aundhe, 2014). However, it may produce intensive social ties, which restrict the acquisition of novel information outside the existent network.

3. Methodology

A systematic literature review was performed to capture the most relevant data in SCT and public procurement. Such a review involves a rigorous process of identification, evaluation and dissemination of the derived findings (Tranfield et al., 2003). We began our review with an extensive search of articles related to SCT by determining the right combination of "strings" and "connectors". Both "social capital" and "public procurement" were selected as the main underlying strings. We also expanded our data collection by including the dimensions of SC (relational, cognitive and structural). A similar procedure was used with supply networks and BSR. Few studies have used SCT as a lens through which to examine public procurement. As such, many social aspects that are linked to SCT need to be directly addressed and amplified within our context of study; public procurement. Thus, findings related to a particular concept (e.g. social capital) identified from the literature on BSRs can be applied to the context of PPPs (Schiele, 2020), allowing us to depict these social dynamics and collaboration practices in PPP. Similarly, in a wider view, an analysis of social interactions amongst supply networks illuminates the qualities of relationships on a network level. These keywords were searched within articles' titles, keyword lists and abstracts using the Scopus database, which is the main research portal for accessing reliable articles across a variety of disciplines (Baas et al., 2020). The overall process used to conduct this systematic review is illustrated in the flow chart (Fig. 1).

3.1 Selection criteria

The selection of articles was based on specific criteria that ensured the objectivity and relevancy of our current research (Tranfield et al., 2003). A total of 997 articles were found in the initial phase. The primary analysis began with a review of the documents' titles and abstracts for relevance to SCT in procurement research. The number of articles was reduced to 716 after filtering out literature not in the English language. Based on a close examination of the abstracts, 173 articles were chosen for further analysis. The excluded articles addressed SCT from psychological and sociological perspectives rather than in the context of procurement. Peer-reviewed articles conforming to the Chartered Association of Business Schools' (CABS) list of scholarly journals were extracted to ensure the quality of the review (Alghababsheh and Gallear, 2020). A snowballing method (backward and forward) was used to pinpoint the key literature covering the research subject (Alghababsheh and Gallear, 2020). Articles that did not emphasise SCT or its elements in the public procurement context or from the buyer-supplier perspective were excluded. A second analysis of the remaining articles yielded a final selection of 81 articles. Most of the articles were within the scope of supply management and operations, and the rest were scattered among the topics of information, innovation, technology, engineering, decision making, public administration and procurement.

3.2 Coding process

An integrative coding process was carried out with the NVivo software, which organises the findings into different nodes (themes) and maintains a well-structured format for all the

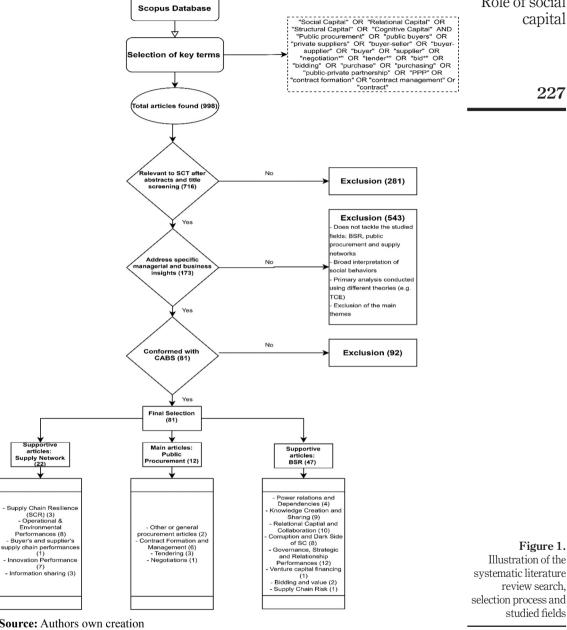


227

Figure 1.

review search,

studied fields



Source: Authors own creation

selected documents (Corbin and Strauss, 2014). To increase consistency and robustness of the coding process, intercoder reliability (ICR) was performed between two researchers by following the process described by O'Connor and Joffe (2020). ICR was carried out with the first researcher coding the sample of data units and structuring the coding frame. Then, a second researcher adopted a similar coding approach in which the corresponding data units were highlighted, but their associated codes were removed by the first researcher. Such of method enables impartiality of perspectives and allows both researchers to communicate commonalities and differences across the coding frame for reaching a joint decision (O'Connor and Joffe, 2020). The initial set of codes comprise social capital elements within relational, cognitive and structural capital. A researcher coded relationships that included these elements. Then, the researcher determined cause-effect relationships pertaining to the thematic categories. The first theme is associated with SC antecedents and includes either facilitators, barriers or a combination of both. The second theme refers to performance. The third theme describes the contingency factors that influence the performance of public procurement either positively or negatively. Relationship codes were created that justify relationships among the three themes, including the antecedents' association with contingency factors and the contingencies' influence on public procurement performance.

Throughout our analysis, the findings on public procurement processes were organised into three functions: tendering, negotiations and contract formation and management. This separation of functions was performed to differentiate the social dynamics in a PPP along each procurement function.

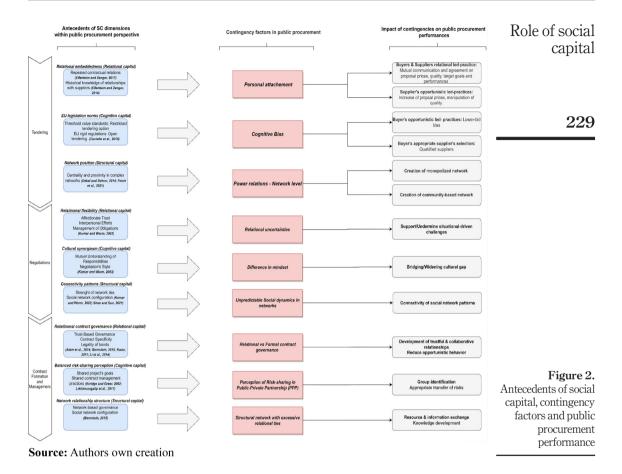
Each node was affiliated with specific subnodes, along with their key descriptions. For instance, affect-based trust contributes to the development of relational capital in negotiations; hereby, a key definition of affect-based trust can be assigned to the facilitator determinant category. Hence, we found relationships that allowed us to detect diverse conceptual patterns (Handoko *et al.*, 2018). At this stage, we were able to construct logical cause–effect mechanisms by alternating between diverse themes and subthemes. An integrative synthesis was carried out that summarised, combined and stimulated novel findings on SCT and the identified themes in procurement research (Tranfield *et al.*, 2003).

4. Findings

4.1 Framework analysis

This section provides a short description of the identified themes, which consist of antecedents (barriers, determinants), performance (outcomes, consequences) and contingency factors. We designed a conceptual framework (Figure 2) that organises the themes into three main columns: "Antecedents of SC dimensions", "Contingency factors in public procurement" and "Impact of contingencies on public procurement performance". This framework is derived from the ABC model (Sulaiman *et al.*, 2021). Such a model examines social behaviours and provides a clear visualisation of the relationship between ABCs. We attempt to depict the relations among the three themes within public procurement functions (tendering, negotiations, contract formation and the management).

4.1.1 Antecedents of SC dimensions. Antecedents are described as factors affecting SC development, here represented as barriers or determinants. Barriers can include those precedent obstacles hindering SC creation or development. Alternatively, barriers may evolve with SC usage with extensive employment of social dynamics. For instance, an extreme level of trust prompts opportunistic behaviour, breeding corruption and undesirable outcomes (Bondeli et al., 2021). Conversely, determinants are perceived as contributors to or drivers of SC development. Affective commitment (Miocevic, 2016; Yeoh, 2017) and capability development (Blonska et al., 2013) are a few determinants that enhance



BSR performance. Thus, antecedents anticipate the social behaviours between public and private partners, framing how SC is developed, which subsequently affects public procurement performance.

4.1.2 Contingency factors in public procurement. In the context of public procurement, several factors exist that influence procurement performance and lead to ambivalent or inconsistent results. Based on contingency theory these factors are situational and are naturally beyond the control of public or private institutions (Lawrence and Lorsch, 1967; Thompson, 1967). Thus, contingencies or contingency factors stem from diverse forces and essentially reform the behaviour of procurement actors, affecting the performance of public procurement. The current research focuses on inherited social attributes, which furthers our understanding of public procurement beyond the traditional role. By identifying contingencies through an SCT lens, this research connects contingencies with public procurement performance.

4.1.3 Performance of public procurement. Performance refers to the positive outcomes or negative consequences of public procurement. Social capital has been shown to influence operational (Whipple et al, 2015; Yim and Leem, 2013; Yu and Huo, 2019; Yu et al., 2021), environmental (Chu et al., 2017), strategic (Gelderman et al., 2016) and financial performance

(Carey et al., 2011). Also, social capital affects knowledge benefits (Chang and Gotcher, 2008; Preston et al., 2016; Rashid et al., 2019) and innovation performance (Alghababsheh and Gallear, 2020; Thi Mai Anh et al., 2019; Chowdhury et al., 2017; Girdwichai et al., 2019; Jääskeläinen et al., 2020; Zhang et al., 2019). However, such influence in innovation is not directly observed in all contexts (Tsai et al., 2013; Wang and Li, 2017). Per our findings, many studies in the literature research SC in private firms, but these may nevertheless provide a reference point for analysing performance in public procurement.

In tendering procedures, public buyers optimise SC application and procurement performance by engaging with relevant stakeholders (Finch *et al.*, 2021). However, in competitive bidding, the value of SC may be diminished when suppliers act opportunistically towards buyers, such as when they increase proposal prices (Elfenbein and Zenger, 2017). Alternatively, SC, if excessively applied, can cause adverse outcomes. For instance, in contract management, strong relational ties may create false assumptions about suppliers' capabilities, thereby limiting operational practices to incumbent suppliers (Daghar *et al.*, 2021). Thus, procurement performance is affected by SC development, and it is vital to identify which specific factors elaborate the impact of SC on procurement performance.

5. Antecedents and contingencies and their effect on performance

5.1 Tendering

Tendering describes contracting authorities' capability to select appropriate suppliers. However, this capability tends to be vulnerable to many social challenges. We have identified three main SC categories that impact tendering performance: relational embeddedness, legislation norms and network position. These categories reflect the antecedents of SC dimensions within the public procurement field.

5.1.1 Relational embeddedness. Relational embeddedness may be aligned with relational contracting, which refers to the governance of social forces that creates strong incentives for collaborative behaviour (Cao and Lumineau, 2015; Carson et al., 2006). Such relational governance describes close practices based on antecedents of repeated contractual exchanges and historical knowledge of relationships (Poppo and Zenger, 2002). Repeated exchanges deepen trust and create a preconceived set of mutual expectations (Elfenbein and Zenger, 2014; Zou et al., 2019). Prior knowledge of historical relationships shapes bidding decisions. Both antecedents show similar features and promote relational-led practices of mutual expectations and communication of goals, quality and proposal price (Krause et al., 2007).

However, they may generate positive or negative outcomes due to personal attachment issues (Verbeke *et al.*, 2020). Based on our findings, personal attachment presents a relational contingency because it triggers paradoxical results. Personal attachment is the development of strong affection towards a particular partner and the seeking of provision in challenging times (Bowlby, 1973). Consequently, public authorities may concentrate on a handful of suppliers and neglect innovative ones that are better suited for complex procurement projects (Elfenbein and Zenger, 2017). In opposition, attachment may also improve buyers' selection due to familiarity with the suppliers' capabilities, allowing the buyer to choose the right expertise for proposal specifications. Thus, personal attachment offers a frame of reference for understanding relational dynamics and unpredictable social behaviours.

5.1.2 Legislation norms. Based on the literature, tendering performance is influenced by rigid procurement legislation that focuses on open competition and a price-centric approach with narrow specifications (Harland *et al.*, 2013; Uyarra *et al.*, 2014). This creates unfavourable collective norms and excessive compliance to regulations, distorting

individual creativity and rational decisions (Mpeera Ntayi *et al.*, 2010). For instance, public buyers may partially select unqualified or lower-bid suppliers because of existing norms that reinforce efficiency over effective tendering (Dekel and Dotan, 2018; Dekel and Schurr, 2014).

Alternatively, public buyers may resort to discretion when the value of a project's proposal is below the required threshold, inviting favourite suppliers to restricted tendering (Coviello *et al.*, 2018). This discretion creates group bias towards favourite suppliers, leaving newer entries behind. However, as argued by Coviello *et al.* (2018), such discretion may have positive outcomes for public buyers, particularly in leveraging cost efficiencies and project compatibility with suppliers. Hence, cognitive bias can be characterised as a contingency factor that may lead to either positive or negative results. This depends on the legislation norms that direct public buyers' decisions towards lower-bid or qualified suppliers.

5.1.3 Network position. Our findings point towards power relations issues (Gelderman et al., 2020; Kim et al., 2017; Petersen et al., 2008) as a contingency factor in buyer—supplier networks. Centrality and proximity in complex networks, as antecedents, exert the most influence on power disparity and tendering performance. A firm is considered central if it is positioned at the focal point of social interactions, unfolding information flow across multiple networks (Freeman, 1978). Proximity justifies a firm's closeness and direct involvement with other networks (Bernstein, 2015; Chumnangoon et al., 2021).

In terms of tendering, centrality and proximity reinforce the power that either public authorities or bidders have over one another. For instance, public procurers may resort to collusion by matching needless requirements with favourite suppliers while disqualifying others (Gargiulo and Benassi, 1999; Goyal, 2019; Popa, 2019; Villena *et al.*, 2011; Zeng *et al.*, 2017). Similarly, the competition level may be rigged by a cartel of suppliers, creating a monopolistic environment (Goyal, 2019). Conversely, in an ideal scenario, either party may choose to discard disparity in power and act fairly towards the other, thereby contributing to positive tendering outcomes. For instance, Finch *et al.* (2021) suggests a community-based bidding in which contracting authorities optimise SC development through stakeholders' engagement. Likewise, Meehan and Bryde (2014) propose engaging with stakeholders to effectively predict sustainable procurement activities.

5.2 Negotiations

Negotiations reflect public and private sector engagement in discussions to create mutually binding agreements that lead to favourable outcomes. Such negotiations are vital for understanding challenges faced in complex social interactions. We determined three main antecedents related to SC dimensions: relational flexibility, cultural synergies and connectivity patterns.

5.2.1 Relational flexibility. Relational flexibility entails the tendencies of two parties to engage in open dialogue and cope with situational changes beyond contract formalities (Malca et al., 2021). This flexibility is founded on affect-based trust, interpersonal efforts and management of obligations (Kumar and Worm, 2003). Lewicki et al. (1998) claims affect-based trust mirrors how a party should act under vulnerable conditions. Interpersonal efforts consider the endeavours initiated by one party to support its relationship with others, such as allocating time for long-term relationship development (Kumar and Worm, 2003). Similarly, the management of obligations translates into the reciprocal behaviour expected from one party towards the other, such as verbal commitments.

These relational antecedents may be tied to managing uncertainties within BSRs. Uncertainties may arise from a lack of knowledge of a partner's behaviour, attitude and

intentions (Kreye, 2017). Consequently, this undermines suppliers' expectations and values, causing failure of negotiations. This emphasises the importance of understanding the attitude of one's partner to manage uncertainties and bring positive outcomes from negotiations.

5.2.2 Cultural synergies. A culturally synergetic partnership integrates the best aspects of all involved partners by accommodating similarities and differences (Brett et al., 2017). Two main antecedents are found to lead to cultural synergies. The first is a mutual understanding of responsibilities that reflects the differences in roles, interests and goals. Secondly, negotiation style refers to the communication habits that one actor conveys to others (Kumar and Worm, 2003). However, cultural synergy may lessen if all involved parties adopt an analytic mindset rather than a holistic one (Kumar and Worm, 2003).

The holistic approach perceives both the public and private sectors as an interconnected entity (Brett *et al.*, 2017). It recognises opposing perspectives and searches for the "middle way" (Nisbett *et al.*, 2001). However, the analytic approach views the public and private sectors as two separate entities with their own self-interests (Brett *et al.*, 2017), focusing on the content rather than attempting to understand the insights of negotiators. Shifting from an analytic to a holistic mindset, or vice versa, requires an understanding of a party's intentions. Hence, such a heterogenous mindset may be considered a contingency factor with its inconsistent attributes. A radical change towards a holistic approach is needed to bridge any cultural gap and create synergies. Thus, a higher level of cognitive capital could facilitate adaptation to cultural differences (Chang *et al.*, 2012).

5.2.3 Connectivity patterns. Our findings emphasise the necessity of strong communication patterns that connect the networks to each other (Shao and Sun, 2021). Strength of ties and social configuration are antecedents that tap into the social aspects of a network (Kumar and Worm, 2003). Strength of ties relates to the capability of a focal firm to build a central, cohesive and interconnected social network (Freeman, 1978). Social configuration describes the quality of social ties and how those ties are connected to each other (Chae et al., 2020). For instance, if individuals create strong social ties with other members, it enhances their intention to share knowledge (Akhavan and Hosseini, 2016).

Per our review, both antecedents promote adequate connectivity patterns. However, they might cause unpredictable social dynamics, leading to controversial results. For instance, public buyers may fail to integrate a supplier's network that is characterised by decentralisation, diffused connection and complex internal dynamics (Kumar and Worm, 2003). This also includes different levels of an organisation, from management to shopfloor, that have their own social capital processes (Handoko *et al.*, 2018). However, social dynamics may otherwise produce convenient outcomes, especially where private suppliers occupy a centralised position and possess flexible connectivity patterns.

5.3 Contract formation and management

Research on contractual management places an emphasis on enhancing relationships between the public and private sectors (Bernstein, 2015; Carey and Lawson, 2011; Yang et al., 2021). This is due to the benefits associated with the governance of procurement projects (Dyer and Singh, 1998; Poppo and Zenger, 2002; Ravindran et al., 2015; Zimmermann et al., 2018). We determined three main antecedent categories: relational contract governance, balanced risk sharing perception and network relationship structure.

5.3.1 Relational contract governance. Relational governance develops value from relational norms and continuous interaction with close partners (Carey and Lawson, 2011). Per our findings, relational governance is influenced by trust-based governance, contract specificity and legality of bonds. Trust-based governance reinforces interpersonal trust and allows for the flexible exchange of information (Bernstein, 2015). In addition, trust in a relationship improves satisfaction (Kwon, 2011) and suppliers' innovation skills (Alam et al., 2014). Contract specificity describes the extent to which a contract is drafted in detailed terms (Yang et al., 2021). It has a moderating role on the relationship between social capital and suppliers' learning activities (Wang et al., 2017). Legal bonds prevent opportunism with formal governance arrangements (Carey and Lawson, 2011).

Nevertheless, research on relational governance proposes conflicting perspectives. Some researchers have posited that relational governance contracts promote close relationships but may provoke opportunism (Dyer and Singh, 1998; Spitzberg and Cupach, 2005; Steinle *et al.*, 2019; Wang *et al.*, 2013; Wuyts and Geyskens, 2005). Other scholars claim that formal contracts offer a protective shield against opportunistic threats (Zou *et al.*, 2019). Such a formal structure may also stimulate informal socialisation (Aeknarajindawat *et al.*, 2019; Cousins *et al.*, 2006). Legal bonds increase the level of security in a relationship when trust and goodwill are high (Carey *et al.*, 2011). However, these formal contracts may prove to be costly and time-consuming (Poppo and Zenger, 2002). Thus, the "relational versus formal" structure is perceived as a contingency factor because it depends on the standing of the relationship and the complexity of operations.

5.3.2 Balanced risk sharing perception. Numerous studies argue for the value obtained from developing SC and risk sharing in a PPP (Erridge and Greer, 2002; Johnson et al., 2013; Narasimhan and Aundhe, 2014). Per our findings, a PPP may be particularly influenced by cognitive capital because it outlines the perception of risk between public and private partners. Two antecedents are determined: goals of a shared project and shared contract management practices. A shared project's goals mark a partnership's mutual target, vision and desired outcomes. This antecedent facilitates mutual understanding of risk shared at the beginning of procurement projects. Such mutual understanding enhances relationship-specific investment and reduces the degree to which risks hamper innovation performance (Onofrei et al., 2020). Similarly, shared contractual practices allocate tasks to the person best able to manage risk, enhancing learning activities in a relationship (Li, 2010) and transforming social capital into supplier performance (Sukoco et al., 2018). This form of cognitive capital reduces operational supply risk (Chowdhury et al., 2019). It also improves information sharing (Li et al., 2014), supply chain resiliency (Gölgeci and Kuivalainen, 2020) and response to disruptions (Jeble et al., 2020).

It is essential to clarify the different perceptions of risk. According to Likhitruangsilp *et al.* (2017), the public sector claims that PPP performance is mostly influenced by external risks (e.g. economic, financial and commercial). On the other hand, the private sector perceives internal risks, such as government corruption and lack of bidding transparency, as the biggest threats (Ke *et al.*, 2011). These differences in perception create conflicts of interest (Solheim-Kile and Wald, 2019). When risk is perceived in an equivalent manner, both partners collaborate and adequately share those risks. Thus, the perception of risk sharing may constitute a contingency factor.

5.3.3 Network relationship structure. Procurement projects can be affected by the structural properties of complex networks. Centrality and proximity are antecedents for the governance of networks (Bernardes, 2010; Lee, 2009). According to our findings, cohesivity and diversity are two key antecedents for social configuration. Cohesivity can be defined as

the strength of interconnected ties in networks (Gargiulo and Benassi, 2000). Such social ties drive socialisation and information sharing when reinforced with relationship-specific adaptations (Roden and Lawson, 2014). Diversity refers to the heterogeneity of networks and expertise that enhances knowledge creation (Reagans and Zuckerman, 2001). Both network-based governance and social configuration determine the adaptability of a network to a complex environment.

However, a structural network with excessive relational ties may prove to be counterproductive, adhering to the concept of contingency factors. Following the approach of Burt (1992), cohesivity may produce redundant knowledge across multiple ties. Similarly, excessive diversity may cause tensions among network members and lead to conflicting knowledge. These contradictions that govern network relationships inhibit access to valuable resources and lower procurement performance (Bernstein, 2015).

6. Discussion

6.1 Theoretical implications

Our research contributes to the literature stream of social capital in the public procurement field (Piening and Salge, 2015). As a first theoretical contribution, this systematic review provides a deeper reflection of SC dimensions in public procurement functions (tendering, negotiations and contract formation and management). Secondly, the research develops SCT by showing how internal contingencies influence the social dynamics between the public and private sectors. A third contribution is the conceptual framework, which will allow scholars to clearly visualise the connections among antecedents, contingencies and effects on public procurement performance. Thus, it provides a new approach that acts as a theoretical tool for depicting social mechanisms. The following section proposes solutions that mitigate contingencies and improve SC development in the context of public procurement functions.

We begin by discussing the contingency factors in tendering. Personal attachment (Bowlby, 1973; Verbeke et al., 2020), cognitive bias (Mpeera Ntayi et al., 2010) and power relations (Kim et al., 2017) seem to interrelate and influence tendering performance. It is worth noting the opportunistic practices that emerged from those contingencies to prevent inadequate selection of suppliers. In line with the perspective of Anderson et al. (2011), a tendering system that prevents opportunism and accommodates transparency with open competition appears to promote the best possible outcomes. However, such a tendering system requires procurers' knowledge of bidding policies, suppliers' capabilities and behavioural directions. According to SC analysis, this knowledge may be further endowed with structural capital investment during the earliest tendering process (Meehan and Bryde, 2014; Shao and Sun, 2021). Aligning with Burt (1992), structural capital is perceived as the core form of SC that provides access to channels and multiple resources. Meehan and Bryde (2014) extend the role of structural capital in sustainable procurement and promote heterogenous networks for increasing knowledge shared beyond BSRs. Conforming to the findings of Shao and Sun (2021), structural capital drives cognitive and relational capital. Holma et al. (2020) claim that suppliers request more social interaction to reach a mutual agreement and cultivate relations during the earliest tendering phase. Thus, structural capital plays two important roles. On one hand, it creates social interactions that enrich buyers' knowledge of suppliers' capabilities to help them determine which are best suited for a procurement project. On the other hand, it provides the suppliers with the time needed to exchange information and obtain an understanding of buyers' required targets.

Addressing contingency factors in negotiations, both relational uncertainties and unpredictable social dynamics seem to be caused by the absence of knowledge of buyers' or suppliers' intentions (Anderson et al., 2011). These uncertainty issues may manifest in relationship dyads, such as in a BSR (Akhayan and Hosseini, 2016), Accordingly, Holma et al. (2020) propose a need for informal communication to attain a mutual understanding of goals and expectations. Similarly, Akhavan and Hosseini (2016) point towards trust as an integral form of relational capital for understanding individuals' intentions to share knowledge. In that sense, relational capital inspires individuals to share knowledge with each other. This ultimately drives cognitive capital by cultivating reciprocity norms and mutual understanding of cultural values. Thus, buyers and suppliers are motivated to advocate for relational-enhanced practices beyond relationship dyads on a network level. This ultimately strengthens ties and social configurations, enhancing structural capital. As previously elaborated, empowering both relational and structural capital in negotiations stimulates cognitive capital that is subsequently adopted in the broader network. Hence, during negotiations, a focus on relational capital brings forth a mutual understanding (cognitive) between buyers and suppliers on a relationship level. In addition, such relational practices can be extended to a network level (structural), prompting a culture of synergies between buyers' and suppliers' networks.

In the contract management phase, special attention to the risks shared in a PPP seems to frame the relational dynamics and structural properties of procurement projects. Following that perspective, cognitive capital may have an effect on relational and structural capital. For instance, Zhang et al. (2019) states that mutual understanding of goals leads to sustainable trust and stronger connections amongst networks. Jia et al. (2021) suggests that cognitive capital clarifies sustainability requirements along tiers of suppliers, encouraging the development of collaborative norms amongst suppliers' networks. In terms of procurement, cognitive capital leads to establishing formalities when forming contracts and to flexible cooperation between public and private partners' networks during contract management. According to Dyer and Singh (1998), an appropriate formation of a contract cultivates informal relations and trust among parties' members, facilitating the management of contracts, Such informal relationships necessitate relational governance that fosters knowledge exchange and solutions to challenging risks (Poppo and Zenger, 2002). Hence, cognitive capital serves public and private partners in two ways. Firstly, it helps both parties to identify and assess risks and allocate them to the party best able to manage them. Thus, it improves the understanding of risk perception between parties' members during contract formation, Secondly, cognitive capital allows both parties to cultivate trust and collaborative norms when managing contracts, enhancing PPP performance and capability to address risks (Solheim-Kile and Wald, 2019).

6.2 Managerial and policy implications

This research proposes a conceptual model that will be useful in decision making and resource allocation, enabling managers to pinpoint which solutions best suit the existing social situations in each procurement function. This will enable procurement managers to prioritise the most critical SC dimension to improve social dynamics and lead to improved performance. For instance, in the tendering stage, the focus is on frequent social interactions, and these promote social relationships and knowledge accumulation. In the negotiations phase, an emphasis on relational dynamics helps reduce uncertainties in dyads and networks, thus creating cultural synergies and successful negotiation outcomes. Finally, contract formation and management are based on the mutual values or risks shared among public and private actors, enabling relational dynamics and improving structural networks.

7. Limitations and future research

There are some limitations that need to be addressed. From a theoretical perspective, SCT only addresses the intangible factors and neglects other critical factors, such as financial and technological (Narasimhan and Aundhe, 2014). Thus, future research may focus on identifying those external elements and incorporating other major theories, such as transactional cost theory (TC), for deeper theoretical insights into procurement practices. From a practical perspective, the application of social capital in the public procurement field is limited. This may be due to the rigidity of procurement legislation, which is based on short-term contracts and arm's length relationships (Erridge and Greer, 2002).

There are also methodological limitations. In data collection, we used the Scopus database, overlooking papers provided elsewhere. Our search was limited, since papers that use other keywords for procurement were not included in the sample. In addition, our coding process is subject to subjectivity even though multiple coders were involved. Finally, the ABC model (Sulaiman *et al.*, 2021) is our base for research synthesis, but there might be other valuable alternatives to this model that could have had other implications. Furthermore, our research has identified certain contingencies related to public procurement functions and performances, but it would be valuable to validate these findings with empirical research. Future research should examine all contingencies that influence relationships between social capital dimensions and performance outcomes and also adopt a suppliers' view. Examples of future research questions are given in Table 1.

Research question	Motivation	Source
What social capital dimensions drive corruption in public procurement? What kind of contingencies prevent corruption even if social capital exists?	The concept of social capital has proven a useful approach for understanding the nature of corrupt exchange	Bondeli et al., 2021
How does social capital influence buyer's discretion in procurement cases that are below threshold values?	Buyers have discretion to invite bids from restricted groups of service providers when a procurement case is below threshold value or in exceptional cases, such as in the military and defence sector	Coviello et al., 2018
What is the relationship between social capital and the cognitive biases of procurement officials?	Cognitive biases might be present during the procurement process. Social capital might have negative or positive influences on cognitive biases	Dekel and Dotan, 2018; Dekel and Schurr, 2014
How can the public buyer facilitate the development of social capital? How could the public sector benefit from social capital?	The public sector is a powerful party of public—private relationships that include the development of social capital to some extent	Erridge and Greer, 2002
What is the relationship between social capital and environmental performance in sustainable public procurement?	There is a need to include broader stakeholders' view when studying the role of social capital in sustainable procurement activities	Meehan and Bryde, 2014
How does social capital influence the risk perceptions of procurement officials?	Relational and cognitive capital have been previously connected to reduced risks in studies from the private sector	Likhitruangsilp <i>et al.</i> , 2017; Onofrei <i>et al.</i> , 2020; Jeble <i>et al.</i> , 2020

Table 1. Future research directions.

Source: Authors own creation

References

- Akhavan, P. and Hosseini, M. (2016), "Social capital, knowledge sharing, and innovation capability: an empirical study of R&D teams in Iran", *Technology Analysis and Strategic Management*, Vol. 28 No. 1, pp. 96-113, doi: 10.1080/09537325.2015.1072622.
- Alghababsheh, M. and Gallear, D. (2021), "Socially sustainable supply chain management and suppliers' social performance: the role of social capital", *Journal of Business Ethics*, Vol. 173 No. 4, pp. 855-875, doi: 10.1007/s10551-020-04525-1.
- Anderson, R.D., Kovacic, W.E. and Müller, A.C. (2011), "Ensuring integrity and competition in public procurement markets: a dual challenge for good governance", *The WTO Regime on Government Procurement: Challenge and Reform*, Vol. 681, p. 681.
- Autry, C.W. and Griffis, S.E. (2008), "Supply chain capital: the impact of structural and relational linkages on firm execution and innovation", *Journal of Business Logistics*, Vol. 29 No. 1, pp. 157-173, doi: 10.1002/j.2158-1592.2008.tb00073.x.
- Baas, J., Schotten, M., Plume, A., Côté, G. and Karimi, R. (2020), "Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies", *Quantitative Science Studies*, Vol. 1 No. 1, pp. 377-386, doi: 10.1162/gss_a_00019.
- Bohnenkamp, T., Schiele, H. and Visser, M. D (2020), "Replacing global sourcing with deep localisation: the role of social capital in building local supply chains", *International Journal of Procurement Management*, Vol. 13 No. 1, p. 83, doi: 10.1504/IJPM.2020.105200.
- Bourdieu, P. (1986), "The forms of capital", in Richardson, J.G. (Ed.), *Handbook of Theory and Research for the Sociology of Education*, Greenwood Press, New York, NY, pp. 241-258.
- Bowlby, J. (1973), "Attachment and loss: volume II: separation, anxiety and anger", in Attachment and loss: Volume II: Separation, anxiety and anger. London: The Hogarth press and the institute of psycho-analysis, pp. 1-429.
- Brett, J.M., Gunia, B.C. and Teucher, B.M. (2017), "Culture and negotiation strategy: a framework for future research", Academy of Management Perspectives, Vol. 31 No. 4, pp. 288-308, doi: 10.5465/ amp.2015.0195.
- Burt, R. (1992), 'Structural Holes: The Social Structure of Competition, Harvard University Press, Harvard, MA.
- Cao, Z. and Lumineau, F. (2015), "Revisiting the interplay between contractual and relational governance: a qualitative and meta-analytic investigation", *Journal of Operations Management*, Vols 33/34, pp. 15-42, doi: 10.1016/j.jom.2014.09.009.
- Carson, S.J., Madhok, A. and Tao, W. (2006), "Uncertainty, opportunism, and governance: the effects of volatility and ambiguity on formal and relational contracting", Academy of Management Journal, Vol. 49 No. 5, pp. 1058-1077, doi: 10.5465/AMJ.2006.22798187.
- Coleman, J.S. (1988), "Social capital in the creation of human capital", American Journal of Sociology, Vol. 94, pp. S95-S120, doi: 10.1086/228943.
- Corbin, J. and Strauss, A. (2014), Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 4th ed., Sage publications.
- Dyer, J.H. and Singh, H. (1998), "The relational view: cooperative strategy and sources of interorganizational competitive advantage", *The Academy of Management Review*, Vol. 23 No. 4, pp. 660-679, doi: 10.5465/amr.1998.1255632.
- Freeman, L.C. (1978), "Centrality in social networks conceptual clarification", *Social Networks*, Vol. 1 No. 3, pp. 215-239, doi: 10.1016/0378-8733(78)90021-7.
- Gargiulo, M. and Benassi, M. (2000), "Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital", Organization Science, Vol. 11 No. 2, pp. 183-196, doi: 10.1287/ orsc.11.2.183.12514.
- Gittell, R. and Vidal, A. (1998), Community Organizing: Building Social Capital as a Development Strategy, Sage.

- Goyal, Y. (2019), "How governments promote monopolies: public procurement in India", American Journal of Economics and Sociology, Vol. 78 No. 5, pp. 1135-1169, doi: 10.1111/ajes.12300.
- Grandia, J. and Meehan, J. (2017), "Public procurement as a policy tool: using procurement to reach desired outcomes in society", *International Journal of Public Sector Management*, Vol. 30 No. 4, pp. 302-309, doi: 10.1108/IJPSM-03-2017-0066.
- Grudinschi, D., Sintonen, S. and Hallikas, J. (2014), "Relationship risk perception and determinants of the collaboration fluency of buyer-supplier relationships in public service procurement", *Journal of Purchasing and Supply Management*, Vol. 20 No. 2, pp. 82-91, doi: 10.1016/j.pursup.2014.03.004.
- Harland, C., Telgen, J. and Callender, G. (2013), "International research study of public procurement", The SAGE Handbook of Strategic Supply Management, (January), Vol. 26 No. 1, pp. 372-399, doi: 10.4135/9781446269886.n16.
- Holma, A.-M., Vesalainen, J., Söderman, A. and Sammalmaa, J. (2020), "Service specification in pre-tender phase of public procurement a triadic model of meaningful involvement", *Journal of Purchasing and Supply Management*, Vol. 26 No. 1, p. 100580, doi: 10.1016/j. pursup.2019.100580.
- Inkpen, A.C. and Tsang, E.W.K. (2005), "Social capital, networks, and knowledge transfer", Academy of Management Review, Vol. 30 No. 1, pp. 146-165, doi: 10.5465/amr.2005.15281445.
- Ke, Y., Wang, S., Chan, A.P.C. and Cheung, E. (2011), "Understanding the risks in china's PPP projects: ranking of their probability and consequence", Engineering, Construction and Architectural Management, Vol. 18 No. 5, pp. 481-496, doi: 10.1108/09699981111165176.
- Keränen, O. (2017), "Roles for developing public-private partnerships in centralized public procurement", *Industrial Marketing Management*, Vol. 62, pp. 199-210, doi: 10.1016/j. indmarman.2016.09.003.
- Kreye, M.E. (2017), "Relational uncertainty in service dyads", *International Journal of Operations and Production Management*, Vol. 37 No. 3, pp. 363-381, doi: 10.1108/JJOPM-11-2015-0670.
- Kroll, A., DeHart-Davis, L. and Vogel, D. (2019), "Mechanisms of social capital in organizations: how team cognition influences employee commitment and engagement", *The American Review of Public Administration*, Vol. 49 No. 7, pp. 777-791, doi: 10.1177/0275074019851894.
- Lawrence, P.R. and Lorsch, J.W. (1967), "Differentiation and integration in complex organizations", Administrative Science Quarterly, Vol. 12 No. 1, p. 1, doi: 10.2307/2391211.
- Lee, R. (2009), "Social capital and business and management: setting a research agenda", International Journal of Management Reviews, Vol. 11 No. 3, pp. 247-273, doi: 10.1111/j.1468-2370.2008.00244.x.
- Makadok, R., Burton, R. and Barney, J. (2018), "A practical guide for making theory contributions in strategic management", Strategic Management Journal, Vol. 39 No. 6, pp. 1530-1545, doi: 10.1002/smj.2789.
- Malacina, I., Karttunen, E., Jääskeläinen, A., Lintukangas, K., Heikkilä, J. and Kähkönen, A.-K. (2022), "Capturing the value creation in public procurement: a practice-based view", Journal of Purchasing and Supply Management, Vol. 28 No. 2, p. 100745, doi: 10.1016/j. pursup.2021.100745.
- Mpeera Ntayi, J., Byabashaija, W., Eyaa, S., Ngoma, M. and Muliira, A. (2010), "Social cohesion, groupthink and ethical behavior of public procurement officers", *Journal of Public Procurement*, Vol. 10 No. 1, pp. 68-92, doi: 10.1108/JOPP-10-01-2010-B003.
- Nisbett, R.E., Peng, K., Choi, I. and Norenzayan, A. (2001), "Culture and systems of thought: holistic versus analytic cognition", *Psychological Review*, Vol. 108 No. 2, pp. 291-310, doi: 10.1037/0033-295X.108.2.291.
- O'Connor, C. and Joffe, H. (2020), "Intercoder reliability in qualitative research: debates and practical guidelines", *International Journal of Qualitative Methods*, Vol. 19, pp. 1-13. doi: 10.1177/1609406919899220.

- Patrucco, A.S., Luzzini, D. and Ronchi, S. (2017), "Research perspectives on public procurement: content analysis of 14 years of publications in the journal of public procurement", *Journal of Public Procurement*, Vol. 17 No. 2, pp. 229-269, doi: 10.1108/JOPP-17-02-2017-B003.
- Piening, E.P. and Salge, T.O. (2015), "Understanding the antecedents, contingencies, and performance implications of process innovation: a dynamic capabilities perspective", *Journal of Product Innovation Management*, Vol. 32 No. 1, pp. 80-97, doi: 10.1111/jpim.12225.
- Polyviou, M., Croxton, K.L. and Knemeyer, A.M. (2019), "Resilience of medium-sized firms to supply chain disruptions: the role of internal social capital", *International Journal of Operations and Production Management*, Vol. 40 No. 1, pp. 68-91, doi: 10.1108/IJOPM-09-2017-0530.
- Putnam, R. (1993), "The prosperous community: social capital and public life", *The American Prospect*, Vol. 13 No. 4.
- Reagans, R. and Zuckerman, E.W. (2001), "Networks, diversity, and productivity: the social capital of corporate R and D teams", Organization Science, Vol. 12 No. 4, pp. 502-517, doi: 10.1287/ orsc.12.4.502.10637.
- Rodriguez-Plesa, E., Dimand, A.-M. and Alkadry, M.G. (2022), "Community social capital, political values, or organizational capacity? Indicators of engagement in sustainable public procurement at the local level", *Journal of Cleaner Production*, Vol. 338, p. 130556, doi: 10.1016/j.jclepro.2022.130556.
- Schiele, H. (2020), "Comparing public and private organisations in their quest to become a preferred customer of suppliers", *Journal of Public Procurement*, Vol. 20 No. 2, pp. 119-144, doi: 10.1108/ JOPP-10-2018-0041.
- Schiele, H., Ellis, S.C., Eßig, M., Henke, J.W. and Kull, T.J. (2015), "Managing supplier satisfaction: social capital and resource dependence frameworks", *Australasian Marketing Journal*, Vol. 23 No. 2, pp. 132-138, doi: 10.1016/j.ausmj.2015.04.008.
- Sulaiman, E., Iskandar, E. and Pratiwi, V.A. (2021), "Model antecedents, behaviour and consequences (abc) of social media information and compulsive panic buying relationship to buying decisions: a conceptual framework", *International Journal of Ecma Science*, Vol. 1 No. 1, pp. 1-7.
- Tantardini, M. and Kroll, A. (2015), "The role of organizational social capital in performance management", Public Performance and Management Review, Vol. 39 No. 1, pp. 83-99, doi: 10.1080/15309576.2016.1071163.
- Thompson, J.D. (1967), Organizations in Action: Social Science Bases of Administrative Theory, McGraw-Hill, New York, NY, doi: 10.1007/s13398-014-0173-7.2.
- Tranfield, D., Denyer, D. and Smart, P. (2003), "Towards a methodology for developing evidence-informed management knowledge by means of systematic review", *British Journal of Management*, Vol. 14 No. 3, pp. 207-222, doi: 10.1111/1467-8551.00375.
- Uphoff, N. (2000), "Understanding social capital: learning from the analysis and experience of participation, in: Social capital: a multifaceted perspective", pp. 215-249.
- Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L. and Yeow, J. (2014), "Barriers to innovation through public procurement: a supplier perspective", *Technovation*, Vol. 34 No. 10, pp. 631-645, doi: 10.1016/j.technovation.2014.04.003.
- van der Valk, W. and Rozemeijer, F. (2009), "Buying business services: towards a structured service purchasing process", *Journal of Services Marketing*, Vol. 23 No. 1, pp. 3-10, doi: 10.1108/08876040910933048.
- Verbeke, W.J.M.I., Gijsenberg, M.J., Hendriks, L.M.E., Bouma, J.T. and Teunter, L.H. (2020), "Highly recommended? How relation-specific attachment styles bias customers willingness to recommend", *Frontiers in Psychology*, Vol. 11, doi: 10.3389/fpsyg.2020.01311.
- Woolcock, M. (1998), "Social capital and economic development: toward a theoretical synthesis and policy framework", *Theory and Society*, Vol. 27 No. 2, pp. 151-208.

Reference list of articles analyzed, (*) public procurement

- Aeknarajindawat, N., Piyapattana, T., Somjai, S. and Aramrueang, P. (2019), "The role of formal and informal socialization in the creation of a supply chain rational capital in the food industry of Thailand", Int. J. Supply Chain Manag, Vol. 8 No. 6, pp. 273-281.
- *Alam, Q., Kabir, M.H. and Chaudhri, V. (2014), "Managing infrastructure projects in Australia", Administration and Society, Vol. 46 No. 4, pp. 422-449.
- Alghababsheh, M. and Gallear, D. (2020), "Social capital in buyer-supplier relationships: a review of antecedents, benefits, risks, and boundary conditions", *Industrial Marketing Management*, Vol. 91, pp. 338-361.
- Bernardes, E.S. (2010), "The effect of supply management on aspects of social capital and the impact on performance: a social network perspective", *Journal of Supply Chain Management*, Vol. 46 No. 1, pp. 45-55.
- Bernstein, L. (2015), "Beyond relational contracts: social capital and network governance in procurement contracts", *Journal of Legal Analysis*, Vol. 7 No. 2, pp. 561-621.
- Blonska, A., Storey, C., Rozemeijer, F., Wetzels, M. and de Ruyter, K. (2013), "Decomposing the effect of supplier development on relationship benefits: the role of relational capital", *Industrial Marketing Management*, Vol. 42 No. 8, pp. 1295-1306.
- *Bondeli, J. V., Havenvid, M.I. and Solli-Sæther, H. (2021), "Corruption in interaction: the role of social capital in private–public relationships", *Journal of Business and Industrial Marketing*, Vol. 36 No. 11, pp. 2098-2110.
- Carey, S. and Lawson, B. (2011), "Governance and social capital formation in buyer-supplier relationships", *Journal of Manufacturing Technology Management*, Vol. 22 No. 2, pp. 152-170.
- Carey, S., Lawson, B. and Krause, D.R. (2011), "Social capital configuration, legal bonds and performance in buyer-supplier relationships", *Journal of Operations Management*, Vol. 29 No. 4, pp. 277-288.
- Chae, S., Yan, T. and Yang, Y. (2020), "Supplier innovation value from a buyer–supplier structural equivalence view: evidence from the PACE awards in the automotive industry", *Journal of Operations Management*, Vol. 66 No. 7-8, pp. 820-838.
- Chang, K.H. and Gotcher, D.F. (2008), "Relationship learning and dyadic knowledge creation in international subcontracting relationships: the supplier's perspective", *International Journal of Technology Management*, Vol. 41 Nos 1/2, p. 55.
- Chang, M.-L., Cheng, C.-F. and Wu, W.-Y. (2012), "How buyer-seller relationship quality influences adaptation and innovation by foreign MNCs' subsidiaries", *Industrial Marketing Management*, Vol. 41 No. 7, pp. 1047-1057.
- Chowdhury, M., Jayaram, J. and Prajogo, D. (2017), "The influence of socialisation and absorptive capacity on buyer's innovation performance", *International Journal of Production Research*, Vol. 55 No. 23, pp. 7022-7039.
- Chowdhury, P., Lau, K.H. and Pittayachawan, S. (2019), "Operational supply risk mitigation of SME and its impact on operational performance", *International Journal of Operations and Production Management*, Vol. 39 No. 4, pp. 478-502.
- Chu, S., Yang, H., Lee, M. and Park, S. (2017), "The impact of institutional pressures on green supply chain management and firm performance: top management roles and social capital", Sustainability, Vol. 9 No. 5, p. 764.
- Chumnangoon, P., Chiralaksanakul, A. and Chintakananda, A. (2021), "How closeness matters: the role of geographical proximity in social capital development and knowledge sharing in SMEs", Competitiveness Review: An International Business Journal, Vol. 33 No. 2.
- Cousins, P.D., Handfield, R.B., Lawson, B. and Petersen, K.J. (2006), "Creating supply chain relational capital: the impact of formal and informal socialization processes", *Journal of Operations Management*, Vol. 24 No. 6, pp. 851-863.

- *Coviello, D., Guglielmo, A. and Spagnolo, G. (2018), "The effect of discretion on procurement performance", *Management Science*, Vol. 64 No. 2, pp. 715-738.
- Daghar, A., Alinaghian, L. and Turner, N. (2021), "The role of collaborative interorganizational relationships in supply chain risks: a systematic review using a social capital perspective", Supply Chain Management: An International Journal, Vol. 26 No. 2, pp. 279-296.
- *Dekel, O. and Dotan, Y. (2018), "Will procurement officials be biased to disregard procurement rules in favor of a low-priced, albeit defective, bid?", *Review of Law and Economics*, Vol. 14 No. 2.
- *Dekel, O. and Schurr, A. (2014), "Cognitive biases in government procurement an experimental study", *Review of Law and Economics*, Vol. 10 No. 2, pp. 169-200.
- Elfenbein, D.W. and Zenger, T. (2017), "Creating and capturing value in repeated exchange relationships: the second paradox of embeddedness", *Organization Science*, Vol. 28 No. 5, pp. 894-914.
- Elfenbein, D.W. and Zenger, T.R. (2014), "What is a relationship worth? Repeated exchange and the development and deployment of relational capital", *Organization Science*, Vol. 25 No. 1, pp. 222-244.
- *Erridge, A. and Greer, J. (2002), "Partnerships and public procurement: building social capital through supply relations", *Public Administration*, Vol. 80 No. 3, pp. 503-522.
- Finch, D.J., Legg, D., O'Reilly, N., Wright, S. and Norton, B. (2021), "A social capital view of an Olympic and paralympic games bid exploration process", *European Sport Management Quarterly*, Vol. 21 No. 2, pp. 302-321.
- Gargiulo, M. and Benassi, M. (1999), "The dark side of social capital", *Corporate Social Capital and Liability*, Springer US, Boston, MA, pp. 298-322.
- Gelderman, C.J., Semeijn, J., ter Avest, F. and Peeters, E. (2020), "Social capital, power and information sharing evidence from the Dutch meat processing industry", *British Food Journal*, Vol. 122 No. 11, pp. 3343-3360.
- Gelderman, C.J., Semeijn, J. and Mertschuweit, P.P. (2016), "The impact of social capital and technological uncertainty on strategic performance: the supplier perspective", *Journal of Purchasing and Supply Management*, Vol. 22 No. 3, pp. 225-234.
- Girdwichai, L., Suksod, P., Saenpakdee, M. and Jermsittiparsert, K. (2019), "An application of social capital theory in supply chain: a case of Thai global buyer firms", *Int. J Sup. Chain. Mgt*, Vol. 8 No. 6, pp. 369-377.
- Gölgeci, I. and Kuivalainen, O. (2020), "Does social capital matter for supply chain resilience? The role of absorptive capacity and marketing-supply chain management alignment", *Industrial Marketing Management*, Vol. 84, pp. 63-74.
- Handoko, I., Bresnen, M. and Nugroho, Y. (2018), "Knowledge exchange and social capital in supply chains", *International Journal of Operations and Production Management*, Vol. 38 No. 1, pp. 90-108.
- Jääskeläinen, A., Schiele, H. and Aarikka-Stenroos, L. (2020), "Getting the best solution from a supplier – a social capital perspective", Journal of Purchasing and Supply Management, Vol. 26 No. 5, p. 100648.
- Jeble, S., Kumari, S., Venkatesh, V.G. and Singh, M. (2020), "Influence of big data and predictive analytics and social capital on performance of humanitarian supply chain", *Benchmarking: An International Journal*, Vol. 27 No. 2, pp. 606-633.
- Jia, M., Stevenson, M. and Hendry, L.C. (2021), "The boundary-spanning role of first-tier suppliers in sustainability-oriented supplier development initiatives", *International Journal of Operations* and Production Management, Vol. 41 No. 11, pp. 1633-1659.
- Johnson, N., Elliott, D. and Drake, P. (2013), "Exploring the role of social capital in facilitating supply chain resilience", Supply Chain Management: An International Journal, Vol. 18 No. 3, pp. 324-336.

- Kim, K.-T., Lee, J.S. and 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 and Industrial Marketing*, Vol. 32 No. 7, pp. 987-997.
- Krause, D.R., Handfield, R.B. and Tyler, B.B. (2007), "The relationships between supplier development, commitment, social capital accumulation and performance improvement", *Journal of Operations Management*, Vol. 25 No. 2, pp. 528-545.
- *Kumar, R. and Worm, V. (2003), "Social capital and the dynamics of business negotiations between the Northern Europeans and the Chinese", *International Marketing Review*, Vol. 20 No. 3, pp. 262-285.
- Kwon, Y.-C. (2011), "Relationship-specific investments, social capital, and performance: the case of Korean exporter/foreign buyer relations", Asia Pacific Journal of Management, Vol. 28 No. 4, pp. 761-773.
- Li, L.Y. (2010), "Antecedents of principal-agent relationship value: the differential impact of social capital and dynamic learning factors", Journal of Marketing Channels, Vol. 17 No. 4, pp. 313-338.
- Li, Y., Ye, F. and Sheu, C. (2014), "Social capital, information sharing and performance evidence from China", *International Journal of Operations and Production Management*, Vol. 34 No. 11, pp. 1440-1462.
- Lewicki, R.J., McAllister, D.J. and Bies, R.J. (1998), "Trust and distrust: new relationships and realities", The Academy of Management Review, Vol. 23 No. 3, p. 438.
- *Likhitruangsilp, V., Do, S.T. and Onishi, M. (2017), "A comparative study on the risk perceptions of the public and private sectors in public-private partnership (PPP) transportation projects in Vietnam", *Engineering Journal*, Vol. 21 No. 7, pp. 213-231.
- Malca, O., Bolaños, J.P., Acedo, F.J., Rubio Donet, J.L. and Peña-Vinces, J. (2021), "Relational flexibility norms and relationship-building capabilities as a mediating mechanism in export performance: insights from exporting SMEs in an emerging economy, Peru", *International Journal of Emerging Markets*, Vol. 16 No. 8, pp. 1745-1768.
- *Meehan, J. and Bryde, D.J. (2014), "Procuring sustainably in social housing: the role of social capital", *Journal of Purchasing and Supply Management*, Vol. 20 No. 2, pp. 74-81.
- Miocevic, D. (2016), "The antecedents of relational capital in key exporter-importer relationships", International Marketing Review, Vol. 33 No. 2, pp. 196-218.
- Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", The Academy of Management Review, Vol. 23 No. 2, pp. 242-266.
- *Narasimhan, R. and Aundhe, M.D. (2014), "Explanation of public private partnership (PPP) outcomes in E-Government – a social capital perspective", 2014 47th HI International Conference on System Sciences. IEEE, pp. 2189-2199.
- Onofrei, G., Nguyen, H.M., Zhang, M. and Fynes, B. (2020), "Building supply chain relational capital: the impact of supplier and customer leveraging on innovation performance", *Business Strategy and the Environment*, Vol. 29 No. 8, pp. 3422-3434.
- Petersen, K.J., Handfield, R.B., Lawson, B. and Cousins, P.D. (2008), "Buyer dependency and relational capital formation: the mediating effects of socialization processes and supplier integration", *Journal of Supply Chain Management*, Vol. 44 No. 4, pp. 53-65.
- Yeoh, P.-L. (2017), "Should I stay or should I go?" understanding the antecedents to buyer commitment in the context of the US eyecare industry", Asian Academy of Management Journal, Vol. 22 No. 2, pp. 1-25.
- *Popa, M. (2019), "Uncovering the structure of public procurement transactions", *Business and Politics*, Vol. 21 No. 3, pp. 351-384.
- Poppo, L. and Zenger, T. (2002), "Do formal contracts and relational governance function as substitutes or complements?", Strategic Management Journal, Vol. 23 No. 8, pp. 707-725.

- Preston, D.S., Chen, D.Q., Swink, M. and Meade, L. (2016), "Generating supplier benefits through buyer-enabled knowledge enrichment: a social capital perspective", *Decision Sciences*, Vol. 48 No. 2, pp. 248-287.
- Rashid, A.Z.A., Alzyoud, A.A.Y., Al Shdaifat, F.H.A. and Omar, K.M. (2019), "Does green supply chain management influence to suppliers' performance? Mediating role of social capital", *Int. J Sup. Chain. Mgt*, Vol. 8 No. 3, p. 143.
- Ravindran, K., Susarla, A., Mani, D. and Gurbaxani, V. (2015), "Social capital and contract duration in buyer-supplier networks for information technology outsourcing", *Information Systems Research*, Vol. 26 No. 2, pp. 379-397.
- Roden, S. and Lawson, B. (2014), "Developing social capital in buyer-supplier relationships: the contingent effect of relationship-specific adaptations", *International Journal of Production Economics*, Vol. 151, pp. 89-99.
- Shao, Y. and Sun, L. (2021), "Entrepreneurs' social capital and venture capital financing", Journal of Business Research, Vol. 136, pp. 499-512.
- *Solheim-Kile, E. and Wald, A. (2019), "Extending the transactional view on public–private partnership projects: role of relational and motivational aspects in goal alignment", *Journal of Construction Engineering and Management*, Vol. 145 No. 5.
- Spitzberg, B.H. and Cupach, W.R. (2005), "The dark side of close relationships", MIT Sloan Management Review, Vol. 46 No. 3, pp. 75-82.
- Steinle, C., Schiele, H. and Bohnenkamp, T. (2019), "Does supplier opportunism lead to buyer opportunism? A social capital perspective", Journal of Business and Industrial Marketing, Vol. 35 No. 2, pp. 362-384.
- Sukoco, B.M., Hardi, H. and Qomariyah, A. (2018), "Social capital, relational learning, and performance of suppliers", *Asia Pacific Journal of Marketing and Logistics*, Vol. 30 No. 2, pp. 417-437.
- Thi Mai Anh, N., Hui, L., Khoa, V.D. and Mehmood, S. (2019), "Relational capital and supply chain collaboration for radical and incremental innovation", *Asia Pacific Journal of Marketing and Logistics*, Vol. 31 No. 4, pp. 1076-1094.
- Tsai, Y.-H., Joe, S.-W., Ding, C.G. and Lin, C.-P. (2013), "Modeling technological innovation performance and its determinants: an aspect of buyer–seller social capital", *Technological Forecasting and Social Change*, Vol. 80 No. 6, pp. 1211-1221.
- Villena, V.H., Revilla, E. and Choi, T.Y. (2011), "The dark side of buyer-supplier relationships: a social capital perspective", *Journal of Operations Management*, Vol. 29 No. 6, pp. 561-576.
- Wang, L., Terziovski, M., Jiang, F. and Li, J. (2017), "The effect of social capital on local suppliers' exploitative and exploratory learning in global buyer-supplier relationships: the moderating role of contract specificity", RandD Management, Vol. 47 No. 4, pp. 654-668.
- Wang, L. and Li, J. (2017), "The antecedents and innovation outcomes of firms' absorptive capacity in global buyer–supplier relationships", The Journal of Technology Transfer, Vol. 42 No. 6, pp. 1407-1430.
- Wang, Q., Li, J.J., Ross, W.T. and Craighead, C.W. (2013), "The interplay of drivers and deterrents of opportunism in buyer-supplier relationships", *Journal of the Academy of Marketing Science*, Vol. 41 No. 1, pp. 111-131.
- Whipple, J.M., Wiedmer, R. and K. Boyer, K. (2015), "A dyadic investigation of collaborative competence, social capital, and performance in Buyer-Supplier relationships", *Journal of Supply Chain Management*, Vol. 51 No. 2, pp. 3-21.
- Wuyts, S. and Geyskens, I. (2005), "The formation of buyer–supplier relationships: detailed contract drafting and close partner selection", *Journal of Marketing*, Vol. 69 No. 4, pp. 103-117.
- Yang, J., Xie, H., Wang, J. and Yang, Y. (2021), "Performance implication of supplier relationship quality: a structural analysis", *Benchmarking: An International Journal*, Vol. 28 No. 1, pp. 28-41.

JOPP 23,2

244

- Yim, B. and Leem, B. (2013), "The effect of the supply chain social capital", *Industrial Management and Data Systems*, Vol. 113 No. 3, pp. 324-349.
- Yu, Y. and Huo, B. (2019), "The impact of relational capital on supplier quality integration and operational performance", *Total Quality Management and Business Excellence*, Vol. 30 Nos 11/12, pp. 1282-1301.
- Yu, Y., Zhang, M. and Huo, B. (2021), "The impact of relational capital on green supply chain management and financial performance", *Production Planning and Control*, Vol. 32 No. 10, pp. 861-874.
- Zeng, F., Chi, Y., Dong, M.C. and Huang, J. (2017), "The dyadic structure of exchange partners' governing-agency social capital and opportunism in buyer–supplier relationships", *Journal of Business Research*, Vol. 78, pp. 294-302.
- Zhang, X., Zhang, H. and Song, M. (2019), "Does social capital increase innovation speed? Empirical evidence from China", Sustainability, Vol. 11 No. 22, p. 6432.
- Zimmermann, A., Oshri, I., Lioliou, E. and Gerbasi, A. (2018), "Sourcing in or out: Implications for social capital and knowledge sharing", *The Journal of Strategic Information Systems*, Vol. 27 No. 1, pp. 82-100.
- Zou, W., Brax, S.A., Vuori, M. and Rajala, R. (2019), "The influences of contract structure, contracting process, and service complexity on supplier performance", *International Journal of Operations* and Production Management, Vol. 39 No. 4, pp. 525-549.

Further reading

Lawson, B., Tyler, B.B. and Cousins, P.D. (2008), "Antecedents and consequences of social capital on buyer performance improvement", *Journal of Operations Management*, Vol. 26 No. 3, pp. 446-460.

Corresponding author

Jad EL Bizri can be contacted at: Jad.EL.Bizri@lut.fi