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Knowledge comes but wisdom lingers! Learning orientation as the decisive factor for translating social capital into organizational innovativeness and performance in Turkey

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Abstract

The Turkish economy has been growing fast and Turkish organizations are increasing their innovativeness and performance. However, their sources of organizational success are far from clear. Linking explanations regarding external and internal antecedents of organizational innovativeness, our study develops and empirically tests a complementary framework that incorporates the cultural and structural specifics of Turkey. Based on empirical data from 178 organizations and using structural equation modelling, we demonstrate that in the emerging Turkish economy the success of an organization results from a fit between its external network ties and its internal learning orientation. Specifically, our results reveal social and business network ties as important drivers of learning orientation, respectively. Additionally, learning orientation significantly raises innovativeness, which sequentially shows a positive effect on organizational performance. Most notably, we demonstrate learning orientation to perform a mediating function in the relationships between network ties and innovativeness. Combined, these findings allow us to make important recommendations for managers of Turkish organizations and organizations wishing to operate in the Turkish market.

Keywords: learning orientation, network ties, innovativeness, performance, emerging economy, Turkey
Introduction

Organizations based in Turkey are increasingly catching up to developed nation’s standards. Over the past several decades, the Turkish economy has been growing fast to become one of the world’s 30 most important economies (Bremmer, Keat, & Schaap, 2009; Nakata & Sivakumar, 1997), and many Turkish firms now list in the Forbes Global 2,000 (e.g., Akbank, Turkish Airlines, Turkcell). But what are the factors that determine organizational success in emerging markets? The management literature seems unanimously to agree that organizational innovativeness is a key factor in terms of sustaining superior performance. As organizational innovativeness refers to an organization’s “capacity to engage in innovation: that is, introduction of new processes, products, or ideas in the organization” (Hult, Thomas, Hurley, & Knight, 2004, p. 429), it becomes clear that innovativeness should be among the most important drivers of organizational success (e.g., Calantone, Cavusgil, & Zhao, 2002; Rhee, Park, & Lee, 2010). Therefore, the question of what drives innovativeness for organizations based in the emerging Turkish economy is the focus of our investigation.

The scarcity of research in this area is surprising for at least three reasons. First, emerging economies have increased their export levels faster than developed nations and Turkey has shown particularly strong growth, increasing exports more than fivefold in the timespan from 2000 to 2014 (International Trade Statistics Yearbook, 2014). Hence, organizations from developed nations find themselves increasingly in fierce competition with rivals from Turkey and managers ought to pay close attention to the drivers of their competitors’ economic success. Second, Turkey is an official candidate for full EU membership since 1999. Even though the outcome of the accession negotiations is far from certain, the economic integration between EU countries and Turkey is more than likely to continue (Source). As research has identified substantial differences between developed and emerging economies (e.g., Boso et al., 2013), understanding Turkey’s specific contextual features is not only important for managers...
competing with Turkish rivals, but also for those wishing to enter the Turkish market. Third, as scholars have so far primarily focused on developed Western economies (Chi & Sun, 2013), one may very well question whether previous findings are applicable to the context of the emerging Turkish economy (Acquaah, 2007). Hence, there appears to be a clear need for research investigating this non-Western business setting (Ambler, Styles, & Wang, 1999).

Reviewing previous research suggests two explanations for where the sources of Turkish organizations’ innovativeness may lie. On one hand, several scholars have regarded innovativeness as the adoption of innovations by the organization (e.g., Covin & Slevin, 1989), indicating that access to innovative external ideas might play an important role. In this light, research has argued the social capital defined as ..... nested within an organization’s network ties to be the decisive source of organizational innovativeness (e.g., Acquaah, 2011; Stam & Elfring, 2008). On the other hand, scholars tend to conceptualize innovativeness as an organization’s willingness to change (Hurley & Hult, 1998), indicating that an organization’s level of innovativeness is a direct result of its organizational culture. Following this view, scholars have investigated internal sources and revealed the value of organizational orientation towards learning (e.g., Calantone et al., 2002; Rhee et al., 2010).

At first glance, investigating the structural and cultural contingencies of the emerging Turkish economy appears to favor external explanations. That is to say, organizations in emerging economies have been argued to rely on stable network ties as a response to regulatory weaknesses and environmental uncertainty (Acquaah, 2011; Dubini & Aldrich, 1991; Miller, Lee, Chang, & Le Breton-Miller, 2009). Moreover, as Turkey features a strongly collectivist culture (Hofstede, 1980; Oyserman, Coon, & Kemmelmeier, 2002), the social and business networks in which organizations operate form an integral part of society. However, we argue that it is not only an organizations’ access to external social capital per se, that matters, but also its internal ability to capitalize (Boso, Story, & Cadogan, 2013; Dyer & Singh, 1998). Put
differently, our study argues the driver of Turkish organizations’ success not only to be the access to external knowledge via network ties, but also a culture of learning orientation through which external knowledge is transferred into wisdom that lingers within the organization and from which innovativeness is derived. Hence, we build on the premise that social capital has contingent value for Turkish organizations (Ahuja, 2000) and propose that organizational innovativeness results from the fit between an organization's internal learning culture and the configuration of its external network ties. We hereby aim to develop a complementary framework that links external and internal sources of organizational innovativeness while incorporating the specifics of the emerging Turkish economy.

For our analysis, we rely on empirical data from 178 textile firms in Turkey and use structural equation modeling to test our hypotheses. As the textile sector constitutes the core of the Turkish economy in terms of GDP contribution, employment, and investments, it seems a suitable setting for our study. In sum, our study is able to make two important contributions: First, linking external and internal explanations regarding the sources of Turkish organizations’ innovativeness, our study overcomes important limitations of previous studies and bridges thus far competing theoretical views. Empirical testing not only substantiates our complementary framework but also clarifies the interrelationship of social capital and internal cultural configuration. Second, we shed light onto the links between network ties, learning orientation, innovativeness, and performance. Addressing business managers, we hereby reveal the success factors of organizations based in the emerging Turkish economy and give evidence-based recommendations as where to focus organizational learning efforts.

We organize our study as follows: In the next section, we present the theoretical basis of our study. We then propose a set of testable hypotheses and present our conceptual framework. Following, we introduce the methods of our study, which include information about the sample, study measures, data analysis, and test results. Following a discussion of our results, we offer
implications for theory and practice and highlight possible limitations of our study as well as future research opportunities.

**Theoretical background**

*Organizational innovativeness and performance*

The necessity for an organization to be innovative in order to survive in a volatile environment such as Turkey appears to be of wide consensus among organizational scholars (Calantone et al., 2002; Johnson, Meyer; Berkowitz, Ethington, & Miller, 1997). As highly innovative organizations are better suited to cope with environmental change, innovativeness is an important competitive advantage and source of superior performance (e.g., Damanpour, 1991; Henard & Szymanski, 2001; Porter, 1998). Thus, innovation seems particularly helpful to organizations operating in the turbulent markets of emerging economies like Turkey (Baker & Sinkula, 2002; Balkin, Markaman, & Gómez-Mejía, 2000; Lyon & Ferrier, 2002; Vrakking, 1990).

Distinguishing between innovation and innovativeness, Hurley and Hult (1998, p. 45) consider innovation to be “part of an organizational culture of innovativeness”, thus characterizing innovativeness as the broader actions of an organization and a fundamental source of innovation (Rhee et al., 2010). Similarly, Hult and colleagues (2004, p. 432) defined innovativeness as the “strategies and actions that the firm may undertake in order to actualize corporate orientations and goals”. Organizational research on innovativeness dates back to Drucker (1954), who was among the first to mention its importance. Since then, many scholars have focused on firm innovativeness, conceptualizing it from different perspectives (Calantone et al., 2002). While Covin and Slevin (1989), for example, define innovativeness as an organization’s tendency towards innovation, others refer to it as an organization’s willingness to innovate (e.g., Naman & Slevin, 1993). Hence, there are two competing views on innovativeness: The first regards
innovativeness as the adoption of innovations by the organization, the second conceptualizes it as an organization’s willingness to change (Hurt, Joseph, & Cook, 1977).

Accordingly, previous literature has provided two competing explanations regarding the origins of organizational innovativeness. On the one hand, research has investigated external drivers and argued the social capital embedded within an organization’s network ties to be an important source of organizational innovativeness (e.g., Acquaah, 2011; Stam & Elfring, 2008). On the other hand, scholars have turned towards internal causes and there seems to be wide agreement that learning climate and organizational innovativeness are highly correlated (e.g., Calantone et al., 2002; Rhee et al., 2010). We will next describe both approaches to explain the sources of organizational innovativeness in more detail, before we then aim to develop a complementary framework that incorporates the specifics of emerging economies.

**Network ties as external source of organizational innovativeness**

Extend research conducted in the fields of sociology and economics, has provided substantial insights into how social structure affects economic life (Uzzi, 1997). Analyzing exchange relationships, several authors have investigated how an organization’s embeddedness in networks provides access to external resources or, more broadly, social capital (Acquaah, 2012; Nahapiet & Ghoshal, 1998; Stam & Elfring, 2008). Previous literature has suggested two levels of network ties: (1) on the micro level, organizational members are embedded in social networks, whereas (2) on the macro level, the organization itself is embedded in business networks. A *social network* can be conceptualized as a set of individuals linked by relationships that form strong interpersonal ties (e.g., friendship). The literature presents a variety of motives for the formation of such social network ties, such as personal, social, economic, and political reasons (for a recent review see Adler & Kwon, 2002). *Business networks*, in turn, refer to “linkages among parties involved in a business transaction, for example, suppliers and buyers” (Yiu, Lau, & Bruton, 2007, p. 524). In this respect, business network ties are defined as the
relationships an organization develops with customers, suppliers, and competitors within its industry (Boso et al., 2013).

The social capital, provided by social and business network ties, has been argued to facilitate access to external information and the discovery and adoption of new ideas (Birley, 1985), thus making it an important source of organizational innovativeness. As Tsai (2001) showed for the intra-organizational setting in an analysis of business units, network ties facilitate the transfer of information between the actors linked to one another, and as such provide an actor with access to ideas generated by others. Similarly, social network ties develop out of need for the transmission of information and ideas (Gargiulo & Benassi, 2000; Shipilov & Danis, 2006). As such, social network ties involve individuals from whom the information, knowledge, and advice can be obtained that is necessary to create value for oneself (Acquaah, 2012; Dubini & Aldrich, 1991). Depending on their specific configuration, social network ties may provide crucial access to aggregate political, industrial, and socio-economical information (Hillman, Zardkoohi, & Bierman 1999). Network ties with other businesses, in turn, are likely to provide more focused but primarily market-centered information, such as specific developments or changes in the market (Lusch & Brown, 1996), new product data (Heide & John, 1992), and facts about potential partners (Poppo & Zenger, 2002). Hence, business network ties provide a platform for the exchange of market and industry-wide insider information (Boso et al., 2013; Li & Zhou, 2010). Accordingly, social and business network ties provide access to external information and as such represent a critical source from which to adopt innovative ideas.

**Learning orientation as internal source of organizational innovativeness**

The conceptualization of innovativeness as an organization’s willingness to change and adapt is closely associated with organizational learning. As innovation requires an organization to generate and implement new ideas, processes, products, or services (Calantone et al., 2002), it is evident that that an orientation towards learning is an important prerequisite. In fact, many
scholars have stressed the value of learning orientation to enhance organizational innovativeness (Cahill, 1996; Damanpour, 1991; Verona, 1999). As organizational learning leads to an accumulation of knowledge over time, learning efforts in one period make it easier to accumulate knowledge in the next period (Cohen & Levinthal, 1990). This notion implies that organizational learning is not static, but rather requires a dynamic orientation towards learning (Gebauer et al., 2012; Todorova & Durisin, 2007). Accordingly, the concept of learning orientation refers to an organization-wide disposition and has been conceptualized as a combination of those values that influence the organization’s propensity to create, absorb and use knowledge (Sinkula, Baker, & Noordewier, 1997). Previous research has consistently argued learning orientation to encompass three facets of organizational climate: commitment to learning, shared vision, and open-mindedness (Hult & Ferrrell, 1997; Hurley & Hult, 1998).

Commitment to learning describes the degree to which an organization values learning as an important investment and promotes a learning climate (Norman, 1985; Sinkula et al., 1997). It hence refers to an organization’s willingness to acquire new knowledge and pursue a long-term orientation whereby learning efforts are channeled towards organizational goals (Calantone et al., 2002; Wang, 2008). As Slater and Narver (1994) illustrate, an organization committed to learning will expect its individual members to pursue innovative ideas outside their immediate scope of work.

Shared vision refers to an organization-wide focus on learning (Sinkula et al., 1997) that gives meaning to the learning efforts undertaken by individual members of an organization (Verona, 1999). Without a common direction, innovative ideas oftentimes fail to be implemented and translated into action (Hult, 1998). In this light, Calantone and colleagues (2002) argue that without a shared vision “even if they [an organization’s individual members] are motivated to learn, it is difficult to know what to learn” (p. 516). A clear direction for learning hence helps
coordinate organization-wide learning efforts and forms a common sense of innovation (Brown & Eisenhardt, 1995; Calantone et al., 2002).

*Open-mindedness,* as the facet of learning orientation, implies the organization’s willingness to critically assess its operational processes and exploit new knowledge to implement creative ideas (Hult, 1998). As organizations face rapid changes in markets and technology, knowledge obsolescence is high. Hence, in terms of assuring organizational innovativeness, existing knowledge is only useful if an organization remains open-minded to constantly renew or update its knowledge base (Calantone et al., 2002; Sinkula et al., 1997; Verona, 1999).

Combined, all three factors influence the organization’s process of using new information to refine existing knowledge and routines and develop a new way of thinking, and thus constitute an important internal source of innovativeness (Slater & Narver, 1995). Consequently, a number of studies have found learning orientation to be positively related to organizational innovativeness (Cahill, 1996; Calantone et al., 2002; Verona, 1999) amongst other measures of economic success (e.g., Baker & Sinkula, 1999; Gebauer et al., 2012; Tsai, 2001).

**Linking external and internal sources of organizational innovativeness for the context of Turkey**

For organizations operating in the emerging Turkish economy, social capital as an unintentional and/or intentional source of organizational innovativeness is of great relevance, primarily due to two reasons. *First,* contrasting developed Western economies with Eastern emerging markets reveals striking cultural differences, which have repeatedly been assigned to differential effects on individual and organizational behavior (see Smith, Fischer, & Sale, 2001 for a review). Whereas Western economies have largely emerged in rather individualistic societies, Turkey, for example, is characterized as a strongly collectivist culture (Hofstede, 1980; Oyserman et al., 2002). The essential difference between individualistic and collectivistic cultures lies in the ‘construal of the self’ (Markus & Kitayama, 1991; Triandis, 1995, Wasti, Tan, Brower, &
Önder, 2007). Accordingly, individualistic cultures tend to view the self as independent, meaning that individuals seek to maintain their independence from others and favor arm’s-length transactions over those embedded in network ties. Conversely, collectivistic cultures regard the self as interdependent and place great emphasis on the social units or networks to which one belongs. Hence, the Turkish cultural contingencies of collectivism favor the unintentional information exchange over social and business network ties that exceed individual and organizational boundaries.

Second, emerging economies such as Turkey generally lack strong legal regimes and regulatory systems, they are characterized by structurally dynamic industries and widespread opportunism (Choi et al., 1999; Humphrey, 1998; Humphrey & Schmitz, 1998; Wasti & Wasti, 2008). Hence, external information provided by an organization’s various stakeholders is generally harder to verify, and legal systems make it difficult to prosecute deliberate misinformation or deceit (Luo, 2006). Previous research has thus argued organizations in emerging economies to actively seek governance structures that circumvent environmental uncertainty and complexity and replace it with stable network ties on both the social and organizational level (Acquaah, 2011; Dubini & Aldrich, 1991; Miller, Lee, Chang, & Le Breton-Miller, 2009). In this light, Peterson and Rondstadt (1986) note that ‘business know-who’ is just as important as ‘business know-how’. The basic conjecture here is that organizations operating in the emerging Turkish economy will intentionally seek to establish network ties as a safe source of strategically relevant external information (Blyler & Coff, 2003; Eriksson, Johanson, Majkgard, & Sharma, 1998; McLoughlin & Horan, 2000).

Looking at innovativeness, however, gaining access to external information is important but it is an organization’s internal ability to apply this new information for commercial purposes that is crucial (Gebauer et al., 2012; Tsai, 2001). Following a functionalist perspective, learning orientation refers to an organization’s willingness to learn, which describes the sequential
process of acquiring, assimilating, transforming, and exploiting external information (Camisón & Forés, 2010; Gebauer et al., 2012; Lane, Koka, & Pathak, 2006). Acknowledging the specifics of the emerging Turkish economy, vital external information is acquired via an organization’s social and business network ties as a result of unintentional and/or intentional information gathering activities (Huber, 1991; Popova-Nowak & Cseh, 2015). However, this information only becomes valuable knowledge when it is exploited for economic benefits, which requires that the external information meets upon an organization committed to learning, is interpreted in the light of a shared vision, and used open-mindedly to transform the cognitive structure of the organization (Zahra & George, 2002; Jansen, van den Bosch, & Volberda, 2005). Hence, an organization’s orientation towards learning seems vital for translating external information acquired via social and business network ties into actual innovativeness (e.g., Verona, 1999; Slater and Narver, 1994). Concurrently, Calantone et al. (2002) argue that organizations featuring high learning orientation are less likely to miss the opportunities created by rising market demand and thus exhibit superior long-term performance. Being able to absorb and learn from external stimuli provides organizations with a better chance of sensing events and trends in the marketplace (Day, 1994; Sinkula, 1994; Tippins & Sohi, 2003), and consequently enable them to act on and respond to new challenges faster than their competitors do (Slater & Narver, 1995). Particularly in the rapidly changing environment of the emerging Turkish economy, a strong learning orientation may therefore facilitate competitive advantages (Slater & Narver, 1995). Surprisingly, however, to our knowledge this causal relationship has not yet been drawn or investigated for the context of emerging economies such as Turkey.

Hypotheses

**Social network ties, business network ties, and learning orientation**

We set out to develop a complementary framework that links external and internal sources of organizational innovativeness, albeit incorporating the specifics of the emerging Turkish economy. Regarding the external sources of organizational innovativeness, both social and
business network ties have been shown to provide organizations with important access to social capital such as external information. As organizations may acquire external information from their networks due to their unintentional and/or intentional information gathering activities, two assertions can be made to link an organization’s network ties and its orientation towards learning.

First, the Turkish cultural contingencies of collectivism favor information exchange over social and business network ties. However, the strong network ties inherent to many emerging economies may cause organizations to unintentionally constrain information gathering to their ‘present’ social and business networks in which they operate, hence raising the risk of overlooking other sources of social capital such as ‘potential’ social contacts, customers and competitors. In fact, several researchers have pointed towards the constraining nature of network ties (Andersen, 2013; McDermott & Corredoura, 2010). As Lin (2001) notes, existing network ties may limit an organization’s ability to acquire creative ideas while reinforcing old routines and practices, and strong networks ties may even block links to new contacts (Dyer, 2006).

In this light, an organizational culture of learning orientation may to an extent be complementary to the cultural constraints imposed by network ties, by providing and upholding capabilities involved in searching for valuable external information (Farrell, 2000; Keskin, 2006; Rhee et al., 2010; Slater and Narver, 1995). This implies that the extent of an organization’s orientation towards learning may rely on its social and business network ties. Previous research concerning the network ties – learning orientation relationship, albeit limited, revealed a positive link. For instance, Uzzi and Lancaster (2003) showed through their study of networks between bank loan managers and their clients that network ties are the principal foundation of organizational learning processes.
Second, the structural dynamics and regulatory weaknesses inherent to the emerging Turkish economy drive organizations to intentionally establish network ties as a safe source of strategically relevant external information (Blyler & Coff, 2003; Eriksson et al., 1998; McLoughlin & Horan, 2000). Hence, it is likely that as organizations scan their social and business networks proactively for external information, concerns with and commitment to learning rise rapidly. That is to say, learning orientation becomes indispensable to the securing of relevant external information. Hence, exploring network ties for relevant information requires a capability to learn which can reduce the uncertainty inherent to the emerging Turkish economy to a significant extent. Taken together, organizational activity to establish and harness the social capital provided by its network ties may be the main impetus for learning orientation. Dhanaraj, Lyles, Steensma, and Tihanyi (2004), for example, revealed the importance of tie strength in enhancing accumulative learning.

Combined, these ideas and empirical findings point to the role of social and business network ties as potential antecedents to learning orientation. We thus hypothesize:

\[ H1: \text{An organization’s social network ties will positively influence its learning orientation.} \]

\[ H2: \text{An organization’s business network ties will positively influence its learning orientation.} \]

Learning orientation, organizational innovativeness, and performance

It is likely that there are several antecedents to organizational innovativeness. However, given that innovativeness implies the adoption of innovation and willingness to change, it is apparent that learning orientation should play a key role (Alegre & Chiva, 2008; Amara, Landry, Becheikh, & Ouimet, 2008). Particularly in the challenging environment of the emerging Turkish economy, it is vital for firms to constantly renew their current knowledge base and be
prepared to unlearn old ways (Porac & Thomas, 1990; Sinkula, 1994; Verona, 1999). As Hurley and Hult (1998) described, learning orientation tends to enhance receptivity towards innovative ideas as part of the organizational culture. In fact, there are various studies investigating the correlation between learning orientation and organizational innovativeness (Calantone et al., 2002; Hult et al., 2004; Keskin, 2006; Liu, Luo, & Shi, 2002; Garcia-Morales, Llorens-Montes, & Verdu-Jover, 2006; Rhee et al., 2010; Sinkula et al., 1997). Referring to the three cultural facets of learning-orientation, Calantone and colleagues (2002), for instance, argue that an orientation towards learning would enhance organizational innovativeness in three ways. As the authors point out, organizations committed to learning will more likely be committed to innovation processes. Open-mindedness, an integer cultural facet of learning orientation, facilitates organizational members’ willingness for the adoption of new ideas (Hult et al., 2004) and helps initiate innovation processes (Zaltman, Duncan, & Holbek, 1973). Lastly, a shared vision coordinates the focus of a firm’s various departments and enhances learning quality, thus helping overcome barriers to innovation (Brown & Eisenhardt, 1995; Calantone et al, 2002). Hence, the degree of organizational innovativeness likely depends on the extent to which the organization features an orientation towards learning (Cohen & Sproull, 1996; Crossan, Lane, & White, 1999).

In turn, innovativeness is a – if not the – most critical determinant of organizational performance; a finding that has been supported by many empirical studies (Calantone et al., 2002; Cooper, 2000; Rhee et al., 2010). Specifically, innovativeness is likely to enhance organizational performance in two ways. First, innovativeness can be seen as a strategic means by which organizations respond to changes in the environment (Rhee et al., 2010). Looking at the emerging Turkish economy, innovativeness is thus critical in order to ensure organizational survival in this turbulent and fast-moving context. Second, innovativeness and the “generation, acceptance, and implementation of new ideas, processes, products, or services” (Calantone et
al., 2002, p. 517) it involves, allows organizations to develop and monetize competitive advantages (Damanpour, 1991; Hurley & Hult, 1998). Concluding, we hypothesize the following:

\[ H3: \text{An organization's learning orientation will positively influence its innovativeness.} \]

\[ H4: \text{An organization's innovativeness will positively influence its performance.} \]

**The mediating effect of learning orientation**

Comprising our earlier discussion, we conclude that the social capital provided by a Turkish organization’s social and business network ties is likely to influence its innovativeness positively, when configured in a learning-oriented culture. Particularly in the emerging Turkish economy, network ties are not merely a result of collectivism, but also provide a facility to circumvent the institutional barriers of accessing secure external information (Acquaah, 2011; Liao & Welsch, 2003; Luo, Hsu, & Liu, 2008). Given the volatile environment, strong social and business network ties may offer advance information about new and impending regulatory changes or crucial developments in the market, which enables the organization to pre-plan for likely environmental shifts (Boso et al., 2013; Li & Zhou, 2010; Lusch & Brown, 1996). Accordingly, several previous studies have revealed network ties to facilitate knowledge transfer and technology acquisition (Rindfleisch and Moorman, 2001; Saxenian 1996), as well as assisting organizations in resolving design and manufacturing problems (e.g., Dougherty & Hardy, 1996; Ibarra, 1993; van de Ven, 1986).

However, network ties do not necessarily generate innovativeness per se. This is because even though they provide social capital in the form of access to external information and thus constitute the ‘potential’ for innovative ideas, they do not necessarily imply organizational ‘behavior’ towards innovative actions. Only if the extent of learning orientation, which has the potential to affect behaviors, is sufficiently great, proclivity for innovativeness may be
developed (Rhee et al., 2010). Following Tsai (2001), we therefore argue that without a strong learning orientation, an organization is likely to suffer from ‘search-transfer problems’, whereby it cannot exploit the social capital nested in its network ties (c.f., Hansen, 1999).

As social and business network ties provide organizations in the emerging Turkish economy with vital social capital, it is likely that network ties enhance Turkish organizations’ capabilities to create new ideas and innovation if the external information disseminates into the organization on a learning-oriented basis (e.g., Coleman, 1990; Rhee et al., 2010; Tsai & Ghoshal, 1998). Thus, network ties meeting a learning-oriented culture may give an impetus to innovativeness. In support of this view, previous studies (e.g., Calantone et al., 2002; Rhee et al., 2010) have found access to external information to enhance organizational innovativeness significantly when combined with a strong orientation towards learning. In sum, these notions and empirical findings point to the mediating role of learning orientation. Accordingly, we hypothesize:

\[ H5: \text{An organization’s social network ties will positively influence its innovativeness via learning orientation.} \]

\[ H6: \text{An organization’s business network ties will positively influence its innovativeness via learning orientation.} \]

Figure 1 shows our conceptual framework.

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Method

**Sampling and data collection**

We base our analysis in the textile industry in Turkey, as this is an adequate empirical setting for three reasons. *First*, as a member of the so called ‘MIST’ states, Turkey is considered one
of the four most important emerging economies (Bremmer et al., 2009; Source). Second, over the past several decades, the Turkish economy has been growing fast due to increased economic integration (Nakata & Sivakumar, 1997), causing turbulent market developments and revealing far-reaching regulatory weaknesses. Also featuring a strong collectivistic culture, Turkey can be considered as proxy for several emerging economies (Hofstede, 1980; Sources). Third, textiles and clothing are among the most important sectors of the Turkish economy, in terms of their contribution to GDP, employment, and investment. Combined, both sectors had a 18.3% share in total export volume in 2013 (Clothing Industry Report, 2014).

For our data collection, we approached three independent textile and apparel associations with several thousand members organizations in the Turkish textile industry: Tekstil Kent (www.tekstilkent.com.tr), Giyim Kent (www.giyimkent.com.tr), and ITKIB (Istanbul Textile and Apparel Export Union). Our questionnaire’s items are all derived from relevant literature and were translated into Turkish by two native speakers, separately. Inconsistencies between the two translations were identified and thoroughly discussed. In order to further verify the accuracy of the translation, back-translation was employed by an English native speaker. The questionnaire was then pretested in several in-depth interviews with key managers of the Turkish textile industry. Based on the feedback received in the interviews, we re-sorted and revised a small number of items in order to enhance clarity. We sent out 200 questionnaires to each association (600 questionnaires in total), addressing the owners/entrepreneurs and top-level managers of randomly selected member organizations. Both can be considered appropriate respondents to this survey, as they are most likely able to evaluate key factors such as their organizations’ network ties, learning orientation, and innovativeness. Moreover, previous studies have repeatedly verified that such thoughtful selection of key informants, combined with the use of multi-item scales, is able to provide reliable and valid information (John & Reve, 1982). We provided each respondent with a cover letter detailing the aim of our study and a
copy of our questionnaire. Two weeks later, a second mailing was conducted in order to increase the response rate. Altogether, a total of 178 textile companies participated in our study, resulting in a response rate of 29.7%, which is comparable or above to those of other studies that examine complex organizational phenomena (Harzing, 1997; Menon, Jaworski, & Kohli, 1997; Workman, Homburg, & Jensen, 2003). The questionnaire was predominantly answered by decision makers, with 52.2% owners/entrepreneurs or board members, 38.8% executives, and 9.0% others. Of these, 96.1% had gained experience within their profession for at least five years and 55.7% had been in their profession for eleven or more years. Adequate data quality may thus safely be assumed.

When conducting survey research, the potential problem of nonresponse bias has to be discussed (Armstrong & Overton, 1977). Following Poppo, Zhou, & Ryu, (2008), we compared early (the first 25%) and late responders (the last 25%) on a number of key demographics such as number of employees, financial turnover, and the development of export activities. Deploying multivariate analysis of variance (MANOVA) no significant differences were identified (Wilks’ Λ = 0.943; F = 1.738; p = 0.165). Additionally, we contrasted early and late responders in regard to various informant-related characteristics such as hierarchical level, years of experience and area of responsibility. Again, we identified no significant differences (Wilks’ Λ = 0.947; F = 1.611; p = 0.193). Combined, the results of these two tests yield sufficient evidence that nonresponse bias is negligible in our study (Armstrong & Overton, 1977).

We do acknowledge that in relying on data from a single source only, our procedure creates the potential for common method bias (Podsakoff & Organ, 1986; Salancik & Pfeffer, 1977). Following Podsakoff, MacKenzie, Lee, and Podsakoff (2003), we took several measures in order to a priori minimize the risk of common method bias. Specifically, we gave precise directions on how to fill out our questionnaire, assured the survey participants that their
responses have been anonymously, separated exogenous and endogenous variables' items over the lengthy survey, and included several reverse-coded items. Nonetheless, we conducted subsequent tests for common method bias using several statistical procedures common in PLS-SEM research. All results are in the appendix. If common method bias were present, correlations among the items would be high (Lindell & Whitney, 2001; Podsakoff & Organ, 1986). First, if method bias were present, high correlations would result in a single underlying factor that explains most of the variation in the items (Bae & Lawler, 2000). Thus, we conducted the Harman one-factor test, which loads the total number of items into a principal component factor analysis (Podsakoff & Organ, 1986), and additionally used the procedure described by Liang, Saraf, Hu, and Xue (2007), creating a specific method factor that comprises all items used in the different measurement models. Testing our data shows that common method bias is unlikely to be of concern. Nonetheless, we also included a marker variable into our model in order to test for common method bias as recommended by Lindell and Whitney (2001). We used the global reach construct developed by Fawcett, Calantone, and Smith (1996), which consists of three reflective items that measure a firm's ability to manage dispersed operations. We evaluated convergent validity, discriminant validity, and reliability for the construct's scale and all values were well above the common standards (see appendix). The global reach construct seemed suitable, because previous research has shown it to be theoretically unrelated to central constructs in our model (Fugate, Stank, & Mentzer, 2009). All significant correlations between our principal constructs remain statistically significant even when common method variance is controlled and sensitivity analysis further shows most significant correlations remain statistically significant beyond \( p \leq .01 \). Therefore and in accordance with the prior tests' results, common method bias appears to be of no particular concern.

**Measures**

All scales were measured with a five-point Likert scale (anchors 1 = very strongly disagree; 5 = very strongly agree), unless specifically indicated otherwise. A detailed overview of all scales
is included in the appendix. As recommended by the common classification criteria of Jarvis, Mackenzie and Podaskoff (2003), all latent variables are measured reflectively.

**Network ties.** We assess a firm’s social and business network ties using Boso et al.’s (2013) social network ties and the authors’ business network ties scales. The social network ties scale comprises three items, originally adapted from Shane and Cable (2002), that capture the respondents’ social ties, relationships, and connections with governmental and/or industrial decision-makers (Luo, 2003). The business network scale comprises three items that have originally been adapted from Yiu et al. (2007) and Lau and Bruton (2011), and which ask respondents to rate the frequency of their organizations’ interaction with industry counterparts, such as suppliers, customers, and competitors.

**Learning orientation.** Following the common definition of organizational learning orientation, we designed this factor as a reflective-reflective (type 1) second-order construct, which comprises three lower-order factors: commitment to learning, shared vision and open-mindedness (Wang, 2008; see also Becker, Klein, & Wetzels, 2012; Jarvis et al., 2003; Ringle, Sarstedt, & Straub, 2012). In order to measure these three facets, we relied on Wang’s (2008) 11-item scale. We used the two-stage approach to model the second-order construct, which means that we estimated the lower-order components’ latent variable scores and subsequently used these scores as indicators for the higher-order latent variable in a separate second-stage analysis (e.g., Agarwal & Karahanna, 2000; Wetzels, Odekerken-Schröder, & van Oppen, 2009; Wilson & Henseler, 2007). This approach has the advantage that latent variables scores for lower-order components can be obtained (Chin, 1998; Lohmoller, 1989; Tenenhaus, Vinzi, Chatelin, & Lauro, 2005) and has been recommended by Becker et al. (2012) for studies that primarily focus on the higher-level constructs’ effects, as ours.

**Firm innovativeness.** We assess firm innovativeness in accordance with Wang (2008), based on a firm’s willingness to try out and adopt novel behaviors and solutions. The scale comprises
three items, originally adapted from Miller and Friesen (1983) and Hurt, Joseph, and Cook (1977).

**Organizational performance.** Following previous studies, we measure firm performance through several items indicating the financial outcomes of the firm compared to its major competitors within the industry (e.g. Flynn, Huo, & Zhao, 2010; Ismail & King, 2005). Specifically, we combine the measurement models of Chen, Paulraj, and Lado (2004) and Droge, Jayaram, and Vickery (2004), assessing firm performance via four items: profit margin as a percent of sales, return on assets, return on investments, and net income before tax. As it is difficult to obtain objective performance data (Narasimhan & Das, 2001), we rely on the key informants’ perceptions of their organizations’ performance. This approach has been adopted widely by previous research (e.g. Chen et al., 2004; Droge et al., 2004; Germain, Droge, & Christensen, 2001; Song, Im, van der Bij, & Song, 2011), and has been shown to correspond closely to objective performance measures (e.g., Murphy & Callaway, 2004; Venkatraman & Ramanujam, 1986).

**Controls.** In line with previous research (e.g. Boso et al., 2013; Wang, 2008; Yiu et al., 2007), we control for the influence of several firm related characteristics: the organization’s size, its age, whether the organization is owner-operated, and whether it is the subsidiary of a group. This is because the academic literature indicates a potential for these variables to influence organizational innovativeness and performance (e.g., Boso et al., 2013; Gao, Zheng, & Yim, 2007; Tsai, 2001; Wang, 2008). We measure organizational size based on the number of employees and financial turnover in the previous fiscal year, both measured on five-point interval scales that reflect the common distinction between small, medium-sized, and large entities. Organizational age is assessed via one self-reported item capturing the number of years the organization has been in business. To represent whether a firm is owner-operated and/or subsidiary of a group, we included two dummy variables (coded 1 if applicable and 0 if not).
Scale reliability and validity
We assess the construct validity and reliability of our measures following the guidelines of Anderson and Gerbing (1988). First, exploratory factor analysis resulted in factor solutions as theoretically expected. Second, we calculated the Cronbach’s alpha for each multi-item scale. For the second-order factors, we separately assessed all lower-order components. All coefficients but for social network ties (α = 0.55) exceed the common 0.60 standard of internal consistency (Aron & Aron, 1999; Hair, Black, Babin, & Anderson, 2010; Nunnally, 1967). Third, we deployed confirmatory factor analyses (CFA) to assess convergent validity and reliability of the multi-item scales. In this context, we dropped one item measuring the lower-order factor open-mindedness. All remaining factor loadings are highly significant and above the 0.40 benchmark, validating the unidimensionality of our measures (Bagozzi & Baumgartner, 1994). Composite reliabilities are all well above 0.60 (Bagozzi & Yi, 1988), and the average variance-extracted (AVE) indices are all equal or greater than 0.50 (Fornell & Larcker, 1981). Fourth, we tested for discriminant validity by checking whether each construct’s variance shared with other constructs is lower than its AVE. As this is the case for all of our constructs, discriminant validity is indicated (Fornell & Larcker, 1981). Multicollinearity also does not seem to pose a problem, as the highest VIF value is 1.55. Overall, our measurements seem to hold sufficient validity and reliability and we abstain from excluding social embeddedness.

Results
We rely on structural equation modeling (SEM) with component-based partial least squares (PLS) estimation to test our hypotheses (specifically, SmartPLS 2.0 M3; Ringle, Wende, & Becker, 2005). SEM provides very accurate results due to its simultaneous estimation of structural relations and measurement errors. We use the PLS estimation method as it has several advantages, such as less strict assumptions regarding the distribution of data, the possibility of using formative (as for market orientation) and reflective scales, and a robust estimation of
smaller samples like ours (Götz, Liehr-Gobbers, Krafft, 2010; White, Varadarajan, & Dacin, 2003). PLS is thus appropriate for this study because it focuses on prediction of data and is well suited for our exploratory model (Bulgurcu, Cavusoglu, & Benbasat, 2010). Table 1 gives an overview of relevant descriptive statistics.

The results are summarized in Table 2. As indicated by the coefficient of determination ($R^2$) we report, our model explains between 20 and 54 percent of the variation in our three outcome variables, providing high explanatory power (Chin, 1998). The standardized root mean square residual (SRMR) is .065 and well below the common threshold of .08 (Hu & Bentler, 1999). Taken together, these findings suggest that the model fits our data satisfactorily.

Hypotheses 1 and 2 postulate a positive effect of social and business network ties on organizational learning orientation. As shown in Table 2, both in fact seem to have a significant and positive impact on learning orientation ($\beta = .26, p \leq .001; \beta = .31, p \leq .001$). Hence, our data supports H1 and 2. Hypothesis 3 assumes a positive influence of an organization’s learning orientation on its innovativeness. Our data implies that learning orientation indeed seems to exert a significant and positive influence on organizational innovativeness ($\beta = .74, p \leq .001$), hence supporting H3. Hypothesis 4, finally, argues for a positive effect of an organization’s innovativeness on its performance. Again, this hypothesis is supported by our data as shown in Table 2 ($\beta = .38, p \leq .001$).
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In order to assess whether organizational learning orientation mediates the positive effects of social and business network ties on organizational innovativeness as postulated by H5 and 6, we first performed a Sobel analysis. Conducting the Sobel test confirmed that both social and business network ties have a significant indirect relationship with organizational innovativeness via learning orientation (social network ties: $z = 3.94$, $p \leq .001$; business network ties: $z = 3.99$, $p \leq .001$). However, even though frequently used in research on mediation, the Sobel test has come under scrutiny as it erroneously assumes normal distribution of the indirect effect (Hayes, 2009). Hence, we subsequently performed a multiple mediation analysis. According to Felker and Gianecchini (2015), “this analytic strategy is recommended over traditional mediation methods as it allows for all mediators to be examined at the same time, thus providing direct and indirect values for each mediation path while accounting for other mediation paths” (p. 66). Hence, we simultaneously regressed both social and business network ties on organizational innovativeness, computing the coefficients for direct and indirect paths (Preacher & Hayes, 2008). As seen in Table 2, both social and business network ties have significant indirect paths to the dependent variable organizational innovativeness ($\beta = .19, p \leq .001$; $\beta = .23, p \leq .001$). As recommended by Preacher, Rucker, and Hayes (2007), we supplemented our mediation analysis with bootstrap confidence intervals, which do not assume a certain sampling distribution. If zero is not included in the confidence intervals, the indirect effect is considered meaningful. We calculated percentile-based and bias-corrected confidence intervals across 5,000 bootstrap resamples, shown in Table 3. None of the confidence intervals for social or business network ties contained zero, which indicates further support for a moderating effect of learning orientation. Finally, after accounting for the mediated effects, the total effects of social and business network ties on organizational innovativeness were significant ($\beta = .25, p \leq .01$; $\beta = .16, p \leq .05$). Combined, these findings strongly point to a mediating effect of learning orientation and are thus in support of H5 and 6.
Analyzing the controls included our model reveals no significant effects for organizational age or size. Interestingly, however, owner-operated organizations seem to exhibit lower levels of learning orientation ($\beta = -0.19, p \leq .05$) whereas subsidiaries of groups show slightly lower levels of organizational performance ($\beta = -0.13, p \leq .1$).

**Discussion**

**Contributions**

In this study, we investigated social and business network ties as drivers of Turkish organizations’ innovativeness and the mediating effect of learning orientation. Overall, we believe our study to contribute to the field of management research in three important areas:

*First*, we relied our conceptual framework on the findings regarding internal and external sources for organizational innovativeness (e.g., Calantone et al., 2002; Stam & Elfring, 2008; Rhee et al., 2010). Considering the cultural and structural contingencies of the emerging Turkish economy, we build on the premise that the innovativeness and with it performance of organizations based in the emerging Turkish economy result from a fit between organizational learning orientation and the configuration of the organizations’ external network ties. Indeed, our study shows that the social capital, defined… nested in Turkish organizations’ network ties (Acquaah, 2012) forms a solid basis for the creation of an organizational culture oriented towards learning. Further, we reveal how such an organizational culture mediates the positive effects of social capital on organizational innovativeness. We herewith establish and empirically test a causal relationship, which to our knowledge has surprisingly not yet been drawn or investigated. Thus, this study represents a valuable theoretical extension of antecedents regarding organizational innovativeness in the emerging Turkish economy and
links to previous studies that have investigated the interrelationship of network ties and learning orientation in the intraorganizational setting (e.g., Tsai, 2001).

Second, our empirical findings unveil social and business network ties as core constructs that play an important role in creating an innovative organization on a learning-oriented basis. Providing further empirical evidence on how network ties shape business outcomes, this study has significant implications for the large body of research on networks. Specifically, within our study, we consider the possibly constraining nature of network ties as emergent consequences of cultural collectivism as well as their active exploitation as a response to the structural and regulatory weaknesses of the emerging Turkish economy (e.g., Acquaah, 2011; Wasti et al., 2007; Wasti & Wasti, 2008). In this light, our results empirically demonstrate that an organizational culture of learning orientation is complementary to cultural restrictions and indispensable in responding to structural restrictions, by providing and upholding capabilities involved in searching for valuable external information (Farrell, 2000; Keskin, 2006; Rhee et al., 2010; Slater and Narver, 1995).

Third, our empirical findings underline the importance of an organizational culture that is oriented towards learning for sustaining economic success in the emerging Turkish economy. Clearly, Turkish organizations’ learning orientation positively influences their innovativeness, and innovativeness itself is related to organizational performance positively. As this finding seems in line with extensive research conducted mainly in developed Western economies (e.g., Calantone et al., 2002; Damanpour, 1991; Henard & Szymanski, 2001; Rhee et al., 2010; Verona, 1999), we empirically demonstrate its transferability and applicability in the Turkish non-Western business setting. Our result thereby suggests that organizational innovativeness may be conceptualized as the manifestation of a broader organizational culture of learning orientation, and point to performance being largely dependent on organizational cultural contingencies.
Implications

Our study reveals that organizations based in the emerging Turkish market are more likely to become learning-oriented when equipped with strong social and business network ties. Our findings further show that an organizational culture of learning orientation itself is a crucial driver for organizational innovativeness and by that for organizational performance. Based on these findings, we reveal the success factors of organizations based in the emerging Turkish economy and make important recommendations for managers of Turkish organizations and organizations wishing to operate in the Turkish market.

Notably, our findings indicate that organizational innovativeness is an important antecedent of performance in the turbulent environment of the emerging Turkish economy (Calantone et al., 2002; Johnson et al., 1997). Despite the apparent limits in resources that discern Turkish organizations their counterparts based in developed economies (Source), Turkish organizations seek to secure success by capitalizing on innovative ideas. Thus, the propensity to innovate, as a critical source of competitiveness, may be even greater in Turkish organizations than in their Western rivals. Top managers of organizations aiming to enter the emerging Turkish market therefore are advised to pay full attention to the innovative strength of their Turkish counterparts and the importance of innovativeness in the volatile environment.

Regarding the sources of Turkish organizations’ success, our study confirms that organizations’ external network ties, which are an important feature of the emerging Turkish economy, are crucial drivers of innovativeness. As the social and business relations these ties are based upon require time in order to emerge, network ties represent a significant competitive advantage of Turkish organizations and an effective barrier for non-Turkish organizations seeking to enter the market. It is therefore vital for Western managers to understand the need to establish ties before pursuing their business objectives. However, our findings also show that an organization’s social and business network ties exert a positive impact on innovativeness via
learning orientation only. It is thus likely that learning orientation is central to transform social capital into organizational innovativeness. That is to say, our study confirms previous research that has found learning orientation to have profound influence on an organization’s capacity to innovate. Based on our findings, management thus ought to place special emphasis on establishing an organizational culture that is committed to learning, creating a shared vision that gives meaning to individual learning efforts, and ensure organizational open-mindedness to new and innovative ideas (see also Rhee et al., 2010).

Combined our findings indicate that organizational innovativeness in the emerging Turkish economy neither stems from external nor intra-organizational sources alone, but is rather the fruit of a fit between an organizations’ network ties and learning orientation. For managers in charge of innovation activities such as research and development, this implies that the mere organizational willingness for innovation alone is not sufficient, as the capacity to innovate depends on fundamental external contingencies such as the organization’s social and business network ties. Thus, we call on management to build learning-oriented organizations while emphasizing the particular importance of organizational network ties.

**Limitations and future research opportunities**

As any research, our study suffers from a number of limitations. First and foremost, for our investigation of the sources of Turkish organization’s innovativeness and performance, we focused on external network ties and internal learning orientation. However, our study did not aim to answer the questions of how network ties emerge or a learning-oriented culture is established. Hence, we believe this to be a promising avenue for future research.

Another limitation is that we relied on a cross-sectional sample in order to empirically test our hypotheses, whereby independent and dependent variables were measured through the same survey. To reduce and evaluate the potential problem of method bias our approach introduced, we relied on common procedural and statistical remedies. Although these suggest little threat
of bias, we advise readers to interpret our results with caution. Besides, we believe that a longitudinal approach might be of value in revealing the temporal linkages among organizational innovativeness, its external and internal sources, and performance.

Regarding the measures we used, we need to point out low level of validity of social network ties and encourage future research to contribute to the development of more reliable scales. In addition, the measures we used to evaluate organizational performance are based on a subjective evaluation by the respondents to our survey. Although such perception-based subjective measures have repeatedly been shown to highly correlate with more objective performance measures (e.g., Murphy & Callaway, 2004; Venkatraman & Ramanujam, 1986), they remain imperfect.

Lastly, as we focus on textile firms based in the emerging Turkish economy, the generalizability of our findings remains limited. Even though the textile sector builds the core of the Turkish economy, we cannot readily expect our findings to be applicable across industries. More importantly, however, we believe it worthwhile for future research to test the transferability of our findings to other emerging economies.

**Conclusion**

The aim of this study was to reveal the sources of organizational innovativeness and performance in the emerging Turkish economy. Our findings reveal the success of an organization in the Turkish economy to result from a fit between the social capital that is provided by its external network ties and its internal learning orientation. Herewith, our study not only links thus far competing explanations regarding external and internal antecedents of organizational innovativeness, but also offers a comprehensive understanding of the success factors in the emerging Turkish economy.
References


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Figures and Tables

Figure 1. Conceptual framework
Table 1. Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Constructs</th>
<th>mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tbody>
<tr>
<td>1. Business network ties</td>
<td>3.38</td>
<td>0.54</td>
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<td></td>
<td></td>
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<tr>
<td>2. Organizational age</td>
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<td>3. Organizational performance</td>
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<td>0.21**</td>
<td>0.24***</td>
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<tr>
<td>4. Organizational size</td>
<td>2.28</td>
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<td>0.09</td>
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<tr>
<td>5. Organizational innovativeness</td>
<td>3.64</td>
<td>0.60</td>
<td>0.28***</td>
<td>0.18*</td>
<td>0.35***</td>
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<td>1.00</td>
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<tr>
<td>6. Learning orientation</td>
<td>3.76</td>
<td>0.41</td>
<td>0.43***</td>
<td>0.10</td>
<td>0.33***</td>
<td>0.01</td>
<td>0.71***</td>
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<tr>
<td>7. Owner-operated</td>
<td>0.10</td>
<td>0.30</td>
<td>-0.22**</td>
<td>0.01</td>
<td>0.03</td>
<td>0.18*</td>
<td>-0.19**</td>
<td>-0.18*</td>
<td>1.00</td>
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<td>8. Social network ties</td>
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<td>0.37***</td>
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<td>9. Subsidiary of a group</td>
<td>0.51</td>
<td>0.78</td>
<td>-0.09</td>
<td>-0.24**</td>
<td>-0.20**</td>
<td>-0.41***</td>
<td>0.05</td>
<td>-0.03</td>
<td>-0.38***</td>
<td>0.08</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. n = 178. s.d.=standard deviation. *p ≤ .05; **p ≤ .01; ***p ≤ .001
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Table 2. Results of PLS-SEM

<table>
<thead>
<tr>
<th></th>
<th>Learning orientation</th>
<th>Org. innovativeness</th>
<th>Org. performance</th>
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</thead>
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<tr>
<td><strong>Controls</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>0.09 (0.06)</td>
<td>0.06 (0.07)</td>
</tr>
<tr>
<td>Organizational size</td>
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<td>0.07 (0.06)</td>
<td>0.17 (0.10)</td>
</tr>
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<td>Owner-operated</td>
<td>-0.19* (0.08)</td>
<td>0.02 (0.04)</td>
<td>0.01 (0.05)</td>
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<td>Subsidiary of a group</td>
<td>-0.03 (0.05)</td>
<td>0.08 (0.05)</td>
<td>-0.13t (0.07)</td>
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<td><strong>Explanatory variables</strong></td>
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<tr>
<td><strong>Direct effects</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Social network ties</td>
<td>0.26*** (0.06)</td>
<td>0.06 (0.06)</td>
<td>-</td>
</tr>
<tr>
<td>Business network ties</td>
<td>0.31*** (0.07)</td>
<td>-0.07 (0.05)</td>
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</tr>
<tr>
<td>Learning orientation</td>
<td>-</td>
<td>0.74*** (0.05)</td>
<td>-</td>
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<tr>
<td>Organizational innovativeness</td>
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<td>-</td>
<td>0.33*** (0.07)</td>
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<tr>
<td><strong>Indirect effects</strong></td>
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<tr>
<td>Social network ties</td>
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<td>0.19*** (0.05)</td>
<td>0.08* (0.03)</td>
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<td>Business network ties</td>
<td>-</td>
<td>0.23*** (0.06)</td>
<td>0.05† (0.03)</td>
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<td>Learning orientation</td>
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<tr>
<td><strong>Total effects</strong></td>
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<tr>
<td>Social network ties</td>
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<td>0.25** (0.09)</td>
<td>0.08* (0.03)</td>
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<td>0.16* (0.08)</td>
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<tr>
<td>R²</td>
<td>0.26</td>
<td>0.54</td>
<td>0.20</td>
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</table>

Goodness-of-fit statistic: SRMR = .065

Note. n = 178. Standard errors are in parentheses. Owner-operated and subsidiary of a group are coded 1 if applicable and 0 otherwise. †p ≤ .1; *p ≤ .05; **p ≤ .01; ***p ≤ .001

Table 3. 95% bootstrap confidence intervals of indirect effects

<table>
<thead>
<tr>
<th></th>
<th>Percentile-based Lower</th>
<th>Percentile-based Upper</th>
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<th>Bias-corrected Upper</th>
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<tr>
<td>Social network ties</td>
<td>.10</td>
<td>.30</td>
<td>.12</td>
<td>.32</td>
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<tr>
<td>Business network ties</td>
<td>.12</td>
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Note. Results are based on 5,000 bootstrapped samples
Appendix

**Common method assessment**

Results for unmeasured latent methods factor approach

<table>
<thead>
<tr>
<th>Construct</th>
<th>Substantive factor loading (R1)</th>
<th>(R1)²</th>
<th>Method factor loading (R2)</th>
<th>(R2)²</th>
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<tr>
<td>1. Commitment to learning</td>
<td>0.96***</td>
<td>0.93</td>
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<td>4.</td>
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<td>0.73***</td>
<td>0.53</td>
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Note. n = 178. Second-order constructs were assessed on lower-order components’ level only. Lower-order constructs are printed in italics. *p ≤ .05; **p ≤ .01; ***p ≤ .001
Results for marker variable approach

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<thead>
<tr>
<th></th>
<th>1 Social network ties</th>
<th>2 Business network ties</th>
<th>3 Commitment to learning</th>
<th>4 Open-mindedness</th>
<th>5 Shared vision</th>
<th>6 Organizational performance</th>
<th>7 Marker variable</th>
<th>8 Organizational innovativeness</th>
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Note. n = 178. Values on the diagonal and in parentheses are estimates of scale reliability. Second-order constructs were assessed on lower-order components’ level only. Lower-order constructs are printed in italics. Negative correlations were reversed into positive correlations to allow the computation of common method variance adjusted correlations. \( r_{Yim} \) estimates partial correlations corrected for common method variance; \( r_{YM} \) estimates disattenuated partial correlations corrected for common method variance and unreliability in the measurement of the marker variable. *p ≤ .05; **p ≤ .01; ***p ≤ .001

Sensitivity analysis on estimated values of \( r_{Yim} \) for \( p=0.25, 0.05, \) and \( 0.01 \)

<table>
<thead>
<tr>
<th>p</th>
<th>( z_p )</th>
<th>( r_s )</th>
<th>( r_{YM} )</th>
<th>( r_{Ys} )</th>
<th>( r_{sM} )</th>
<th>( r_{sS} )</th>
<th>( r_{YsM} )</th>
<th>( r_{YsS} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25</td>
<td>1.15</td>
<td>0.09</td>
<td>0.24**</td>
<td>0.19*</td>
<td>0.68***</td>
<td>0.51***</td>
<td>0.54***</td>
<td>0.27***</td>
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<tr>
<td>0.05</td>
<td>1.96</td>
<td>0.15*</td>
<td>0.18*</td>
<td>0.14</td>
<td>0.66***</td>
<td>0.48***</td>
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<td>0.22**</td>
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<td>0.01</td>
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<td>0.19*</td>
<td>0.14</td>
<td>0.09</td>
<td>0.64***</td>
<td>0.45***</td>
<td>0.47***</td>
<td>0.17*</td>
</tr>
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</table>

Note. n = 178. \( r_{Yim} \) estimates partial correlations corrected for common method variance relating to \( r_s \) as upper bound. *p ≤ .05; **p ≤ .01; ***p ≤ .001
### Measurement items and assessment of reliability and validity

**Organizational innovativeness: \( \alpha = 0.82; \ CR = 0.89; \ AVE = 0.74; \ HSV = 0.48 \)**

1. Management actively responds to the adoption of "new ways of doing things" by main competitors. \( 0.72^{***} \)
2. We are willing to try new ways of doing things and seek unusual, novel solutions. \( 0.93^{***} \)
3. We encourage people to think and behave in original and novel ways. \( 0.91^{***} \)

**Organizational performance: \( \alpha = 0.73; \ CR = 0.82; \ AVE = 0.54; \ HSV = 0.17 \)**

1. Profit margin (as a percent of sales). \( 0.69^{***} \)
2. Return on Assets (ROA). \( 0.85^{***} \)
3. Return on Investments (ROI). \( 0.73^{***} \)
4. Net income before tax. \( 0.75^{***} \)

**Learning orientation: \( \alpha = 0.80; \ CR = 0.88; \ AVE = 0.71; \ HSV = 0.48 \)**

**Commitment to learning: \( \alpha = 0.90; \ CR = 0.93; \ AVE = 0.77; \ HSV = 0.48 \)**

1. Managers basically agree that our organization’s ability to learn is the key to our competitive advantage. \( 0.88^{***} \)
2. The basic values of this organization include learning as a key to improvement. \( 0.89^{***} \)
3. The sense around here is that employee learning is an investment, not an expense. \( 0.86^{***} \)
4. Learning in my organization is seen as a key commodity necessary to guarantee organizational survival. \( 0.88^{***} \)

**Shared vision: \( \alpha = 0.74; \ CR = 0.83; \ AVE = 0.58 \ 0.56; \ HSV = 0.37 \)**

1. There is a commonality of purpose in my organization. \( 0.65^{***} \)
2. There is total agreement on our organizational vision across all levels, functions and divisions. \( 0.73^{***} \)
3. All employees are committed to the goals of this organization. \( 0.85^{***} \)
4. Employees view themselves as partners in charting the direction of the organization. \( 0.74^{***} \)

**Open-mindedness: \( \alpha = 0.71; \ CR = 0.87; \ AVE = 0.77; \ HSV = 0.31 \)**

1. We are not afraid to reflect critically on the shared assumptions we have made about our customers. \( 0.93^{***} \)
2. Personnel in this organization realize that the very way they perceive the marketplace must be continually questioned. \( 0.82^{***} \)
3. We rarely collectively question our own business about the way we interpret customer information. (R) \( ---^a \)

**Business network ties: \( \alpha = 0.62; \ CR = 0.80; \ AVE = 0.57; \ HSV = 0.20 \)**

1. Please state the frequency of your firm’s interaction with its customers. \( 0.77^{***} \)
2. Please state the frequency of your firm’s interaction with its suppliers. \( 0.77^{***} \)
3. Please state the frequency of your firm’s interaction with its competitors. \( 0.72^{***} \)

**Social network ties: \( \alpha = 0.55; \ CR = 0.74; \ AVE = 0.50; \ HSV = 0.18 \)**

1. I can obtain information about my industry from my network of contacts faster than competitors can obtain the same information. \( 0.47^{**} \)
2. I have a professional relationship with someone influential in my industry. \( 0.65^{***} \)
3. I have engaged with someone influential in my industry in informal social activity (e.g. playing tennis). \( 0.86^{***} \)

**Global reach: \( \alpha = 0.90; \ CR = 0.93; \ AVE = 0.82; \ HSV = 0.14 \)**

1. Our business unit locates specific production activities in countries that provide a comparative advantage. \( 0.92^{***} \)
2. Production facilities are placed in foreign countries to develop a positive image as a local player. \( 0.89^{***} \)
3. Top management emphasizes global manufacturing strategy within the overall corporate strategy. \( 0.91^{***} \)

**Organizational size: \( \alpha = 0.83; \ CR = 0.92; \ AVE = 0.85; \ HSV = 0.14 \)**

1. How many employees does your company have? \( 0.92^{***} \)
2. What was your company’s turnover in the last financial year? \( 0.93^{***} \)
Organizational age
1. Since how many years is your company in business?  

Owner-operated
1. Is your company owner-operated?  

Subsidiary of a group
1. Is your company a subsidiary of a group?  

Note. Table shows an English translation of the Turkish items used in the original survey. For second-order constructs, lower-order components are printed in italics.

* Item dropped in the course of reliability and validity assessment. (R) = reverse coded item; SFL = standardized factor loading; α = Cronbach alpha; CR = composite reliability; AVE = average variance-extracted; HSV = highest shared variance with other constructs. *p ≤ .05; **p ≤ .01; ***p ≤ .001