

# Interlocking Effects of Self-Efficacy and Self-Regulation on Social Ties and Social Entrepreneurial Orientation

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#### **Abstract**

In recent years, the projection of Social entrepreneurs' cognitive drive is a critical factor that needs attention in determining the efficiency of social entrepreneurial orientation in entrepreneurship studies. In order for Social entrepreneurs to be fully oriented in improving social well-being through long term developmental project and not merely considered to perform acts of charity, there has to be a social cognitive mechanism as a key characteristic of social value creation. There are however, significant gaps in understanding social entrepreneur orientation hence, few empirical studies on the subject. This paper using both the Social Network and Social Cognitive theories attempts to identify the relationship between Social ties, self-efficacy, self-regulation and entrepreneurial orientation outcomes. Using the Partial lest square of the structural equation model to analyze a survey data of 397 Philanthropist (i.e. social activist, environmentalist and other social innovators) NGOs in Ghana, the findings proved that, the level of an individual's self-efficacy and Self-regulation is not only important to consider as a driving social entrepreneurs' cognitive behaviors but also fruitful in improving social Entrepreneurial orientation. The study reveals some directions for social innovators seeking to promote their social entrepreneurial orientation skills using cognitive measures alongside social connections in solving a social problem.

Keywords: key words, business ties; political ties; self-efficacy; self-regulation; social entrepreneurial orientation

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#### 1. Introduction

In an increasing scholarly era of innovation, having a critical assessment of factors that shapes and strengthen Social Entrepreneurial Orientation (SEO) capability to perform is a key issue to discuss in the management field. Having passion and capability to perform a specific task is the most potent way in which a social entrepreneur with social ties (CL Wang, HFL Chung 2013) can strengthen the act of being proactive, innovative and risk taking (W. Zhu et al., 2017) to perform efficiently. Many resources and benefits accrued from these social ties would be used judiciously and efficiently to affect lives positively in the society by a social entrepreneur with high self-efficacy and self-regulation.

Extensive research proves that, Social entrepreneurial orientation is characterized by how well a social entrepreneur is motivated by his/her own perceived belief in accomplishing a specific task which is described as perceive self-efficacy (Bandura ,1997) and how it is regulated (Grant & Higgins, 2003). Given this analogy, one might assume that Social entrepreneurs are naturally self-efficacious, since they are being defined with Proactiveness, Risk taking and Innovativeness (Wiklund, 1998). However, a critical assessment of social entrepreneur's performance shows that the capabilities vary from persons to persons even with all things being equal and equal opportunities given (Wiklund, 1998). After critical assessment, a research question is developed: To what extent does social ties enhance social entrepreneurial activities? The aforementioned observation thus necessitates the need to evaluate the effects of cognitive mechanisms on SEO and its social ties.

On the alert of this phenomenon, management scholars have sought to identify the factors that affect social entrepreneur propensity to operate in different environment under several conditions (e.g., W. Zhu et al, 2017; Anderson, B.S., Eshima Y., 2011). Even though this body of work outlines insight into how social entrepreneurs may exhibit all the characteristics needed for high level of social impact, it is also important to understand which social entrepreneur performs best and why. Still very little research has scrutinized the cognitive drive of a social entrepreneur to unveil why some are limited in implementing ideas, fore sighting and readiness to embrace circumstances on a specific task when equal opportunities and resources from their social ties are being provided. Social ties (CL Wang, HFL Chung 2013) unlike previous studies which commonly tackles it from the weak and strong ties perspective, here refers to both the business and political ties normally considered by scholars as managerial ties (K.M. Ismail et al., 2012). Existing literature contribute more to the social Networks at the organizational level (macro) other than Individual level (micro). This research seeks to combine both social network theory and social cognitive theory at the individual level to provide such insight by drawing attention to the cognitive aspect that may lead some social entrepreneurs to become highly productive in problem solving.

Our perspective on Self-efficacy consists of three core arguments. First, we draw from Social Network theory



and other related studies on Social ties (Granovetter, 1985; Peng and Luo, 2000) to propose that, forming networks which is an effective means for social entrepreneurs to gain access to a lot of opportunities for problem solving is not enough tool for success hence there are other driving forces.

Furthermore, drawing from the social cognitive theory (Bandura ,1997), we emphasize on the points from previous scholars (Fast, Burris, and Bartel, 2014) that a central feature of an entrepreneurial orientation is to demonstrate high self-efficacy and self-regulation, to possess ample confidence necessary to be efficient in solving a specific problem in as much as the magnitude of entrepreneur's internal capabilities varies. Moreover, based on previous related research, we suggest that being a social entrepreneur doesn't guarantee a possession of entrepreneurial characteristics, there are causal agents behind an individual's ability to be proactive, innovative and risk loving which boosts the strength of entrepreneurial orientation.

This research aims to contribute to the existing literatures on social ties and cognitive factors. First and foremost, we seek to offer insight into why some social entrepreneurs actively reach out to their social ties for resources, opportunities and efficiently put them to use and why others are limited by their own actions. Specifically, we propose that the relationship between social ties and social entrepreneurial orientation has a positive impact and stronger when self-efficacy and self-regulation influence this relationship (Bandura, 1991).

Second, we seek to highlight from the social cognitive theory how self-efficacy and self-regulation serve as better mechanisms to influence pro-activeness, Risk taking and Innovativeness in enhancing and building entrepreneur's capacity to be more efficacious. In other words, we examine these entrepreneurs' variations in performance as a cognitive phenomenon rather than tangible and intangible resource effects (B.S. Anderson, Y. Eshima 2011).

Third, this study contributes to the social entrepreneurship literature, which has invested meaningful effort in understanding the outcomes of various entrepreneurial orientations and its social ties but has generated less knowledge about the determinants of building an efficient entrepreneur orientation. The arguments and studies described in this paper will project social entrepreneur's cognitive drive as a critical factor that determines efficient entrepreneurial orientation. For as long as entrepreneurs with varying Self-efficacy and self-regulation come into contact with social ties, the cognitive aspect that grooms a social entrepreneur's characteristics when well understood is an essential effort.

#### 2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

# 2.1 Social ties and social entrepreneurial orientation

The term social entrepreneur in recent years has been used frequently in the field of academia and business (Witkamp, Royakkers, and Raven 2011). Considering the fact that it has been used in diverse ways with different perspectives, some scholars' states there is no clear definition for the concept (Dacin and Dacin 2011; Harding 2004; Mair and Martí 2006; Weerawardena and Sullivan 2006) causing a lot of confusion and gaps in specialized literature and empirical studies (Cukier et al. 2011; Helm and Andersson 2010; Mair and Martí 2006; Nicholls 2006; Zahra et al. 2008). This is because there is more to who a social entrepreneur is, than to be seen as just social problem solvers (Austin et al. 2006; Martin and Osberg 2007; Zahra et al. 2009). Other scholars after critically assessing this definition as elemental approach which does not reflect social entrepreneurs' motivations, examined deeper ideas that reflects a more idealistic concept of social entrepreneurs and more pragmatic perspective (Miguel et.al, 2013). From the idealistic perspective, authors such as Mort, Weerawardena, and Carnegie (2003); Peredo and McClean (2006); Chell 2007; Light 2006; Mair and Martí 2006; Roberts and Woods 2005, attribute social entrepreneurs with the aim of social value creation, innovation, taking risk, and the creation and diffusion of social values to bring social well-being to the community which creates deep transformation in the society at large. Several scholars (Austin et al. 2006; Boschee, 2001; Defourny and Nyssens 2010; Haugh 2007; Nicholls 2006; Thompson, Alvy, and Lees 2000) with the pragmatic ideology considers that social entrepreneurs seek to generate revenue by obtaining social results focusing greatly on community's social welfare than for making money. Combining both idealistic and pragmatic ideas, a more detailed definition for social entrepreneur is the kind of entrepreneur who focuses on seeking solutions through building, evaluating, and pursuing opportunities to solve social problems, permitting the generation of sustainable social value, including nonprofit organizations, firms, and governmental organizations' direct actions in achieving new stable balances (Guzmán and Trujillo, 2008).

Social entrepreneurship has some set of attributes and behaviors that form the backbone to social entrepreneur's culture. One of the components of this culture is networks (Baum et.al, 2000). Social networks adding up to an individual competency by having access to opportunities from its ties, being able to tap these resources and utilizing it efficiently is an integral aspect of social entrepreneurial orientation. Ties with business partners is an important predictor of business success that creates opportunities in facilitating information sharing, resource exchange and knowledge transfer (Park and Luo, 2001). In this respect, we draw on recent work on Social ties which some scholars refer to as managerial ties (e.g. Chung, 2012; N. Boso et al. 2013) to suit this study by defining business ties as the relationships social entrepreneurs develop with other funding partners and social innovators in a society. In view of this, social entrepreneurs become oriented in being proactive, risk takers and



innovative through this opportunity creation. Business ties helps to overcome institutional barriers as it allows social entrepreneurs connect to banks, suppliers, distributors, buyers and customers (Liao and Welsch, 2003) for support in curbing societal problems.

According to Peng & Luo, (2000), social entrepreneurs can achieve more institutional support, such as enforcement of contracts, favorably interpreting regulations, settlement of negotiations, and erecting entry barriers when there is a strong intimate relationship with government officials. Thus, having close ties with government can help facilitate the social entrepreneur to quickly capture opportunities by accessing the latest news about relevant policies and regulations which aids in industrious planning and to tap scarce resources such as capital support and land.

As (Park and Luo, 2001) mentioned in previous studies, despite the fact that both types of ties impact opportunity capture, they may exert different effects in the sense that business ties involve not only the sharing of operational resources (e.g., raw materials, production facilities, technologies, financial capital, and distribution channels), but also strategic resources (e.g., information, experience, and knowledge). Ozgen and Baron (2007) also stated that entrepreneurs with wide social networks tend to be more successful at grasping opportunities than those with narrower ones. This makes both ties very essential in improving social entrepreneurial orientation as far as this study is concerned even though some fast developing countries like China are shifting from cultivating relationships with government officials to building ties with other business partners (Peng & Zhou, 2005). Therefore:

Hypothesis 1: Business ties have positive relationship with social entrepreneurial orientation Hypothesis 2: Political ties have positive relationship with social entrepreneurial orientation

#### 2.2 Self-Efficacy

Self-efficacy (Bandura, 1989) is the self-confidence built in an individual to perform specific task which varies from persons to persons and that is why individuals having equal ability perform differently. In line with this, irrespective of one positing social entrepreneur characteristics will still perform differently since the degree of self-efficacy existing in every individual differs for a specific task given. The higher the self-efficacy of a person, the greater the efforts to execute for a lengthy period of time, persist through setbacks, be determined for higher achievements and plan more creative strategies and solutions for the task (Bandura, 1989). Even though the basic principles that lies in the theory of self-efficacy from the Social Cognitive Theory derived by Bandura states that people are likely to engage in activities with the perception of being competent which automatically gives an entrepreneur that credits of having a certain level of self-efficacy which cause them to be courageous enough to take up big decisions and still portray all the entrepreneurial characteristics, it is still not enough basis for all social entrepreneurs to be equally effective or efficient when having equal opportunities (like social ties). Scholarly research reveals the influential role of self-efficacy in determining the level of effort, choice and the perseverance of an individual (Chen, Gully, & Eden, 2004) self-efficacy as an important determinant concept of explaining human behavior. As it is clearly stated by Bandura (1997), individuals possessing high self-efficacy for a specific task are most likely to pursue, persist and innovate efficiently in that task compare to those who possess low selfefficacy. Despite the availability of opportunities for an individual, he/she can still be inefficient and ineffective when there is no or low sense of efficacy which will enable one to make good use of the existing abilities. Taking insight from the Social Network Theory which emphasizes on the resources and benefits tapped from Social ties, a social entrepreneur with high self-efficacy would be zealous in strengthening its connections to be able to tap more benefits to solve societal problems. Hence self-efficacy in an important motivational element as it has the ability to increase or reduce an individual's effort.

The above statements prove how an entrepreneur would react differently to opportunities that comes from its social ties when influenced by cognitive thinking which has been described as self-efficacy (Bandura, 1898) and regarded as internal motivation. From this perspective, the following hypothesis were developed:

Hypothesis 3a. Self-efficacy plays a moderation role on the relationship between business ties and social entrepreneurial orientation.

Hypothesis 3b. Self-efficacy plays a moderation role on the relationship between political ties and social entrepreneurial orientation.

## 2.3 Self-Regulation

Another relevant aspect, related to the social cognitive theory, is self-regulation. This is an individual psychological process that significantly contributes to professional performance, since it influences the agency of actions. They aim to explain behavior and its results on the basis of the active perception and interpretation of information by the individual (Grants and Higgins, 2003). The approach taken in this study relies on the social cognitive theory of Bandura (1991, 2006) which can help by providing input on the self-regulatory processes that would result in entrepreneurial orientation development. Self-regulation is defined as the process that includes monitoring, evaluating, and providing feedback on personal actions through self-reinforcement and emotional self-



control to redirect actions toward achieving goals (Bandura, 1991, 2006). The function of self-regulation is to make the actor take personal control of the environment in which he/she is located, increasing his/her capacity as an agent. This is essential in social entrepreneurial activity and leads to successful performance. This study concentrates on promotion focus which is one of the two dimensions (i.e. promotion focus and prevention focus) of self-regulation (Grant & Higgins, 2003). Promotion focus increases the desire to attain gains whereas prevention focus increases the desire to avoid potential losses (P. Bryant, 2009). Based on these mechanisms, entrepreneur's response to opportunities from both business and political ties will be stronger by creating the enabling environment to eagerly seek opportunities through vigilance and cautious means (Grant & Higgins, 2003).

Hypothesis 4a: Self-regulation plays a moderation role on business ties and social entrepreneurial orientation. Hypothesis 4b: Self-regulation plays a moderation role on business ties and social entrepreneurial orientation. Based on these projections, this paper will contribute to existing literatures by exploring and identifying the extent to which social ties enhance social entrepreneurial orientation

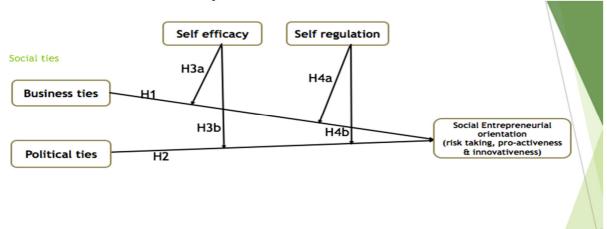


Figure 1. Theoretical model

# 3. Methodology

## 3.1 Sample

The analysis was based on the results collected as a primary data from Ghana through an online survey. There were 397 effective responses from Non-Governmental Organizations (NGO), which was close to the estimated intended sample size of 450 for this study. Participants from Ghana were considered. Ghana is a developing country with a different culture, administrative system and individuals with high sense of social entrepreneurship zeal. The study adopted the Purposive sampling method for the survey. Purposive sampling as stated by Fraenkel and Wallen, (2006) could be used by researchers to dig out those knowledgeable about the target population in achieving the purpose of a study. Potential participants (Philanthropist, social activist, environmentalists and other social innovators) were contacted via email and social media platforms. The demographic information of the respondents and the various social entrepreneurs surveyed is summarized in (**Table 1**).

### 3.2 Procedure

We sampled the social entrepreneurs in Ghana mostly through the help of the internet. Letters were then sent to all the social entrepreneurs sampled mostly through emails, with a brief proposal of the study attached to it. After receiving a reply from those social entrepreneurs who were interested in the study, we sent them the questionnaires which was completed and returned to the research team. It took a maximum of about two months for the entire data collection process.

This study aims to empirically test the influence of Self-efficacy and Self- regulation capability at the individual level on innovative social entrepreneurial behaviors (social networks activities and cognitive mechanisms) of Social entrepreneurs. This resulted to the proposed causal model of antecedents and the adopted method for analyzing the data has been the analysis of structural equation modeling (SEM) using the partial least square (PLS), SEM-specification (Fornell and Chan; 1994). The sample size of 397 qualifies for the use of PLS-SEM since it is more than 100 as proposed by (Kline, 2005). PLS uses ordinary least square (OLS) algorithm. It is designed to reflect the theoretical and empirical qualities of social science and behavior, (Wold, 1979).

#### 3.3 Measurements

This article adapted the Social Entrepreneurship item scale (Carraher, 2013) to measure the dimensions of the dependent variable, Social Entrepreneurial Orientation. 5 item constructs of which some are; 'I am adopting a mission to create social value', 'I am relentlessly pursuing new opportunities to serve my mission', 'I seek to be a world changer through the accomplishment of my mission', were modified to suit the study context. Social ties



being the independent variable was adapted (Yuan Li & Haowen Chen & Yi Liu & Mike W. Peng, 2000). Two dimensions were assessed; Business ties and Political ties. The overall construct consisted of 15 modified items, 7 items measured business ties and 8 items measured political ties. Some items include; 'We have cultivated close connections with our partners', 'Personal relationships with our partners are important to our social responsibilities', 'We ensure good relationship with influential government officials' 'We have invested heavily in building relationships with government officials'. An adapted New general self-efficacy scale (Chen et.al., 2001) was used to measure the moderator, self-efficacy with 6 items. Some items include; 'I will be able to achieve most of the goals I have set for myself' and 'In general, I think I can obtain outcomes that are important to the society'. A standardized regulatory focus scale adapted from Grant & Higgins, (2003) was assessed. It comprises of two dimensions; Promotion pride and Prevention pride but only 4 items of the promotion pride, for example; 'doing well at different things', 'unable to get what you want', deemed fit for this study as a cognitive mechanism promoting Social Entrepreneurial Orientation, hence considered. All variables were rated on a 5-point Likert scale (response ranging from 1 strongly disagree to 5 strongly agree). Some of the control variables considered were; Gender, level of education, year of operation, number of awards and position in organization (Mirabella, 2012; Nga et. al, 2010).

# 4. Data Analysis and Results

Before analyzing the structural model, we assessed the reliability and validity of each construct. (Hair et al. 2010) recommended the acceptance of items with a minimum loading of 0.7. The reliability of the individual items was reasonably judged, given that no items exhibited loading of less than 0.7 (Table 2). Composite reliability (CR) is measured in relation to internal reliability. The CR of all the constructs were above 0.7 (Table 2), which satisfies the rule of thumb in (Hair et al. 2013). The average variance extracted (AVE) was used to evaluate the convergent validity; this value exceeded 0.5 in all the constructs (Table 2) the finding indicates that the convergent validity of these constructs is satisfactory (Fornell and Larcker, 1981). The alpha of all the construct is above 0.7 (Table 2). The R-Square for the dependent variable social entrepreneur orientation is 0.864 (Table 2). The mean, standard deviation (SD) and discriminant validity of all the constructs are summarized in (Table 4). The Q<sup>2</sup> of the dependent variable social entrepreneur orientation is 0.693 (**Table 2**). The Stone-Geisser Indicator (Q<sup>2</sup>) evaluates how much the model approaches what was expected of it (or the model prediction quality or accuracy of the adjusted model). Q<sup>2</sup>>0 means that the PLS-SEM model is predictive of the given endogenous variable under scrutiny (HAIR et al., 2014). From the results, SRMR=0.078 is within the accepted threshold of and NFI=0.840 although it is slightly lower than the 0.90 threshold, it is believed that, one of the consequences of comparison between covariance structure analysis modeling approach and PLS is that, no proper overall goodness-of-fit measures exit for models using the latter (Hulland, J. 1999), (Henseler. J. & Sarstedt, M., 2013). The structural model is often evaluated examining the "R" Square values and size of the structural path coefficients (Alon, I., et. al., 2013). Fig 2, shows the outer model with factor loadings of the structural model according to PLS SEM application method. The structural model resulting from the PLS analysis through the bootstrapping procedure with 397 cases and 1000 samples is summarized in (Table 3), where the T-values observed and their corresponding, path weight (β), Pvalues, and F-Square values with the level of significance achieved from the bootstrap test are shown. For the degrees of freedom, t-values of (t > 1.96) correspond to p-values (\*\*p <0.05) As observed, five out of the six hypotheses presented have been verified. With respect to the relationship of business ties (BT) and the consequent variable of the model, in accordance with hypothesis (H1), the influence of business ties on social entrepreneur orientation (SEO) has been fully confirmed (T=2.982; β=0.366\*\*). The effect of political ties (PT) on social entrepreneur orientation (SEO), H2 is significant (T=2.031;  $\beta$  = 0.166\*\*). Also, the moderating effect of selfefficacy and business ties (SE\*BT) on social entrepreneur orientation (SEO), H3a is positive but not significant (T= 1.411;  $\beta$ = 0.096). Again, the moderating effect of self-efficacy and political ties (SE\*PT) on social entrepreneur orientation (SEO), H3b is negative but significant (T= 2.367,  $\beta$ =-0.186\*\*). The moderating effect of self-regulation and business ties (SR\*BT) on social entrepreneur orientation (SEO) H4a, is negative and significant  $(T=2.612, \beta=-0.116**)$ . Finally, the moderating effect of self-regulation and political ties (SR\*PT), H4b has been fully confirmed (T= 2.153;  $\beta$ =0.152\*\*).



# Table 1

Гable 1			
Gender	Frequency	percent	cumulative percent
male	242	61.0	61.0
female	155	39.0	100.0
Total	397	100.0	
	Level	of education	
High school	2	0.5	0.5
Bachelor degree	29	7.3	7.8
Masters	108	27.2	35.0
Doctorate	189	47.6	82.6
Professional courses	65	16.4	99.0
Others	4	1.0	100.0
Total	397	100.0	
·	Area	of operation	
Ghana	397	100.0	100.0
other	0	0.0	0.0
Total	397	100.0	
	Type of er	trepreneurship	
Philanthropist	100	25.2	3.3
social activist	164	41.3	44.6
Environmentalist	120	30.2	74.8
Others	13	3.3	100.0
Total	397	100.0	
		osition	-
CEO	125	31.5	19.9
Manager	151	38.0	57.9
Human relation officer	79	19.9	61.5
Facilitator	28	7.1	68.5
Others	14	3.5	100.0
Total	397	100.0	100.0
Total		organization	
For Profit	69	17.4	17.4
non-profit	285	71.8	89.2
Others	43	10.8	100.0
Total	397	100. 0	100.0
10111		of operation	
Poverty Alleviation	37	9.3	9.3
Health care	49	12.3	21.7
Education	64	16.1	37.8
Community development	42	10.6	48.4
Shelter	52	13.1	61.5
Disaster relief	40	10.1	71.5
Human right	44	11.1	82.6
Women empowerment	35	8.8	91.4
water supply	16	4.0	95.5
Clothing	6	1.6	96.0
Public policy	10	2.5	99.7
Others	2	0.5	100.0
Total	397	100.0	100.0
10111		of operation	1
1-2	149	37.5	37.5
3-4	101	25.4	63.0
5+ 5+	147		
		37.0 100.0	100.0
Total	397	100.0	



Number of awards						
None	271	68.3	68.3			
1-3	106	26.7	95.0			
3+	20	5.0	100.0			
Total	397	100.0				

Source: Research data

NB: Table I shows the Demographic characteristics of Respondents

Table 2 Results of factor analysis

Constructs	Items	Factor Loadings	Cronbach's alpha	CR	R <sup>2</sup>	AVE	$Q^2$
	BT1	0.843	атрпа				
	BT2	0.767					
	BT3	0.861			0.674		
Business Ties	BT4	0.842	0.920	0.935			
Business Ties	BT5						
	BT6	0.762					
		0.839					
	BT7	0.829					
	PT1	0.909					
	PT2	0.739					
	PT3	0.897					
D 11:1 1 m	PT4	0.765	0.946	0.955	0.727		
Political Ties	PT5	0.875					
	PT6	0.873					
	PT7	0.885					
	PT8	0.861					
	SE1	0.921					
	SE2	0.934					
	SE3	0.92	0.929	0.945			
Self-Efficacy	SE3	0.905				0.742	
	SE5	0.726					
	SE5	0.726					
	SEO	0.733					
	SR1	0.886					
Self-Regulation	SR2	0.915	0.933	0.933	0.832		
Sen-Regulation	SR3	0.924		0.932			
	SR4	0.923					
	SEO1	0.945					
	SEO2	0.939	0.960	0.970	0.864	0.865	
Social Entrepreneurial	SEO3	0.958					0.693
Orientation	SEO4	0.955					0.075
	SEO5	0.848					

Source: Research data

NOTE: BT= business sties (BT); PT= political ties (PT); self-efficacy (SE)= self-regulation (SR); social entrepreneur orientation (SEO)

<sup>\*</sup> Quality criteria of model application according to PLS method – SEM specification – Factor loadings, Cronbach's Alpha, composite reliability (CR),  $R^2$ , Rates of average variance extracted (AVE), and Stone-Geisser Indicator ( $Q^2$ ) of all Constructs.



Table 3 Path analysis using Regression Analysis

Path	T-value	β	F-square	Hypothesis	Conclusion
BT→SEO	2.982	0.366**	0.076	H1	Supported
PT <b>→</b> SEO	2.031	0.166**	0.041	H2	Supported
SE*BT <b>→</b> SEO	1.411	0.096	0.014	Н3а	Not supported
SE*PT→SEO	2.367	-0.186**	0.043	H3b	Supported
SR*BT→SEO	2.612	-0.116**	0.045	H4a	Supported
SR*PT→SEO	2.153	0.152**	0.052	H4b	Supported

Source: Research data

Quality criteria of model application according to PLS method – SEM specification with Path coefficients, T-values, P-values, F-square of the structural model through the bootstrapping procedure with 397 cases and 1000 samples.

For the degrees of freedom, t-values of  $(t \ge 1.96)$  correspond to p-values of (\*\*p < 0.05)

NOTE: BT= business sties (BT); PT= political ties (PT); self-efficacy (SE)= self-regulation (SR); social entrepreneur

 Table 4 Discriminant Validity (Fornell and Larcker criterion)

Construct	Mean	(SD)	BT	PT	SE	SR	SEO	
BT	33.08	(3.23)	0.821				_	
PT	36.87	(4.18)	$0.778^{**}$	0.853				
SE	27.34	(3.66)	$0.850^{**}$	$0.809^{**}$	0.861			
SR	18.82	(2.17)	$0.832^{**}$	0.621**	0.681**	0.912		
SEO	23.19	(3.19)	$0.861^{**}$	0.813**	$0.885^{**}$	$0.660^{**}$	0.930	

Source: Research data

NOTE: BT= business sties (BT); PT= political ties (PT); self-efficacy (SE)= self-regulation (SR); social entrepreneur orientation (SEO); (SR); social entrepreneur orientation

### 5. Discussion and Conclusion

This study conducted an empirical test for social entrepreneurs of a developing country to analyze the cognitive influence (Social cognitive) and Connections (Social networks) on individual social entrepreneurial orientation. This is because recent research calls for the attention of Social innovators to be much concerned about realizing and building upon who they are and improving their capabilities as the best opportunities when combined with other factors rather than depending solely on external factors to improve productivity.

Basing on the Social cognitive theory (Bandura, 1997), we examined the cognitive consequences (when well-regulated) of social entrepreneur's engagement in social ties in facilitating Social entrepreneurial orientation. Our findings show that the level of an individual's self-efficacy and Self-regulation is not only important to consider as driving social entrepreneurs' cognitive behaviors but also fruitful in achieving more resources and opportunities. We find that social entrepreneur with higher self-efficacy would or would not need a business partner to achieve target set. It is only when one's self efficacy is low that political ties will be needed most to improve social entrepreneurial orientation. Also, when a social entrepreneur's self-regulation is high, business ties will be needed more to achieve SEO and political ties will be considered most when self-regulation is low. Theoretically, our study contributes to the social networks, social cognitive and the social entrepreneurship literature by implementing a clear conceptual model at the individual level and outlining the relationships among social variables in the management field. Considering the Methodological aspect, this study has contributed as well by using the Partial Least Square (PLS) which has been rarely used in a study of this kind in proving the validation of all constructs

In conclusion, our study has highlighted the importance of using social cognitive perspective and social network theory to examine the relationship among self-efficacy, self-regulation, business ties, political ties and social entrepreneurial orientation in social entrepreneurship setting. Our findings suggest that, a social innovator's social entrepreneurial orientation directly depends on both the business and political ties and indirectly depends on, self-efficacy and Self-regulation mechanisms.

## 6. Limitations

This paper has limitations that should be addressed in future research. First, we did not consider all items of the regulatory focus scale that may be of important hence future research should explore all items in justifying the relationship between social ties, self-efficacy, self-regulation and social entrepreneurial orientation. Second, we

<sup>\*</sup>The diagonals are the square root of the AVE of the latent variables ad indicates the highest in any Column or row



chose the New General Self-efficacy scale which future researchers can consider other self-efficacy scales. Also, future research should consider two or more countries for this research since only one country might not be enough to justify our inclusions. Finally, future research could link social ties to social entrepreneurial orientation by testing the mediation effects of self-efficacy and self-regulation on the relationship.

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#### Reference

- Alon, I., Jiao, H., Kwong, K. C., & Cui, Y. (2013). The moderating effects of environmental dynamism on the relationship between dynamic capabilities strategy and new venture performance in an emerging market.
- Anderson, B. S., & Eshima, Y. (2013). The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. Journal of Business Venturing, 28(3), 413-429.
- Austin, J., Stevenson, H., & Wei-Skillem, J. (2006). Social and commercial entrepreneurship: Same, different, or both? Entrepreneurship: Theory and Practice, 30(1): 1–22.
- Bacq, S., Ofstein, L. F., Kickul, J. R., & Gundry, L. K. (2017). Perceived entrepreneurial munificence and entrepreneurial intentions: A social cognitive perspective. International Small Business Journal, 35(5), 639-659.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory, Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational behavior and human decision processes, 50(2), 248-287.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Barron, F. & Harrington, D. (1981). Creativity, intelligence, and personality. In M. R. Rosenzweig & 1. W. Porter (Eds.), Annual review of psychology, vol. 32: 439-476. Palo Alto, CA: Annual Reviews.
- Baum, J. A., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. Strategic management journal, 267-294.
- Bentler, P. M. (1995). EQS structural equations program manual. Encino, CA: Multivariate Software.
- Boschee, J. (2001). The Social Enterprise Sourcebook. Minneapolis: Norhtland Institute.
- Boso, N., Story, V. M., & Cadogan, J. W. (2013). Entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy. Journal of Business Venturing, 28(6), 708-727.
- Bryant, P. (2009). Self-regulation and moral awareness among entrepreneurs. Journal of Business Venturing, 24(5), 505-518
- Carraher, S. M., Welsh, D. H., & Svilokos, A. (2016). Validation of a measure of social entrepreneurship. European Journal of International Management, 10(4), 386-402.
- Cecil, H., & Pinkerton, S. D. (2000). Magnitude: An Important Dimension of Self-Efficacy 1. Journal of Applied Social Psychology, 30(6), 1243-1267.
- Cervone, D., & Peake, P. K. (1986). Anchoring, efficacy, and action: The influence of judgmental heuristics on self-efficacy judgments and behavior. Journal of Personality and Social Psychology, 50: 492-501.
- Cervone, D., Jiwani, N., & Wood, R. (1991). Goal setting and the differential influence of self-regulatory processes on complex decision-making performance. Journal of Personality and Social Psychology, 61: 257-266.
- Chell, E. (2007). Social enterprise and entrepreneurship: Towards a convergent theory of the entrepreneurial process. International small business journal, 25(1), 5-26.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. Organizational research methods, 4(1), 62-83.
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(3), 375-395.
- Chung, H. F. (2012). Export market orientation, managerial ties, and performance. International Marketing Review, 29(4), 403-423.
- Cohen, G. L., Aronson, J., & Steele, C. M. 2000. When beliefs yield to evidence: Reducing biased evaluation by affirming the self. Personality and Social Psychology Bulletin, 26: 1151–1164.
- Covin, J.G. and Slevin, D.P. (1986) 'The development and testing of an organizational-level entrepreneurship



- scale', in R. Ronstad, J.A. Hornaday, R. Peterson and K.H. Vesper (Eds.): Frontiers of Entrepreneurship Research, Babson College, Wellesley, Mass.
- Cuddy, A. J. C., Glick, P., & Beninger, A. (2011). The dynamics of warmth and competence judgments, and their outcomes in organizations. Research in Organizational Behavior, 31: 73–98.
- Cukier, W., Trenholm, S., Carl, D., & Gekas, G. (2011). Social entrepreneurship: a content analysis. Journal of Strategic Innovation and Sustainability, 7(1), 99-119.
- Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social entrepreneurship: A critique and future directions. Organization science, 22(5), 1203-1213.
- Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. Journal of social entrepreneurship, 1(1), 32-53.
- DeNoble, A., Jung, D., & Ehrlich, S. (1999). Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurship. In P.D. Reynolds, W.D. Bygrave, S. Manigart, C.M. Mason, G.D. Meyer, H.J. Sapienza & K.G. Shaver (Eds.), Frontiers of entrepreneurship research (pp. 73–87). Wellesley, MA: Babson College.
- Dubini, P., & Aldrich, H. E. (1991). Personal and extended networks are central to the entrepreneurial process. Journal of Business Venturing, 6: 305–313.
- Dyer, W.G., Jr. (1994). Towards a theory of entrepreneurial careers. Entrepreneurship Theory and Practice, 19(2), 7–
- Eckhardt, J., & Shane, S. (2003). Opportunities and entrepreneurship. Journal of Management, 29(3): 333–349. Fornell, C., & Larcker, D. F. 1981. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18: 39–50.
- Eden, D. (1990). Pygmalion in management: Productivity as a self-fulfilling prophecy. Lexington, MA: Lexington Books.
- Eden, D. (2001). Means efficacy: External sources of general and specific subjective efficacy. In M. Erez, U. Kleinbeck, & H. Thierry (Eds.), Work motivation in the context of a globalizing economy: 65-77. Hillsdale, NJ: Erlbaum.
- Eggers, F., & Kraus, S. (2011). Growing young SMEs in hard economic times: the impact of entrepreneurial and customer orientations—a qualitative study from Silicon Valley. Journal of Small Business & Entrepreneurship, 24(1), 99-111.
- Ericsson, K. A., Krampe, R. T., & Clemens, T. R. (1993). The role of deliberate practice in expert performance. Psychological Review, 103: 363-406.
- Faccio, M., Masulis, R. W., & McConnell, J. (2006). Political connections and corporate bail-outs. The Journal of Finance, 61(6), 2597–2635.
- Fast, N. J., Burris, E. R., & Bartel, C. A. (2014). Managing to stay in the dark: Managerial self-efficacy, ego defensiveness, and the aversion to employee voice. Academy of Management Journal, 57(4), 1013-1034.
- Fornell, C. (1994). Partial least squares. Advanced methods of marketing research.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 39-50.
- Fraenkel, J. R., & Wallen, N. E.(2006). How to design and evaluate research in education.
- Garbade, P. J., Fortuin, F. T., & Omta, S. O. (2011). Alliance Performances in the Dutch Biotechnology Sector. Proceedings in Food System Dynamics, 78-86.
- Gist. M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. Academy of Management Review. 12: 472-485.
- Gist. M. E. (1989). The influence of training method 011 self-efficacy and idea generating among managers. Personnel Psychology, 42: 787-805.
- Gist, M. E., 8r: Mitchell. T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. Academy of Management Review. 17: 183-211.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. American journal of sociology, 91(3), 481-510.
- Gu, F. F., Hung, K., & Tse, D. K. (2008). When does Guanxi matter? Issues of capitalization and its dark sides. Journal of Marketing, 72, 12–28.
- GUZMÁN VÁSQUEZ, A. L. E. X. Á. N. D. E. R., & TRUJILLO DÁVILA, M. A. (2008). Social Entrepreneurship-Literature Review. Estudios Gerenciales, 24(109), 105-123.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). Multivariate Data Analysis (ed.): Pearson Prentice Hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2012). Partial least squares: the better approach to structural equation modeling?
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance.



- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.
- Harding, R. (2004). Social enterprise: the new economic engine? Business strategy review, 15(4), 39-43.
- Harding, R., & Cowling, M. (2006). Social entrepreneurship monitor. London: Global Entrepreneurship Monitor.
- Harms, R., Reschke, C.H., Kraus, S. and Fink, M. (2010) 'Antecedents of innovation and growth: analyzing the impact of entrepreneurial orientation and goal-oriented management', Int. J. Technology Management, Vol. 52, Nos. 1/2, pp.135–152.
- Haugh, H. (2007). New strategies for a sustainable society: The growing contribution of social entrepreneurship. Business Ethics Quarterly, 17(4), 743-749.
- Helm, S. T., & Andersson, F. O. (2010). Beyond taxonomy: An empirical validation of social entrepreneurship in the nonprofit sector. Nonprofit Management and Leadership, 20(3), 259-276.
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. Computational Statistics, 28(2), 565-580.
- Higgins, E. T., Grant, H., & Shah, J. (2003). 13 Self-Regulation and Quality of Life: Emotional and Non-Emotional Life Experiences. Well-Being: Foundations of Hedonic Psychology, 244.
- Hillman, A. J., & Hitt, M. A. (1999). Corporate political strategy formulation: A model of approach, participation, and strategy decisions. Academy of Management Review, 24(4), 825–842.
- Hitt, M. A., Ahlstrom, D., Dacin, M. T., Levitas, E., & Svobodina, L. (2004). The institutional effects on strategic alliance partner selection in transition economies: China vs. Russia. Organization Science, 15 (2): 173–185.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. Strategic management journal, 20(2), 195-204.
- Ismail, K. M., Richard, O. C., & Taylor, E. C. (2012). Relationship conflict in supervisor-subordinate dyads: a subordinate perspective. International Journal of Conflict Management, 23(2), 192-218.
- Jiao, H. (2011). A conceptual model for social entrepreneurship directed toward social impact on society. Social Enterprise Journal, 7(2), 130-149.
- Kline, R. B. (2005). Methodology in the social sciences.
- Lang, J. W., & Fries, S. (2006). A revised 10-item version of the Achievement Motives Scale. European Journal of Psychological Assessment, 22(3), 216-224.
- Li, J. J. (2005). The formation of managerial networks of foreign firms in China: The effects of strategic orientations. Asia Pacific Journal of Management, 22(4), 423–443.
- Li, J. J., Zhou, K. Z., & Shao, A. T. (2009). Competitive position, managerial ties, and profitability of foreign firms in China: An interactive perspective. Journal of International Business Studies, 40(2), 339-352.
- Liao, J., & Welsch, H. (2003). Social capital and entrepreneurial growth aspiration: a comparison of technologyand non-technology-based nascent entrepreneurs. The Journal of high technology management research, 14(1), 149-170.
- Lim, K., & Cu, B. (2012). The effects of social networks and contractial characteristics on the relationship between venture capitalists and entrepreneurs. Asia Pacific Journal of Management, 29(3): 573–596
- Lin, B., Li, P., & Chen, J. (2006). Social capital, capabilities, and entrepreneurial strategies: A study of Taiwanese high-tech new ventures. Technological Forecasting and Social Change, 73: 168–181.
- Lin, Z., Peng, M. W., Yang, H., & Sun, S. L. (2009). How do networks and learning drive M&As? An institutional comparison between China and the United States. Strategic Management Journal, 30: 1113–1132.
- Locke, E. A., Frederick, E., Lee, C., & Babka, P. (1984). Effect of self-efficacy, goals, and task strategies on task performance. Journal of Applied Psychology, 69: 241-251.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. Journal of Business Venturing, 16: 429–451.
- Luthans, F., & Ibrayeva, E. S. (2006). Entrepreneurial self-efficacy in Central Asian transition economies: quantitative and qualitative analyses. Journal of International Business Studies, 37(1), 92-110.
- Lyon, D.W., Lumpkin, G.T. and Dess, G.G. (2000) 'Enhancing entrepreneurial orientation research: operationalizing and measuring a key strategic decision making process', Journal of Management, Vol. 26, No. 5, pp.1055–85.
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. Journal of world business, 41(1), 36-44.
- Martin, R. L., & Osberg, S. (2007). Social entrepreneurship: The case for definition (Vol. 5, No. 2, pp. 28-39). Stanford, CA: Stanford social innovation review.
- Merton, R. K. (1957). Social theory and social structure. Glencoe, IL: Free Press.
- Miller, D. (1983) 'The correlates of entrepreneurship in three types of firms', Management Science, Vol. 29, No. 7, pp.770–91.
- Mirabella, R., & Young, D. R. (2012). The development of education for social entrepreneurship and nonprofit management: Diverging or converging paths? Nonprofit Management and Leadership, 23(1), 43-57.



- Mumford. M. D., 8r: Gustafson, S. B. (1988). Creativity syndrome: Integration. application. and innovation. Psychological Bulletin, 103: 27-43.
- Nga, J. K. H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. Journal of business ethics, 95(2), 259-282.
- Nicholls, A. (2006). Playing the field: A new approach to the meaning of social entrepreneurship. Social Enterprise Journal, 2(1), 1-5.
- Ozgen, E., & Baron, R. A. (2007). Social sources of information in opportunity recognition: Effects of mentors, industry networks, and professional forums. Journal of Business Venturing, 22: 174–192.
- Park, S., & Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. Strategic Management Journal, 22: 455–477.
- Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. Academy of management journal, 43(3), 486-501.
- Peng, M. W., & Zhou, J. Q. (2005). How network strategies and institutional transitions evolve in Asia. Asia Pacific Journal of Management, 22(4): 321–336.
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. Journal of world business, 41(1), 56-65.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship: Theory and Practice, 33(3): 761–787.
- Roberts, D., & Woods, C. (2005). Changing the world on a shoestring: The concept of social entrepreneurship. University of Auckland Business Review, 7(1), 45-51.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American psychologist, 55(1), 68.
- Santos, F. M. (2012). A positive theory of social entrepreneurship. Journal of business ethics, 111(3), 335-351.
- Sastre-Castillo, M. A., Peris-Ortiz, M., & Danvila-Del Valle, I. (2015). What is different about the profile of the social entrepreneur? Nonprofit Management and Leadership, 25(4), 349-369.
- Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. Entrepreneurship theory and practice, 13(3), 53-72.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25: 217–226.
- Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. Journal of Marketing, 75: 1–15.
- Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. Strategic entrepreneurship journal, 3(2), 161-194.
- Short, J. C., Ketchen, D. J., Shook, C. L., & Ireland, R. D. (2010). The concept of "opportunity" in entrepreneurship research: Past accomplishments and future challenges. Journal of Management, 36(1): 40–65.
- Sullivan Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualisation. International journal of nonprofit and voluntary sector marketing, 8(1), 76-88.
- Thompson, J., Alvy, G., & Lees, A. (2000). Social entrepreneurship—a new look at the people and the potential. Management decision, 38(5), 328-338.
- Vissa, B. (2011). A matching theory of entrepreneurs' tie formation intentions and initiation of economic exchange. Academy of Management Journal, 54(1), 137-158.
- Wang, C. L., & Chung, H. F. (2013). The moderating role of managerial ties in market orientation and innovation: An Asian perspective. Journal of Business Research, 66(12), 2431-2437.
- Weerawardena, J., & Mort, G. S. (2006). Investigating social entrepreneurship: A multidimensional model. Journal of world business, 41(1), 21-35.
- Wiklund, J. (1998) Small Firm Growth and Performance: Entrepreneurship and Beyond, Jönköping International Business School, Jönköping.
- Williamson, O. E. (1985). The economic institution of capitalism. New York: Free Press.
- Witkamp, M. J., Royakkers, L. M., & Raven, R. P. (2011). From cowboys to diplomats: Challenges for social entrepreneurship in the Netherlands. Voluntas: international journal of voluntary and nonprofit organizations, 22(2), 283-310.
- Wold, H. (1979). Model construction and evaluation when theoretical knowledge is scarce: An example of the use of partial least squares. Université de Genève Faculté des sciences économiques et sociales.
- Xin, K. R., & Pearce, J. L. (1996). Guanxi: Connections as substitutes for formal institutional support. Academy of Management Journal, 39(6), 1641–1658.
- Yang, H., Lin, Z., & Peng, M. W. (2011). Behind acquisitions of alliance partners: Exploratory learning and network embeddedness. Academy of Management Journal, 54: 1069–1080.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs:



- Motives, search processes and ethical challenges. Journal of business venturing, 24(5), 519-532.
- Zahra, S. A., Rawhouser, H. N., Bhawe, N., Neubaum, D. O., & Hayton, J. C. (2008). Globalization of social entrepreneurship opportunities. Strategic entrepreneurship journal, 2(2), 117-131.
- Zahra, S. A., Newey, L. R., & Li, Y. (2014). On the frontiers: The implications of social entrepreneurship for international entrepreneurship. Entrepreneurship Theory and Practice, 38(1), 137-158.
- Zhang, S., & Li, X. (2008). Managerial ties, firm resources, and performance of cluster firms. Asia Pacific Journal of Management, 25(4): 615–633.
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. Journal of applied psychology, 90(6), 1265.
- Zhao, Y., Li, Y., Lee, S. H., & Chen, L. (2011). Entrepreneurial orientation, organizational learning, and performance: Evidence from China. Entrepreneurship: Theory and Practice, 35(2): 293–317.
- Zhou, K. Z., & Li, C. B. (2010). How strategic orientations influence the building of dynamic capability in emerging economies. Journal of Business Research, 63(3), 224–231.
- Zhu, W., Su, S., & Shou, Z. (2017). Social ties and firm performance: The mediating effect of adaptive capability and supplier opportunism. Journal of Business Research, 78, 226-232.