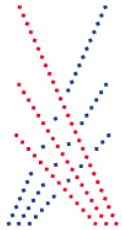

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Title: Trust-Based Ties and Perceived Environmental Dynamism in Entrepreneurial Orientation-Performance Relationship in a Developing Economy

Abstract

Previous scholarly studies have concluded that entrepreneurial orientation (EO) positively relates to firm performance and that relationship is dependent on several contingencies This study applies the RBV, contingency theory and regulatory focus theory, to show how the different domain of inter-organisational trust and the external environment (i.e. environmental dynamism) within which firms operate interactively impact on EO-firm performance relationship. A survey study of 253 Malaysian-based small- and medium-sized enterprises (SMEs) in service sector finds that the positive moderating role of inter-organizational cognitive- and affective-based trust weakens the EO-performance relationship in dynamic market environments. The study's implications and future research directions are discussed.

Keywords SMEs, entrepreneurial orientation, developing economies, cognitive trust, affective trust, perceived environmental dynamism

Track 5: Entrepreneurship

1.0 Introduction

In changing and increasingly competitive environments, firms must seek out entrepreneurial opportunities (D'Aveni, 1994) and translate them into improved performance outputs (Hitt et al, 2001). Given the importance of entrepreneurship to business performance (Rauch, Wiklund, G. T. Lumpkin, *et al.*, 2009), EO, which refers to a firm's strategic orientation, capturing specific entrepreneurial aspects of decision-making styles, methods and practices (Lumpkin and Dess, 2001) could be an importance measure of the way an organisation is organized ((Management, 2016)and Slevin, 1991)– one that enhances the performance benefit of an organisation's knowledge-based resources by focusing attention on the utilization of these resources to discover and exploit opportunities[1]. Thereby, EO can explain, in part, the managerial processes that allow some organisations to be ahead of the competition because EO facilitates organisation action based upon early signals from its internal and external environments (Lumpkin and Dess, 1996).

EO scholars have empirically explored the independent effect of EO on performance (e.g., Zahra & Covin 1995) and its conditional relationship with various contingencies (Lyon et al., 2000; Wiklund and Shepherd, 2005; (Rauch, Wiklund, G. T. Lumpkin, *et al.*, 2009)), including internal variable (e.g. Covin et al., 2006) and external conditions (e.g., Covin and Slevin, 1989). In terms of the latter, recent research has suggested that certain firm resource and capabilities may lead to greater EO and/or enhance EO-outcome relationships and agency costs or firms beliefs may impact firm resource levels and affect firm EO (Covin and Miller, 2014; Miller, 2011). From the author's best knowledge, as in regard of networking taken as moderating variables in EO research, there is no rigorous attempts in examine the trust-based tie within the EO-performance relationship. It appears, that EO and networking scholars have focused on how the organisation is organized to undertake entrepreneurial activities, ignoring the role of trust that act as lubricant and governance agent of an inter-organisational relationships[2]. To extend this line of scholarly inquiry, this study examines whether the

[1] Entrepreneurship refers to the discovery and exploitation of opportunities to bring into existence future goods and services (Shane and Venkataraman, 2000).

[2] Inter-organisational relationship, such as alliance, joint venture, supply chain agreement, franchising or cross-sector partnership, have become increasingly important for achieving competitive advantage (Parmigiani and Rivera-Santos, 2011)

relationship between EO-firm performances is contingent upon firm's trust-based ties. The present study extends research on how EO interacts with firm's trust-based ties to increase firm performance by arguing that trust in relationships plays a role in converting and assisting EO into improved performance.

A major arguments is that given the uncertain success of introducing new products and services, and the challenges of developing new organizations with limited resources, trust ties can become one of key drivers of entrepreneurship (Doh and Zolnik, 2011; Gedajlovic et al., 2013). Thus, trust ties can serve as complementary capital that can translate firm's entrepreneurial activities into improved firm performance a. In response to the nature of trust, which is multifaceted and multidimensional, this research's conceptualization of trust ties consist the element of cognitive and affective (McAllister, 1995). Whereas cognition-based trust is grounded in individual's cognitive evaluations of the reliability, integrity and competence of others; affect-based trust is grounded in individual's feelings of emotional involvement and others' genuine care and concern for their welfare (De Jong, Dirks and Gillespies, 2016).

Therefore, the present study extends research on how EO interacts with inter-firm trust ties' elements to increase firm performance by arguing that trust ties play a critical role in converting EO into improved performance. A major insight is to argue that, while EO provides direction for organizations to pursue new opportunities in the marketplace, effective implementation of EO requires commitment and strong team on the whole chain of operations. For instance, Shane et al. (2003, p. 259) indicated that "the entrepreneurial process occurs because people act to pursue opportunities." This suggests that the field of entrepreneurship recognizes the significant role of knowledge sharing, commitment and cooperation that associated with trust and norms of reciprocity and mutual attraction (Emerson, 1981; De Clercq, 2010), in implementing entrepreneurial activities.

Furthermore, in order to develop a nuanced understanding of how EO and elements of trust ties interact, this study also examines how the dynamism of the environment in which the firm operates influences the interaction of EO and elements of trust ties. Extant literature suggest that affect particularly trust elements occurs against to environmental variables (e.g. Perrone, Zaheer and McEvily, 2003; Krishnan *et al.*, 2006). This study contends that utilizing each elements of trust-based ties on the EO-performance positive relationship should be enhancing in environments characterized by constant flux based on the assumption that trust may introduce systematic bias that can result in judgements that are flawed in dynamic environments (Krishnan et al., 2006). This suggest that the moderating effect of trust ties elements on the relationship between EO and firm performance will be stronger in environments that generate high levels of activation than those that generate lower levels of activation. In these environments, the generation of new information, knowledge, commitment and passion for work appears particularly important for entrepreneurial firms, as does as a timely response to new circumstances. Therefore, this study argued that the moderation of utilization of inter-firm's trust ties on the relationship between EO and performance is stronger when the environment is in a state of flux than when it is static.

Against this background, the present study examines the following research questions:

RQ1. How do the inter-organisational trust ultimately moderate the relationship between EO and firm performance?

RQ2. How does perceived environmental dynamism moderate this relationship?

In addressing the research objectives, the study makes two specific contributions to the literature. First, and most generally, it seeks to contribute to current efforts to examine the

influence of firm trust network[3] in implementing entrepreneurial activities. Specifically, this study examines the moderating role of cognitive and affective elements of trust ties on the relationship between EO and firm performance. In doing so, this study address the call to consider the different type and level of firm network (Covin et al., 2006).

Second, it has been suggested that greater insight into firm performance can be gained by investigating the integrative mechanisms that involves a simultaneous and joint consideration of firms' internal influencer and business environmental factors (Wiklund and Shephard, 2003).

The role of inter-organizational trust in influencing the EO-firm performance relationship may be affected by exogenous influences. Extend research has suggested that these effects, when they occur, do so against a backdrop of powerful environmental variables (Baron and Tang, 2011). Therefore, it has been shown that trust can either enhance or lose its effects on the domain of entrepreneurship because the environments in which entrepreneurs operate are highly unpredictable and consistently show signs of rapid change (Baron, 2008; Mitchel et al., 2007). Research on the influence of trust network further indicates that it is precisely in such environments that trust network exerts its strongest effects on cognition and opportunistic behaviour (e.g., Ashnai et al., 2016, Krishnan et al., 2006, Zaheer et al, 1998).

The above considerations and a growing empirical evidence for the important role of trust in the pursuit of entrepreneurial activities strongly show the usefulness of examining how trust ties influences EO-performance linkage. Accordingly, this study contends that the effect of trust ties on the EO-firm performance relationship varies according to different level of environmental dynamism. Therefore, cognitive- and affect-based ties was introduced as a cognitive resource to extend the network theory and to answer the question concerning what changes are likely to occur when the firm's environment is characterized by constant change. In doing so, this study adds environmental dynamism as an important boundary condition to the trust and network literature.

2.0 Literature Review

2.1 Research model and theoretical rationale

Entrepreneurial orientation (EO) has received substantial conceptual and empirical attention, representing one of few areas in entrepreneurship research where a cumulative body of knowledge is developing. Meta-analysis done by Rauch et al. (2009) shows that the correlation of EO with performance is moderately large (corrected r = .242). More recently, meta-analysis done by Rosenbusch et al. (2013) also reporting nearly similar correlation of EO and performance link, which is 0.26. Thus, we can conclude that in general, EO and performance has positive and moderately strong relationship.

In this study, the focus is placed on the boundary conditions of the EO-performance relationship because scholarly studies offer empirical support for the positive link between EO and firm performance (Rauch, Wiklund, G. T. T. G. T. Lumpkin, *et al.*, 2009). Therefore, no direct-effect hypothesis is offered. The present study contends that the facilitating role of trust-based ties between firms on the EO-performance relationship should be the weakening in dynamic environments relying on the assumption that when the environment is in a state of flux, it would cause prime decision makers to mimic the behaviour of other organisations in their environment through the adaption best practices, comparable market positions, and similar technologies (DiMaggio and Powell, 1983; Greve, 1998). In other words, the opportunistic behaviour tends to engages when trust-based ties is involved and the environment

[3] In regards of trust network, some authors used the terms social capital in order to examine the trust related ties (e.g. Stam, Arzlanian and Elfring, 2014)

is uncertain. Thus, the present study suggests that the opportunities offered by the changing environment provide the setting for the firm and their partner to exploit new market niches and new geographic markets ahead of competitor, rather than maintain their trust relationship.

This study examines the effect of EO by drawing on research from RBV (Barney, 1991), contingency theory (Venkatraman and Prescott, 1990), and regulatory focus theory (Higgins, 1997). The notion behind RBV lies in understanding the conditions under which resources, external capabilities and market environment enable firms to achieve sustained and superior performance (Barney, 1991; Barreto, 2010; Kraaijenbrink et al., 2010). According to the RBV, firms are unequally distributed bundles of resources (Wernerfelt, 1984) that create resource heterogeneity which persists over time, and provides a basis for firm performance (Barney, 1991). A major view of the RBV is that a firm can achieve a competitive advantage if it acquires and control valuable, rare, inimitable and non-substitutable resources and capabilities and effectively deploy them in dynamic market environment (Teece et al., 1997). In this regard, a firm can attain competitive advantage if it has greater success than its current and potential industry competitors (Peteraf and Barney, 2003). Firms' EO is thus viewed as a strategic resource that may provide a firm with the ability to compete in target markets by offering customers products and services with added and/or different sources of value relative to competitors (Kim and Park 2010; Schilke, 2014).

Specifically, this study contends that the relationship between EO and firm performance is hypothesized to be stronger at high levels of trust between firm, and that the moderating effect of trust network on EO-firm performance relationship is weaker when the environment is in a state of flux. This study contends that SMEs in an emerging country context lack all aspects of the VRIO (valuable, rare, inimitable and organizing) espoused by Barney (1991). The RBV provides some insight as to possible outcomes when some, but not all, of the VRIO criteria are present. For instance, SMEs that possess cognitive resource advantage may be able to generate advantage from their strategically valuable resources such as EO. Hence, the expectation is that positive growth results from entrepreneurial, resource-rich firms. Consequently, the EO-performance relationship is expected to be strongest when the complete VRIO criteria are present in SMEs operating an emerging economy.

In keeping with this notion, strategic orientation (e.g. EO) describes what a firm strategically does. Accordingly, in the light of the current study, EO is defined as firms' proclivity to explore new market opportunities (Lumpkin and Dess, 1996; Matsuno et al., 2002) and it manifests itself through a firm's tendency to accept innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy (Lumpkin and Dess, 1996). The EO research that draws on RBV perspective has explained why EO serves as a basis for higher firm performance. First, greater EO means that firms are more likely to pursue an opportunity-seeking orientation involving the process of exploring market areas that offer future advantages to the firm (Wiklund and Shepherd, 2011). With its emphasis on exploratory activities, firm with high levels of entrepreneurial-orientated processes are proficient in creating new organizational forms and industry configurations and are capable of shaping market arrangements to their advantage (Baker and Sinkula, 2009).

However, while many studies and meta-analysis largely confirm the positive contributions of EO (Rauch et al., 2009), relatively few studies have found no positive relationship between EO and firm performance (e.g. Ireland et al., 2003). Moreover, extent research has been more consistent in showing that the strength of the EO-firm performance relationship depends on various contingencies (Lyon et al., 2000), including external conditions (e.g. Zahra and Covin, 1995) and internal variables (e.g. Covin et al., 2006). Thus,

the notion that EO benefits firms irrespective of the conditions under which they operate provides an incomplete understanding of EO and is relationship with firm performance.

This study suggests EO is a resource that can enhance firm performance and trust network between firms is a cognitive process that serves as a complementary resource that if aligned with EO will help enhance firm performance. A substantial literature has documented the importance of trust, which lead to a conclusion that firms' trust-based ties can help as a complementary resource for enhancing strategy implementation in organizations. Trust facilitates cooperation (Pillutla, Malhotra and Murnighan, 2003), reduces transaction costs (Granovetter, 1985) and enables managers and organisations to operate effectively (Dirks and Ferrin, 2001; Jones and George, 1998; Kim, Dirks, Cooper and Ferrin, 2006). In studies of inter-organizational trust within the context of small entrepreneurial firms, interfirm trust appears to be tightly linked to trust between individuals in those organisations (Howarth, Westhead and Wright, 2004; Larson, 1992; Sapienza and Korsgaard, 1996; Zaheer and Harris, 2006). The effectiveness of trust differ under behavioural and environmental uncertainty. Therefore, this study draws on fundamental premises in regulatory focus theory (Higgins, 1997) and contingency theory to develop a nuanced understanding of how EO and trust network interact in dynamic market environments in which the firm operates.

The regulatory focus theory highlights the fact that individuals may not attach similar weight to potential positive outcomes (opportunities) as to the potential negative outcomes (Higgins, 1997, Brockner et al., 2004; de Carolis and Sparito, 2006). This study argues that the facilitating role of trust network on the EO-firm performance relationship should be the strongest in stable markets based on assumption that individual characteristics like trust will weakening and opportunistic behaviour tend to developed (Morgan and Hun, 1994). Hence, generate lower outcomes in dynamic environments (Baron and Tang, 2011). A major assumption of regulatory focus theory is that individuals may approach pleasure and avoid pain in different ways (Brocker et al., 2004). This assumption is reflected in two-major self-regulatory systems; that is "promotion focus" and "prevention focus." The main difference is that individuals using "promotion focus" highlight the potential gains, while those individuals using "prevention focus" concentrate on avoiding potential gains, while those individuals using "prevention focus" concentrate on avoiding potential losses (Brocker et al., 2004). The notions of "promotion focus" and "prevention focus" are consistent with the entrepreneurial thinking that recognizing, reshaping, and responding to opportunities lie at the nexus of the individual and the environment (Shane and Venkataraman, 2000).

With specific regard to contingency theory, a key premise is that managerial actions are affected by forces in the external environment. Previous research has indicated that the environments in which a firm operates play a critical role in determining a firm's strategy (Covin and Slevin, 1991). This study argues that the opportunities afforded by the changing environment provide the setting for the firm to be first and to exploit new market niches and new geographic markets ahead of competitors. To respond to the pressures and take full advantage of new market opportunities available to them, trust network provide the smooth of operational and sometimes even better, the knowledge sharing. There, we draw on fundamental premise in contingency theory to argue that when the environment is in the state of flux, the benefit the firm obtains from trust network in implementing EO is reducing. We capture this reasoning in our proposed conceptual model in Figure 1. As shown in Figure 1, firm performance is influenced by EO. Additionally, the present study contends that the level of trust-based ties boosts the effect EO on firm performance in stable environments. The section that follows next explains the theoretical underpinnings of the present study.

2.2 Moderating effects of inter-organisational trust-based ties

Past entrepreneurial studies have shown that firms can positively influence EO through their networking practices (Parida and Westerberg, 2009). Thus, to fully extract the capability to identify, create and exploit entrepreneurial opportunities, new ventures and small firms benefit from joining networks and thus gaining advantages from external relationships. The effects of networking are widely studied and understood to positively affect entrepreneurial opportunities (Chathot, 2002; Stam, 2010; Gaidici, 2013).

According to Rotter (1967, p.651) trust is "generalised expectancy held by an individual that the word, promise, oral or written statement of a group can be relied upon". Within this definition, there are several aspects, including an expectancy, a promise and an ability to rely on the other party (Schurr and Ozanne, 1985). While definitions such as this are common in the marketing literature, what is lacking is recognition of affective component of trust (Young and Daniel, 2003). Not all exchanges can be accounted for by rational choices (Lawler and Thye, 1999) and some researchers have highlighted the benefits of affective trust for promoting long-term relationship development (McAllister, 1995). Young and Albaum (2002, p.255) therefore have suggested that a more inclusive definition of trust is "an evolving, affective state including both cognitive and affective elements and emerges from the perceptions of competence and a positive, caring motivation in the relationship partner to be trusted".

In contrast to cognitive trust, affective trust is a trusting attitude or motivation focused on another person which is not causally driven (Becker, 1996). Affective trust is based upon interpersonal reciprocity, care and concern displayed (McAllister, 1995). Essentially, affective trust is the confidence placed in another generated through the feelings, care and the concern that the partner demonstrates (Johnson-George and Swap, 1982). It is based upon experiences developed through interactions with a partner and alters over time, depending partly on the frequency of contact (Johnson and Grayson, 2005). Affective trust can be summarised as an emotional bond, feelings related to welfare and concern (Lewis and Weigert, 1985).

Table 1: Elements of trust (Source: D. Dowell et al, 2015)

Base	Element	Definition
Cognitive	Competency	A person's ability to complete a task to a desired level. An industry or academic attainment that creates a perception of a person being capable to complete a task.
	Integrity	Adherence or delivering on what is promised and contracted and conforming to ethical standards.
	Goodwill	Completion of tasks over and above what is required and agreed to. The presumption of a positive orientation, motives and intentions of the other person.
Affective	Relational	Faith in the norm of reciprocity.
	Intuitive	Results from friendship with and/or feelings towards another.

There is also cause to believe that each of the cognitive elements of trust will have direct and positive influences on relationship performance. Competency trust has been found to be important in relationship because there are formal expectations in any relationship, where partners are expected to perform certain tasks to specific levels of competency (Newell and Swan, 2000). Competency trust relates to ability a person has in particular area; when trust is present in this domain the trusting partner allows them to perform the task. Thus, supervision

and negotiations (discussions) savings can be made which enhance relationships performance (Mayer et al., 1995). It is also expected that integrity trust will have a positive influence on relationship performance, Adherence to contracts and principles will make one partner credible to the other (Mayer et al., 1995). If one partner can trust that the other will adhere to their word there can be a reduction in contracting and sanctions, leading to savings and improving relationship performance (Sako, 1992). Moreover, integrity trust is needed to allow large and continuing investments by partners, as partners are required to keep their promises or face a withdrawal of investment (Ahmed et al., 1999). Goodwill trust has been found to influence relationship performance in prior research. Partners who are more benevolent and less self-occupied are more likely to be trusted in situations where little control can be placed on the relationship, allowing activities and initiatives which may yield better outcomes (Ganeson, 1994). Therefore, if goodwill trust is present, partners are more likely to remain confident of the other partner, despite short-term inequities because of the benefits associated with the other partner taking advantage of them, therefore reducing monitoring costs and increasing performance (Ganeson, 1994).

Lastly, there is evidence that the elements of affective trust directly influence performance. Affective trust is likely to influence relationship effectiveness through the participants operating together with less regards for monitoring, more personal contact through better relational citizenship and assistance (Massey and Dawes, 2007), Morrow et al. (2004) found that intuitive trust influenced performance, though it was mediated by general trust. Two other studies also found that affective trust influenced relationship performance through mediating variables. McAllister (1995) found that affective trust influences performance, through mediated by citizenship behaviour and monitoring (McAlliser, 1995). Johnson and Grayson (2005), however, found that affective trust had a direct effect on future interactions. For relational trust, they found that no trust in the partner's reciprocity would mean that the person would likely terminate the relationship or seek further assurances. While for intuitive trust, they found that initial distrust based on various types of cues would also drive the need for greater assurances and perhaps lead to distrust and even early termination of the relationship.

This study, therefore, hypothesizes that:

H1: Cognitive trust positively moderates the relationship between EO and firm performance.

H2: Affective trust positively moderates the relationship between EO and firm performance.

2.3 Joint effects of trust-based ties and perceived environmental dynamism

To understand the boundary condition and the role of inter-organisational trust-based ties on the link between EO and firm performance, this study further investigate how environmental dynamism impacts EO-firm performance relationship. Dynamism refers to the extent to which the environments in which firms operate are subject to unpredictable and rapid change and subsequently to high levels of uncertainty (Dess and Beard, 1984; Miller, 2007). The literature on trust conceptually argues that trust can be more valuable in dynamic market because it allows managers leading their firms in dynamic environments to deal with the turbulence and uncertainty as these dynamic environments generate high levels of activation (Baron and Tang, 2011; Baas et al., 2008). Based on this insight, this study argues that dynamic environments can relate to the moderating effect of trust network on EO-firm performance relationship.

The extant management literature argues that entrepreneurship is marked by good resource allocation. Thus, this study argues that inter-organizational trust is important in

leveraging EO's full potential in entrepreneurial firms. This is because the extent to which people experience feelings of secure when engaging in work-related activities does not only make them support entrepreneurial activities, but to focus their cognitive efforts towards exploiting knowledge resources to develop capabilities to manage environmental pressures (Kogut and Zander, 1992; Cardon et al., 2009; Foo et al., 2009). These feelings appear to be even more important when environmental dynamism is rapid. This suggests that the moderation effect of inter-organizational trust on the relationship between EO and firm performance will be much stronger in dynamic environments that generate high levels of activation than ones that generate lower levels of activation. Essentially, high dynamic environments are more likely to induce high levels of activation among managers than less dynamic environments.

Highly dynamic environments are unpredictable and filled with rapid and dramatic change which often involves high levels of uncertainty and risk, plus the necessity for making key decisions on the basis of incomplete information (e.g. Aldrich, 2000; Miller, 2007). Thus, for these reasons, are likely to be higher in dynamic than stable markets environments. Under such conditions, inter-organisational trust can become suitable for enhancing the effect of EO, which will lead to greater firm performance.

In addition, if the environment is entirely unpredictable it suggests that opportunities also emerges regularly to which entrepreneurial firms must react swiftly (Helfat et al., 2007). This might be especially difficult to spot when the environment is in a state of flux (Haleblian and Finkelstein, 1993). Accordingly, as environments become more dynamic, intangible or tangible resource gather from the trust-based ties is expected to be seek by the top managers to improve their assessment and understanding of new opportunities and threats confronting the firm. It is further contended that if the environment is entirely predictable and static, it impose less challenging and complex conditions on firms such that they can be successful with

H3: The moderating effect of cognitive trust on the relationship between EO and firm performance is stronger when environmental dynamism is high than when it is low.

H4: The moderating effect of affective trust on the relationship between EO and firm performance is stronger when environmental dynamism is high than when it is low.

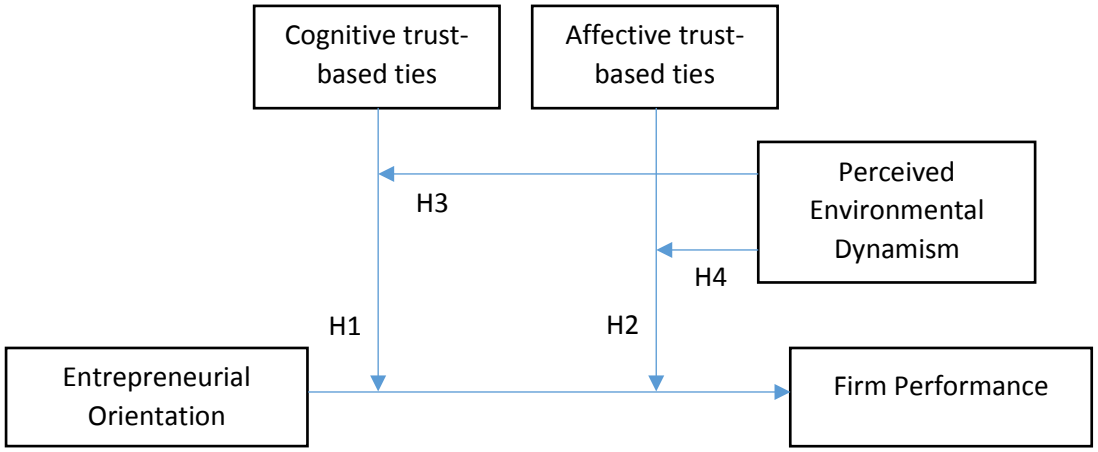


Figure 1: Research model

3.0 Methodology

3.1 Sample and data

This research defines an SME as a firm with ≤200 employees or sales turnover ≤ RM50 million for manufacturing, while a firm with ≤75 employees or sales turnover ≤ RM20 million for services and other sectors. This definitional criteria of an SME in Malaysia stems from SME Corporation Malaysia. Potential survey respondents that met the SME definitional criteria will then randomly selected from the business directory of SME (Acquaah, 2007) to test the hypotheses which yielded an initial sample of 274 SMEs.

Data will be collected through the on-site administration of a questionnaire. A letter or an email (which they preferred) will be sent to CEOs requested that the chief executive or another member of the top management to complete the questionnaire. Usable responses were received from 253 firms yielding 92.3 percent response rate. To assess non-response bias, this study will compare early and late respondents (Armstrong and Overton, 1977). Multivariate t-tests with EO, cognitive trust, affective trust, environmental dynamism and firm performance showed no significant difference between early and late respondents, suggesting that non-response bias is not a concern in the data.

As the study was designed to cover only the service sector of the economy, businesses that fell within the manufacturing and agricultural sectors were not considered in the present study. The reason for choosing the service sector was that, the main focus of the Malaysian economy rests on the services as the SMEs establishment and contribution of SMEs to overall GDP are higher than other key economic activity (BNM quarterly report, 2018; SME Annual Report 2016/2017, September2017).

3.2 Measure of constructs

The core constructs were measured using established multi-item scales in the literature. Table 2 provides an overview of the variables, the corresponding set of items measured on a seven-point Likert scale, their means and standard deviations, standardized factor loadings, Cronbach's α, and average extracted variance.

Table 2: Constructs, measurement items, reliability and validity tests

Items description	**Factor Loading (t-values)**
EO (Hughes and Morgan, 2007): α = 0.92, CR = 0.78; AVE = 0.58	
We actively introduce improvements and innovations in our business.	0.852 (41.23)
Our business is creative in its methods of operation.	0.815 (33.31)
Our business seeks out new ways to do things.	0.840 (38.21)
The term "risk taker" is considered a positive attribute for people in our business.	0.693[b] (18.19)
People in our business are encouraged to take calculated risks with new ideas.	0.720 (21.14)
Our business emphasizes both exploration and experimentation for opportunities.	0.664 (17.24)
We always try to take the initiative in every situation (e.g., against competitors, in projects when working with others).	0.800 (30.62)
We excel at identifying opportunities	0.705 (20.10)
Market orientation (Vorhies and Morgan, 2005): α = 0.89, CR = 0.71; AVE = 0.62	

Our top managers are able to gather information about customers compared to most important competitors	0.662 (16.49)
We are able to use market research skills to develop effective marketing programmes	0.705 (19.30)
Our top managers have the ability to track customer wants and needs compared to most important competitors	0.815 (31.82)
We are able to make full use of marketing research information compared to most important competitors	0.895 (47.99)
This company is able to analyse its market information compared to most important competitors	0.827 (33.82)
Environmental dynamism (Miller, 1987): α = 0.73, CR = 0.59; AVE = 0.50	
Growth opportunities in the environment have increased dramatically	0.602 (11.70)
Rate of innovation of new operating processes and new products or services in your principal industry rate has fallen dramatically (reversed code)	0.576 (11.59)
Research and development (R&D) activity in your principal industry has substantially increased	0.888 (21.42)
Cognitive trust (Sirdeshmukh et al., 2002; Ganesan, 1994): α = 0.91, CR = 0.73; AVE = 0.55	
Promises made by this supplier rep are reliable	0.667[b] (17.69)
This supplier rep has made sacrifices for us in the past	0.743 (24.01)
This supplier rep cares for us	0.770 (27.06)
In times of shortages, supplier has gone out on limb for us	0.680 (18.47)
We feel like this supplier is our friend	0.820 (35.36)
I feel the supplier rep is very competent	0.924 (73.22)
I feel the supplier rep is very dependable	0.807 (32.79)
This supplier rep is very knowledgeable about their product/services	0.677 (18.34)
The supplier rep has problems answering our questions (reversed code)	0.525 (10.84)
Affective trust (McAllister, 1995; Morrow et al., 2004): α = 0.91, CR = 0.77; AVE = 0.63	
We have a sharing relationship, we can freely share ideas, feelings and hopes	0.603[b] (13.96)
I can talk about difficulties and they will freely listen	0.687 (18.95)
If I shared problems with them, they would respond constructively and caringly	0.730 (22.76)
My instincts tell me I can trust them	0.897 (57.19)
My intuition tells me that I can trust this person	0.910 (63.53)
I have a haunch I can trust this person	0.886 (53.95)
I have a gut feeling I can trust this person	0.781 (28.68)
Firm performance (Anderson and Eshima, 2013): α = 0.92, CR = 0.85; AVE = 0.71	
Top managers' evaluation of sales growth rate compared to rivals in the last three years	0.816[b] (35.16)
Top managers' evaluation of growth in full-time employees compared to rivals in the last three years	0.590 (13.48)
Top managers' evaluation of productivity growth compared to rivals in the last three years	0.911 (67.88)

Top managers' evaluation of growth in profit compared to rivals in the last three years	0.928 (82.18)
Top managers' evaluation of overall company growth in full-time employees compared to rivals in the last three years	0.940 (91.19)

3.3 Reliability and validity assessment

To evaluate the reliability and validity of each construct, an exploratory factor analysis (EFA) will run for the sample. Items will be further refined in confirmatory factor analysis (CFA) using STATA. The final CFA results show a good fit to the data. A satisfactory model fit was obtained: χ^2 (degrees of freedom (df)) = 840.16 (482); $p < 0.00$; root mean square error of approximation (RMSEA) = 0.05; non-normed fit index (NNFI) = 0.94; and comparative fit index (CFI) = 0.92. Factor loadings for each construct are significant at 1 percent for sample, which supports convergent validity of measured (Bagozzi and Yi, 1988).

Reliability was assessed using two indicators of convergent and discriminant validity: composite reliability (CR) and average variance extracted (AVE). First, estimation of discriminant validity of the constructs was carried out by calculating the square roots of AVEs for all multi-item constructs (Table 2). The results show that, for all constructs, each correlation of one construct with another is smaller than the square roots of its AVE, indicating discriminating validity for out measures (Fornell and Larcker, 1981). Therefore, the study's measured concepts differ significantly from each other (Bagozzi and Philips, 1982). Second, convergent validity was tested for the study's scales through the assessment of the composite reliability (CR). Estimate of CR above 0.60 and statistically significant concept-to-domain coefficients ($t > 2.0$; $p < 0.05$) are usually considered supportive of convergent validity (Bagozzi and Yi, 1988). All values had CR significantly higher than the stipulated criteria, and all items were statistically significant (Table 2). Correlations between constructs are provided in Table 3.

4.0 Results

Table 3 contains the descriptive and correlations statistic for the study variables. Moderated hierarchical regressions is used to test the hypotheses (Cohen and Cohen, 1983), with a mean –centering procedure for the independent and moderating variables to minimize multicollinearity (Aiken and West, 1991). The variance inflation factors were all lower than the critical value of 10, suggesting that multi-collinearity is not a concern in our data (Neter et al., 1996). In Table 4, the regression results for several models. Model 1 contains only the control variables, Model 2 adds the effect of EO, Model 3 and 4 add the direct effect of affective trust, cognitive trust and perceived environmental dynamism. Model 5-6 add the two corresponding interaction terms one at a time, in order to avoid the masking of true interaction effects (Cohen and Cohen, 1983; Aiken and West, 1991), as suggested in prior entrepreneurship. In model 2, consistent with the starting point of the theoretical review, this study find a positive effect of EO on performance ($\beta = .536$, $p<.001$), and the EO variable explains additional variance ($\Delta R^2=.271$, $p<.100$). In model 3 and 4, the additional of the two elements of trust and perceived environmental dynamism further increases the explained variance ($\Delta R^2=.332$, $p<.010$), suggesting that these factors also affect firm performance. The main effect of cognitive trust is positively significant and the main effect of perceived environmental dynamism is negatively significant, whereas the main effect of affective trust is not significant.

Hypotheses 1-2 predict positive moderating effects of the affective trust and cognitive trust variables on the relationship between EO and performance. To test these hypotheses, the individual interaction terms were added in Model 4 and 5. It is noted that each of the interaction terms improves the explanatory power of the models.

Model 4 and 5 reveals a positive and significant interaction effect between EO and cognitive and affective trust on performance (β=.13, p<.05; β=.14, p<.05). To understand the nature of the interaction, a simple slope test was conducted, following Aiken and West (1991). As illustrated in Figure 2, it was found that the relationship between EO and firm performance is stronger at high level of cognitive and affective trust and negative at low levels. This findings provides strong support for Hypothesis 1 and 2.

Hypotheses 3-4 predict a three-way interaction effect among EO, cognitive and affective trust and environmental dynamism on firm performance. As hypothesized, the three-way interactions effect are positive and significant (β=.20, p<.01) (β=.19, p<.05), indicating that the moderation effect of cognitive and affective trust on the EO-performance relationship is generally affected by a dynamic environment (Krishnan et al, 2006). Therefore, H3 and H4 were also supported. The results indicate that EO and cognitive and affective trust are jointly reinforcing and complementary in terms of their influences on firm performance and that this relationship is improved in dynamic environments.

Finally, several post-hoc analyses were run to test the robustness of the results. Firstly, the sample was split into two halves for each of the three moderators, using the mean as the cut off value (De Clercq et al., 2010; Sarin and Mahajan, 2001) and estimate Model 4 and 5 for each half. The relationships were found consistent with the results in Table 4. Specifically, the relationship between EO and performance is positive and significant at high levels of cognitive trust (p<.01) and affective trust (p<.001). At low levels, the relationship between EO and performance is weaker and marginally significant at p<.10. In order to investigate the direction of this moderation, the slopes for the eight relevant cases (combining high/low cognitive and affective trust and high/low environmental dynamism) are plotted (see Figure 3) and the resulting plots are examined by conducting a slope different test, following procedures in previous studies (e.g. Adomako et al., 2010; Dawson and Richter, 2006). Figure 3 depicts the pattern of moderated results related to H3 and H4. These results highlight the configuration influence of cognitive and affective trust on EO to enhance firm performance in dynamic environments. Overall, these findings from the three-way interaction analysis partially support H3 and H4 that EO is highly related to firm performance when the elements of inter-firms trust is high, and either dynamic environment high or low. Specifically, EO-performance relationship is much enhance in lower than high dynamic environment.

5.0 Discussion and implications

Guided by the RBV, contingency theory and regulatory focus theory, the present study develops theoretical arguments regarding how inter-organizational trust within the supply chain facilitate EO-firm performance relationship. It also introduces the degree of environmental dynamism in order to clarify the boundary conditions of inter-organisational trust's role in terms of the EO-firm performance relationship. In addressing this gap, this study's findings highlight several theoretical and practical implications. Empirical findings suggest that inter-organisational trust facilitates the association between EO and firm performance, but react opposite in dynamic environment. These findings contribute to the EO literature and the inter-organisational trust literature.

The study's contribution to the EO literature is the empirical validation of the theoretical argument that a firm's EO-performance relationship is moderated by inter-firm trust). In the line with the study's theoretical arguments, inter-organisational trust moderates the EO-performance relationship, particularly in dynamic environments. This study also takes the complementary perspective of RBV to study how a firm's resource (i.e. EO) interacts with the network (i.e. inter-organisational trust) to simultaneously impact firm performance. To make up for the limitation of the RBV, this study further tested the impact of the three-way interaction of EO, inter-organisational trust, and environmental dynamism on firm performance.

Second, this study contributes to the existing management literature by considering the joint effect of environmental dynamism and inter-organisational trust on the relationship between EO and firm performance (H3 and H4). Indeed, previous scholarly studies have investigated the moderating role of environmental dynamism or uncertainty on the EO-performance relationship (e.g. Covin, 1991). Other scholars have also examined internal factors such as social exchange process (e.g. De Clercq et al., 2010), strategic process (e.g. Covin et al., 2006), and top management transformational leadership as positive moderators on EO-firm performance relationship (e.g. Engelen et al., 2015). However, none of these earlier studies have considered the joint effect of different level of inter-organisational trust and environmental dynamism on EO-firm performance relationship.

The findings from this study provide managers with a deeper understanding of how to achieve superior firm performance, especially when firms are entrepreneurially oriented. First, the results of this study show that cognitive trust can help firms to implement a strategic orientation to enhance their relationship with performance as cognitive trust has been proved to be associated with relationship commitment and information sharing (De Clercq et al, 2010). More specifically, firm's cognitive trust enables a firm to implement an entrepreneurially oriented strategic posture more effectively and efficiently than it could if the firm's has more or strong cognitive trust with their shareholders. This insight, which supposedly is particularly important for entrepreneurially oriented firms that operate in dynamic business which are commonly characterized by rapid change in customer needs or quick technological developments. However, the empirical results showed the opposite proving that opportunistic behaviours in SMEs lowering the positive effect of cognitive trust.

Second, the present study in the Malaysian context has great implications for Malaysian firms. It reminds managers that in order to enhance firm performance, firms must not only be entrepreneurially orientated, but pure and strong inter-organisational relationship. When managers have full confidence in one another's honesty and truthfulness, they experience less need to monitor potential defective behaviour by others, have more time to invest in extensive knowledge exchange, and exhibit a higher motivation to share tacit knowledge (De Clercq et al., 2010; Yli-Renko et al., 2001; Zaheer et al., 1998), which facilitates the effective implementation of EO. In contrast, at low level of trust, EO-performance relationship may turn negative, perhaps due to give away power when sharing knowledge (Kim and Mauborgne, 1998), which can be detrimental to the viability of the organization's entrepreneurial opportunities (Floyd and Lane, 2000). In such case, poor knowledge exchange may worsen the uncertainty and costs associated with EO (Lumpkin and Dess, 1996).

Third, firms need to recognize trust network alone may not always strengthen the EO-firm performance relationship. The current empirical findings suggest that the benefits of aligning EO with firm's cognitive- and affective- trust network depend on the rapidly changing external market environment (i.e. environmental dynamism). The findings from this study suggest that in dynamic environments, the positively moderating effect of inter-organizational

trust is enhancing. Thus, firms prioritizing EO can improve firm performance by adopting an approach to train or place the managers who are able to analyse and observe the sign of opportunistic behaviours of firm's external networks, to minimize the impact of mistrust and permit the firm to be positive toward EO implementation. As suggested by the regulatory focus theory (Higgins, 1997), individuals may not attach the same weight to potential opportunities as to the potential risks. This study suggest that it is important to develop a self-regulatory technique that may be beneficial to managers who are best able to regulate and direct firm's external networks.

6.0 Conclusion, limitations and future research

The present study has several limitations that offer avenues for future research. First, this study employed subjective measures of firm performance. The use of self-reported and perceptual measures of firm performance has the potential to introduce respondent bias to the sample. Although prior research has suggested that subjective measures of firm performance are correlated with objective measures with a high degree of reliability (e.g. Dess and Robinson 1984), it is possible that there are gaps between subjective measures and the financial information released by firms. This study suggests that future research should makes use of secondary source of financial information to assess firm performance.

Second, because the study used cross-sectional sample, it did not allow casual claims to be made. Especially because this study focusses on firm performance, a major avenue for future research should be the exclusion of a potential endogeneity bias in this relationship (Hamilton and Nickerson, 2003) by using longitudinal data.

In conclusion, the present study sought to enhance our understanding of how EO, elements of inter-organisational trust and environmental dynamism influence firms' performance in general. Specifically, this study found that the influence of EO on firm performance is moderated by inter-organisational cognitive trust. Therefore, the present study does not only theoretically highlighted the important influence of inter-organisational trust on firm performance, but also provided supporting empirical evidence, thereby advancing our understanding of EO and its implications for firm performance. The study also found that the joint effect of EO and inter-organisational trust on firm performance is further moderated by environmental dynamism. These findings provide insights regarding how firm should balance their EO and trust-based ties in constantly changing market environments.

Table 2: Descriptive statistics and correlations

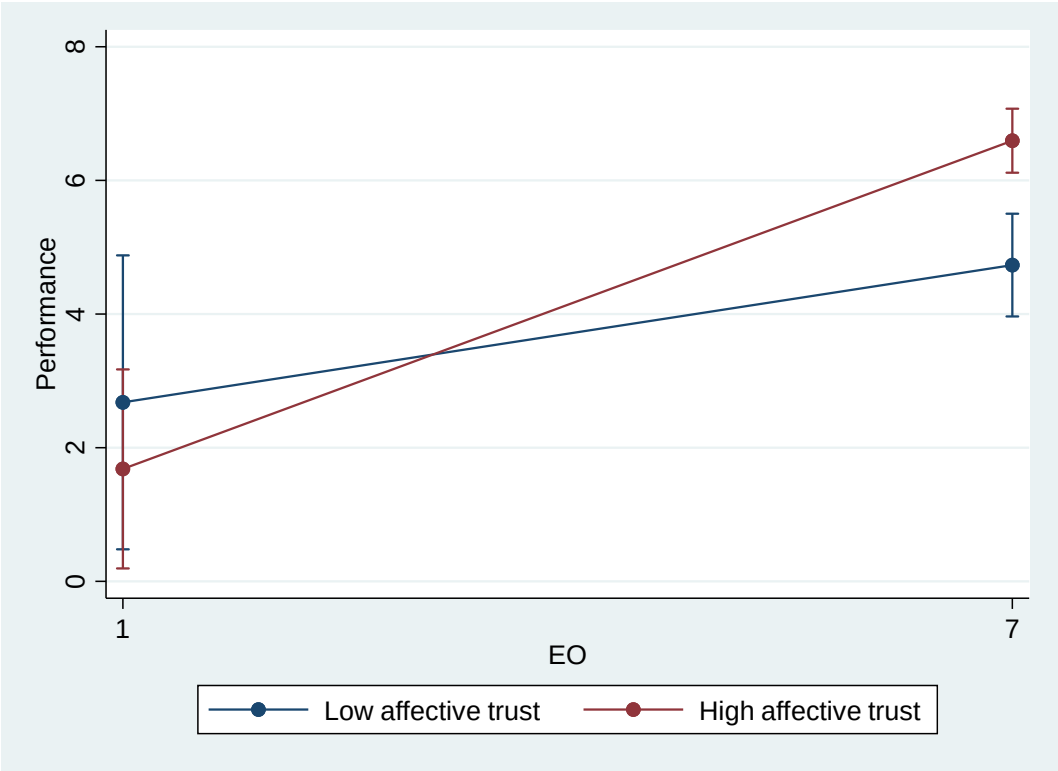
	Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Firm age (years)	1.95	0.59	1.00											
2	Firm location (1 = urban)	0.91	0.28	-0.059	1.00										
3	Type of business (finance-related)	0.18	0.39	0.313*	0.146*	1.00									
4	Legal (1 = informal)	0.70	0.46	-0.069	0.230*	0.171*	1.00								
5	Market orientation	5.14	0.88	0.076	0.009	0.008	0.094	1.00							
6	Education (graduated)	0.40	0.49	-0.044	0.137*	-0.008	0.246*	0.031	1.00						
7	Management experience	0.68	0.47	0.217*	0.086	0.173*	0.161*	0.190*	0.082	1.00					
8	Entrepreneurial orientation (EO)	5.49	0.77	0.051	0.092	0.016	0.113	0.697*	0.049	0.170*	1.00				
9	Cognitive trust (CT)	4.90	0.96	0.222*	-0.053	0.133*	-0.083	0.148*	-0.180*	0.063	0.171*	1.00			
10	Affective trust (AT)	4.71	1.01	0.151*	-0.054	-0.026	-0.045	0.080	-0.177*	0.035	0.117	0.829	1.00		
11	Perceived environmental dynamism (PED)	4.91	1.08	0.019	0.156*	-0.122	0.0938	0.361*	0.028	0.170*	0.496*	0.011	0.151*	1.00	
12	Firm performance	4.93	1.01	0.038	0.134*	-0.039	0.087	0.413*	-0.049	0.170*	0.508*	0.331*	0.262*	0.217*	1.00

Notes n = 253. SD = standard deviation. *Correlation is significant at the 0.05 levels.

Table 3: Ordinary least squares estimation of performance

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**
Constant	4.307***	4.449***	4.518***	4.477***	4.551***	4.588***	4.808***	4.818***
Firm control variables								
Company age (years)	0.041	0.039	-0.037	-0.031	-0.080	-0.071	-0.116	-0.128
Company location (urban)	0.505**	00.391*	0.425*	0.456*	0.450*	0.414*	0.500**	0.546**
Type of business (finance related)	-0.249	-0.236	-0.322*	-0.340*	-0.428**	-0.201*	-0.298*	-0.262
Legal form (informal)	0.100	0.078	0.121	0.122	0.138	0.131	-0.026	-0.021
Market orientation	0.452***	0.128	0.112	0.116**	0.122	0.142+	0.156*	0.154+
Individual control variables								
Higher education	-0.206+	-0.212+	-0.127	-0.129	-0.130	-0.135	-0.175	-0.201
Management experience	0.206	0.180	0.179	0.187	0.231*	0.203+	0.169	0.151
Main effect variables								
Entrepreneurial orientation (EO)		0.536***	0.484***	0.524***	0.270***	0.368***	0.384***	00.369***
Cognitive trust (CT)			0.333**	0.300**	0.342	0.260**	0.240*	0.352**
Affective trust (AT)			-0.054	-0.023	-0.015	-0.159	-0.005	-0.083
Perceived environmental dynamism (PED)				-0.063	1.135**	1.060*	-0.132*	-0.129*
Two-way interaction								
H1: EO x CT					0.131*		0.043	
CT x PED					-0.160*		-0.034	
EO x PED					-0.074	0.101	-0.113	-0.013
H2: EO x AT						0.140*		-0.033
AT x PED						-0.124*		-0.060
Three-way interaction								
H3: EO x CT x PED							0.195**	0.192**
H4: EO x AT x PED								
Model fit								
F-value	9.31***	12.71***	13.53***	12.41*	10.44*	10.44	6.34**	9.76**
R^2	0.210	0.294	0.359	0.362	0.381	0.381	0.349	0.382
Adjusted R^2		0.271+	0.332+	0.332**	0.344*	0.344***	0.306**	0.343*

Notes: n = 253. Dependent variable firm performance. ***p<0.001, **p<0.01,*p<0.05, +p<.10.



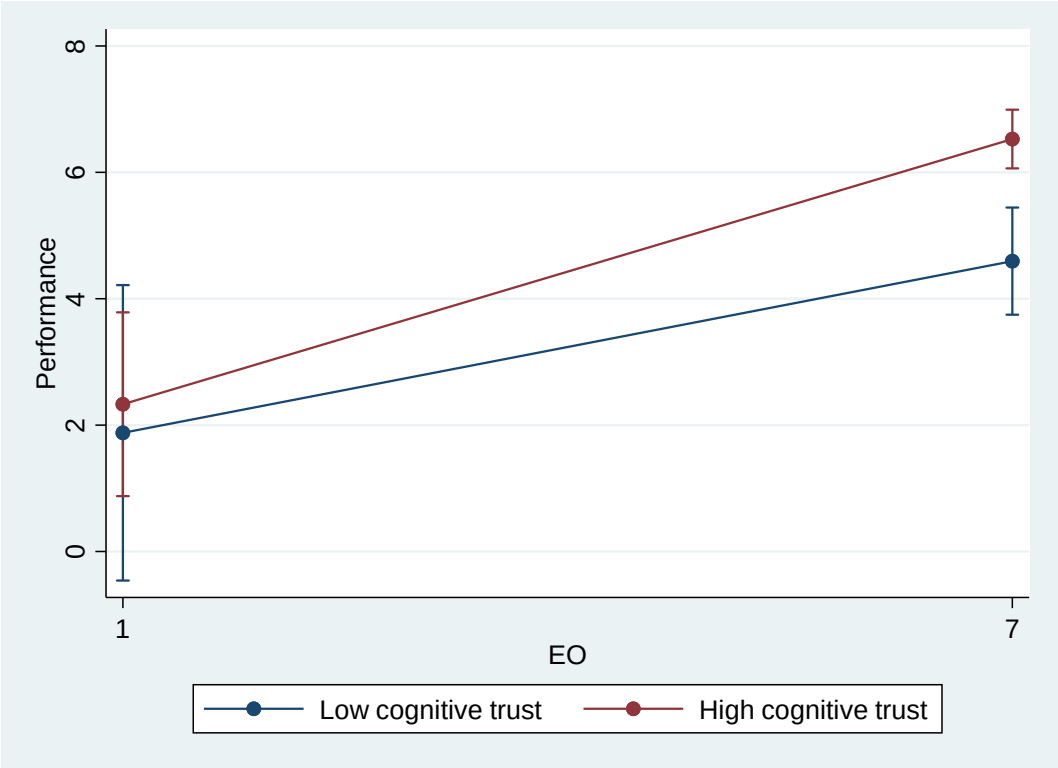
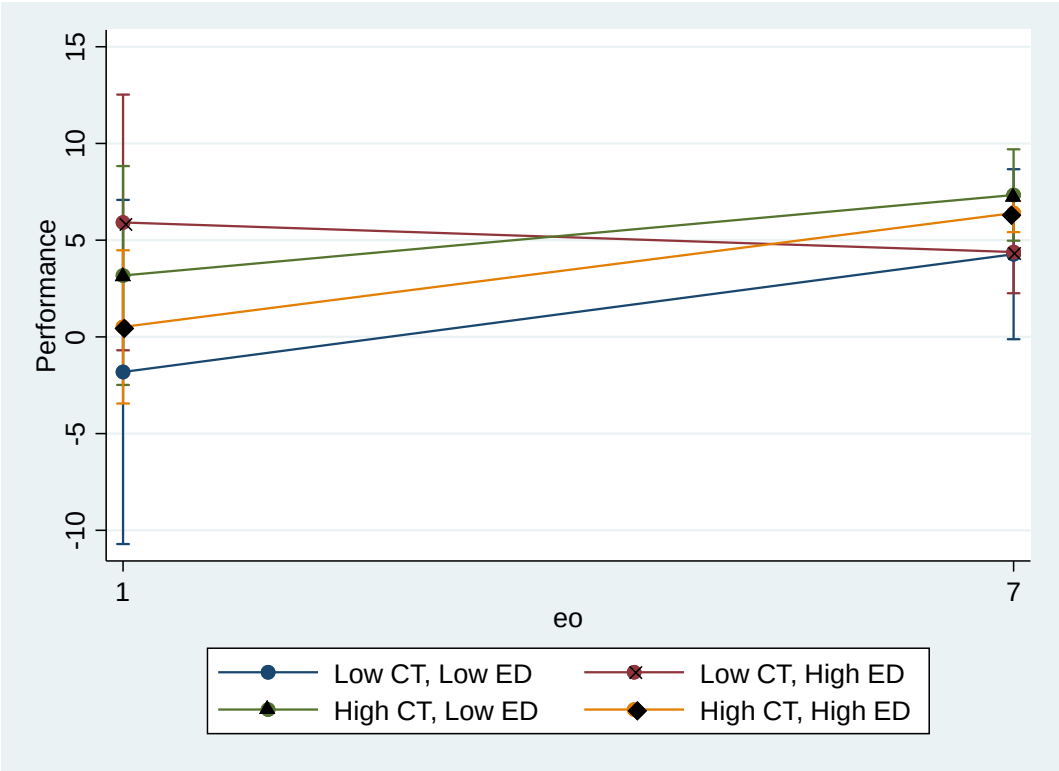


Figure 2: Moderating effects of cognitive trust and affective trust on the EO-performance relationship



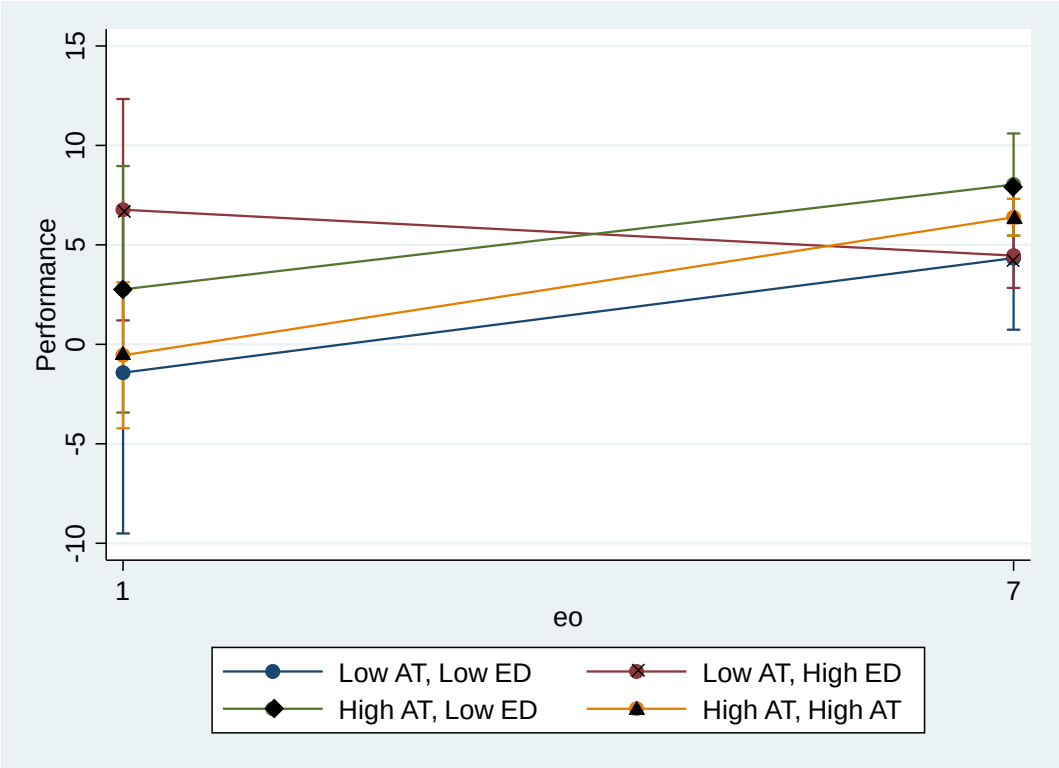


Figure 3: Interaction effects of EO with cognitive and affective trust and environmental dynamism on the EO-performance relationship

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