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# Path and boundary of the influence of social entrepreneurial opportunity identification on the growth of commercial startups

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Social entrepreneurship, as a way for enterprises to fulfill social responsibility, is becoming one of the key means to reconcile social contradictions in China. In the field of social entrepreneurship as entrepreneurship research focus in the emerging background, such as type business start-ups face “vulnerable” new defects, social entrepreneurship, how to deal with scarce resources, social entrepreneurship resources come from and how to create such basic problems as what kind of results is still not well explain, related research is still in a state of “cumulative pieces”. Therefore, this paper focuses on the social opportunity identification of commercial new ventures, and empirically analyzes the mechanism of social entrepreneurial opportunity identification and resource patchwork on their growth. The results demonstrate that finding social entrepreneurial opportunities is an important part of how resource collages can help social enterprises grow, and the entrepreneur’s social network allows for the mediating effect of resource collage. The more sources of “strong relationships” in entrepreneurs’ social networks, the stronger the impact of social entrepreneurial opportunity identification on the growth performance of commercial startups. Focusing on the field of corporate social entrepreneurship, our findings establish a complete chain of social entrepreneurship processes, from motivation to behavior to corporate sustainability. The findings confirm the mechanism by which social entrepreneurial opportunity identification and resource patchwork help to improve the growth performance of commercial new ventures, and also suggest that entrepreneurs’ social networks can relieve entrepreneurs’ dependence on external network construction to a certain extent.

## KEYWORDS

growth of commercial startups, resource bricolage, social entrepreneurship opportunity identification, social network theory, social entrepreneurship

## 1 Introduction

Social entrepreneurship has attracted widespread attention and gradually evolved into a global phenomenon as an effective means to manage social problems, such as population aging and environmental pollution. An examination of entrepreneurial practices in recent years illustrates that enterprises' entrepreneurial behaviors are gradually beginning to focus on social issues and entrepreneurship beyond business activities, with startups being the driving force of the latter. Although the increasing importance of social entrepreneurship of startups is generally agreed upon in academic circles and the industry, startups often face challenges, such as resource constraints and teething problems, as their social entrepreneurship grows (Wang et al., 2019). The theoretical exploration of social entrepreneurship in commercial enterprises is still in the early stage and lacks empirical analysis. Liu et al. (2019) emphasized that the integration of resources and opportunities opened up a new way for future research, and made full use of individual social networks of entrepreneurs and transformed these relationships into close and stable ones, which would help realize the potential value of existing resources. Therefore, based on social opportunity identification theory, resource patchwork theory and social network theory, this study explores how social entrepreneurship opportunity identification propels the growth of new ventures to provide valuable insights for promoting and leading the sustainability of corporate social entrepreneurship.

Social entrepreneurship follows the logic of creating social value based on commercial means (Dees, 1998). Social entrepreneurship as a new form in the field of entrepreneurship, the purpose is to use innovative means to solve the social problems so as to realize the creation of economic value and social value, the study found that usually under the double malfunction of government and market, caused by a lack of common configuration and the reasons for the inefficient and produce social entrepreneurship opportunities (Shaker et al., 2008). Part of empirical research, points out that social entrepreneurship opportunity recognition effect on organizational performance has significant prediction model (Sebastian et al., 2020), such as the entrepreneurs of prosocial motives, this contains the mutual sharing of behavior prompted entrepreneurs and others on the perspective-taking, beneficial to individuals out of their own limitations, to promote the integration of view skills, so as to promote the creativity of the organization (Tu et al., 2020). However, a few studies have found that social entrepreneurial opportunity identification has no effect on the innovation growth of enterprises, and believe that the reason for this result is that social opportunity identification may affect the innovation growth of organizations through other ways (Pablo and Ricardo, 2021). In this regard, McDermott et al. (2018) attempted to further analyze the impact of social opportunity identification on

organizational innovation growth by mobilizing the active participation of stakeholders and resource mobilization. Therefore, the primary purpose of this paper is to examine the impact of social opportunity identification on the realization of economic and social value of new ventures.

Some studies have demonstrated that resource bricolage is an essential path for resource innovation to create value because it solves the problem of resource constraint and advances corporate social innovation (Wang et al., 2019). Conversely, a few studies have also found that resource bricolage is inefficient and leads to repetition because it is limited by time and resources. Mainly, bricolage strategies used in certain situations do not work for all businesses, and too much bricolage can hurt startup' performance. However, resource bricolage is an essential method for firms to solve the problem of resource constraints. We must recognize the complicated nature of resource bricolage, inconsistency of the current research results, and that the theory of resource bricolage needs further attention. In short, the origination of firms' resources and their results are still in question. In this study, we seek to reveal how identifying social entrepreneurship opportunities affects the growth of startups using resource bricolage as a critical approach.

From the perspective of social network theory, entrepreneurs are the core personnel involved in social entrepreneurial activities. Their social networks are a key "way" to access the social assets, resources, and support needed for social entrepreneurship. However, the effect of entrepreneurial social networks on organizational performance is complex (Park and Luo, 2001). Existing theoretical research conclusions are not unified, which demonstrates that the social network theory of entrepreneurs is still insufficiently mature (Balagopal, 2011). Therefore, it may be necessary to re-examine and clarify the entrepreneur's social network in a specific context. Moreover, despite the growing interest in the social networks of entrepreneurs, little has been done to examine how these networks interact with social opportunity identification interactions to promote entrepreneurial firm growth. To this end, this study surveyed social entrepreneurs participating in the China Social Entrepreneurship Forum 2020. Held in an "online + offline" format in Beijing, China. The event brought together dual value creation-oriented entrepreneurs from all over China to provide methods and suggestions for the sustainable development of enterprises. We conducted a multi-stage questionnaire to investigate how social entrepreneurship opportunity identification can contribute to the growth of startups. By exploring the relationship between social networking and opportunity identification for entrepreneurs, we answer the following research question: How do startups achieve long-term growth performance *via* resource bricolage and entrepreneurs' social network in social entrepreneurship opportunity identification? Based on the empirical results, we propose a set of theoretical models involving social

entrepreneurs' opportunity identification, resource bricolage, and social network to promote the growth of startups.

The theoretical contributions are as follows. First, the research on the identification mechanism of social entrepreneurial opportunities is deepened. Based on the theory of social entrepreneurial opportunity identification, this paper clarified the relationship between social entrepreneurial opportunity awareness and the growth of new ventures through literature review, and further verified the hypothesized relationship through empirical analysis. At the same time, it clarifies the social network of entrepreneurs that plays a reinforcing role in the process of social entrepreneurial opportunity identification, which has an important theoretical contribution to the research on social entrepreneurial opportunity identification. It deepens the theoretical research on social entrepreneurial opportunity identification from the theoretical level, and is also a response to previous research (Charles et al., 2020). Secondly, it enriches the research methods of social entrepreneurial opportunity identification. At present, the research on social entrepreneurship is mainly based on qualitative research methods, and the research results lack the support of empirical research. Moreover, the research on the identification of social entrepreneurship opportunities is in its initial stage, which also lacks the effective verification of empirical research results. In particular, previous studies on the growth of startups have shifted from focusing only on the economic benefit analysis to exploring the internal mechanism of social and economic value creation. The acknowledgment of the protection mechanism of social entrepreneurship opportunity identification and the motivation mechanism of entrepreneurs' social networks will shed new light on the understanding of the sustainable growth mechanism of commercial startups during the transitional period. Second, we provide theoretical support for innovative growth models that are not entirely about economic benefit and a theoretical reference for high-quality entrepreneurial practices and policymaking in emerging economies experiencing social and economic transitions.

The structure of this paper is as follows. First, we review the literature on social entrepreneurship opportunity identification and the growth of startups. Second, we look at the research on resource bricolage and entrepreneur social networks to build a theoretical model. Third, we discuss the methods and data used. Fourth, we discuss our results and summarize their theoretical and practical implications.

## 1.1 Theoretical background and research hypotheses

Social entrepreneurship is a new field (Gerometta et al., 2005). Existing theoretical studies are carried out in three dimensions: entrepreneurship content, process, and social empowerment participation (MacCallum et al., 2009). They

are scattered across different disciplines, such as economics, sociology, and management (Gerometta, et al., 2005a). Social problems are the main source of opportunities for the development of enterprise entrepreneurship and innovation (Sagawa and Segal, 2000), and social entrepreneurship is a practical process in which the government and enterprises creatively integrate and utilize social resources to solve social problems or meet social needs in new ways or ways. Social entrepreneurship has the following basic characteristics: sociality of the goal, pluralism of the subject, and creativity of the method. The basic method is to creatively integrate and allocate superior resources of all parties individually or cooperatively, and generate new social technologies and methods through innovative ideas. The social goal is to solve social problems, meet social needs, maintain social order, and promote social progress. The basic conditions for implementation are universal values and replicable and diffusible patterns (Schwartz, 2012). The Bank of Boston, Bell Atlantic, General Electric, Wieppon, Wal-Mart, and others have turned social responsibility into social entrepreneurship, radically changing the role of enterprises in society (Saul, 2010).

Resource patchwork is an innovative way of applying resources that can help businesses survive and succeed. Based on the resource patchwork theory, scholars explain the phenomenon of entrepreneurs starting from scratch and the enterprise growth and expansion process from many perspectives. For example, new international ventures can improve their innovation performance and competitive position by using powerful resources. The flexible application of resource pooling can help enterprises improve their financial performance and growth rate in the early stage of their establishment (Li and Zhu, 2014). For example, Garud and Karne (2003) conducted field research on typical enterprises in the wind turbine industry in Denmark and concluded that entrepreneurs try their best to assemble financial resources to realize the purchase of newly established enterprises in the face of resource shortage.

The embeddedness of the social network of entrepreneurs is the prerequisite for obtaining complementary resources, and the research on social networks is particularly important in social entrepreneurship (Jack and Anderson, 2002). As entrepreneurs embedded in the network have heterogeneous resources, their network relationships and locations will affect the manner and efficiency of the resource flow. Therefore, the main research elements of social networks are relationship elements and structural elements. First, social network relationship elements, such as business networks, governments, and government support networks, are important resources in social entrepreneurship, and social entrepreneurs depend highly on them. Second, social entrepreneurship is a complex multi-stage dynamic evolutionary process, and the construction

of social networks requires social entrepreneurs to establish good cooperative relationships with other organizations and individuals. In sum, social capital embedded in social networks and increasingly extensive social networks are the cornerstones for the further development of social enterprises. The key to the success of social entrepreneurship is the circular operation of social capital.

## 1.2 Social entrepreneurship opportunity identification and startups growth

The exact definition of social entrepreneurship is still debatable, with the most common principle in previous studies being the “broad concept of inclusiveness” (Choi and Majumdar, 2014). Some scholars have interpreted it based on an economic and social “dichotomy.” For example, Dacin et al. (2010) argue that social entrepreneurship opportunity identification refers to the utilization of commercial methods to provide innovative solutions to social problems and balance economic and social values, and is, thus, “social,” “innovative,” and “market-oriented.” argues that a “dichotomous” approach is difficult to result in consensus. Mair and Marti (2006) examine social entrepreneurship from the perspective of value creation and posit that opportunities identified to meet social needs facilitate the improvement of institutional systems. In this regard, social entrepreneurship opportunity identification is characterized by the overlap of a set of opportunities that solve social problems and a set of profitable business opportunities (Marcus et al., 2016). Regarding the research paradigm, entrepreneurship research goes beyond organization-level entrepreneurial processes to individual and team-level entrepreneurial cognition and decision-making behaviors. Opportunity identification and resource bricolage are core issues in entrepreneurship research. However, traditional strategic management and resource-based theories can hardly solve problems such as how social entrepreneurs identify opportunities when resources are scarce.

Consequently, scholars began to apply theories of opportunity discovery and creation to the field of social entrepreneurship and argue that the first step to social entrepreneurship is opportunity identification (McDermott et al., 2018). Halberstadt et al. (2021) also called for social entrepreneurship opportunity identification to receive the same attention as the business sector, especially regarding organizational performance. Although social entrepreneurship is prone to “initial weaknesses” that render breaking through resource constraints difficult, using empirical studies, McDermott et al. (2018) found that social entrepreneurship opportunities are associated with active stakeholder participation and resource mobilization. Thus, identifying

social entrepreneurship opportunities for entrepreneurs is essential for integrating and utilizing resources and a prerequisite for obtaining external legitimacy.

This paper defines social entrepreneurship opportunity as the possibility of creatively integrating social assets and resources to meet social needs and create social values. Clarifying that social entrepreneurs are the pivot of entrepreneurship opportunity identification and are at the core of the network connecting startups and external stakeholders is essential. Entrepreneurs identifying social entrepreneurship opportunities is also a process of breaking resource constraints, ad hoc utilization, and improvisation; hence, identifying entrepreneurs identifying social entrepreneurship opportunities is directly related to enterprise growth. The development of startups has two aspects: economic performance and social performance. Startup growth is underpinned by specific social assets/resource integration and the value created in social entrepreneurship (e.g., sociality, feasibility, profitability) that raises stakeholder expectations, which leads to the improvement of startup performance. First, sociality reflects the extent to which social entrepreneurs or startups focus on social value creation and not only business financial performance (Kraus et al., 2017). Sociality can reinforce the motivation of social entrepreneurs and stakeholders to achieve social goals. When the vision of social value creation connects stakeholders to inspiring plans, it may motivate stakeholders to consider socially responsible objectives and enable employees to work positively.

Similarly, high goal identification in high-performing organizations helps social entrepreneurs adopt the correct strategic direction and focus on corporate goals (Doherty et al., 2014). In addition, enhanced social purpose motivation can drive organizations to improve quality and efficiency and promote the creation of more social value (Ellsworth, 2002). Second, feasibility emphasizes the availability of social assets and social resources, which determines the feasibility of establishing market exchange relationships—no social enterprises and social entrepreneurship opportunities will exist without market exchange relationships (Hu et al., 2019). In managerial practice, feasibility identification meets the new need of stakeholders through the operability of entrepreneurial solutions, the novelty of ideas, and the practicability of product/service innovation; it helps the business grow. Third, profitability identification promotes the growth of startups in the following two ways: First, entrepreneurs develop new products through technological improvements to generate a differentiation advantage in the market; second, social startups build a vivid corporate image in the market, garner market reputation, and expand market share through product iteration and business model innovation. Based on the above, we propose the following hypothesis:

**H1.** Social entrepreneurship opportunity identification has a significant positive impact on the growth of startups.

### 1.3 Mediating role of resource bricolage

Access to resources is critical and forms a central element in identifying social entrepreneurship opportunities (Dorado, 2006; Hockerts, 2006; Murphy and Coombes, 2009; Virginie and Katia, 2021). Salunke et al. (2013) noted that entrepreneurs could gain a competitive edge by compounding existing resources. Entrepreneurs' bricolage behavior can be induced through strategic flexibility and relational learning, among others, to promote the growth of startups. Li and Zhu (2014) found that resource bricolage can effectively address the lack of resources for startups and promote inclusive business growth. Zhou et al. (2019) discussed the positive effect of resource bricolage on enterprises' innovation.

Similarly, Sunduramurthy et al. (2016) discovered that when entrepreneurial startups face severe resource constraints, resource bricolage enables social entrepreneurial firms to implement precision marketing strategies successfully, thus, driving business growth. By improving their resource bricolage skills, new social enterprises often get better at developing new ideas and becoming more competitive. There is a strong correlation between resource bricolage ability and enterprise growth. On the other hand, entrepreneurs with a greater ability to identify social enterprise opportunities have better perception and alertness, promoting resource bricolage development and use. In particular, when entrepreneurs pay attention to opportunities to create economic and social value, they obtain resources for cheap and use them quickly to solve problems as their businesses grow. They do this by "breaking resource constraints" through active searching, social exchange, and contract signing, among other things (Zahra et al., 2009). Second, entrepreneurs may creatively use existing resources to address business growth problems by "making do with what they have." Third, entrepreneurs creatively rebuild resources to promote growth per the enterprise's strategic intent and entrepreneurial goals (Baker and Nelson, 2005). When resources are not enough, resource bricolage that is new, flexible, and immediate can help businesses respond quickly to market needs at the lowest cost. By contrast, revitalizing redundant resources is difficult if the enterprise lacks creative bricolage. The bricolage can become an inefficient resource, thus complicating the realization of the entrepreneurial behavior. Based on the above, we propose the following hypothesis:

**H2.** Resource bricolage plays a mediating role between social entrepreneurship opportunity identification and the growth of startups.

### 1.4 Moderating role of entrepreneurs' social networks

Based on social network theory, network relationships are increasingly strategic, especially in early development, as social entrepreneurs often use social network resources to break the constraints of social entrepreneurial resources (Servantie and Rispal, 2018). In this study, we maintain that an entrepreneur's social network is a collection of relationships between the entrepreneur and external stakeholders within and outside the organization. These relationships contain resources that provide action opportunities for the growth of the startup, through which the entrepreneur obtains information, resources, services, and substantive support needed for social entrepreneurship opportunity identification and development. Whether entrepreneurs can leverage resources depends on the stability of the relationship between social entrepreneurs and stakeholders (Liu et al., 2019). Relationship stability implies the frequency of contact between entrepreneurs and stakeholders, which plays a vital role in the quantity and quality of resources acquired, ensures the effective transfer and acquisition of resources needed for the growth of startups. Recent studies have found that, compared with other aspects of social networks, trust can improve the frequency and quality of information sharing and exchange between entrepreneurs and stakeholders and lengthen the time spent talking. The emotional tool network significantly impacts how external resources are used (Sarkar, 2018). To this end, we focus on entrepreneurial social networks.

Within the framework of social network theory, the social entrepreneurial network is an important variable that affects how social entrepreneurship opportunity identification affects resource bricolage. The accumulation of resource bricolage ability in social entrepreneurship positively correlates with the strength of social entrepreneurs' network relationships (Liu et al., 2019). First is the effect of resource patchwork quantity on network relationship strength on entrepreneurial performance. We introduce an R&D model to illustrate the resource patchwork effect.

Assume that the piecework resource demand function is linear,  $Q = 1 - P$ , and the initial marginal cost of production of the entrepreneur's firm is  $c$ , and assume that  $nc < 1$ ; the level of research  $i$  effort chosen by each entrepreneur is  $s_i \in s = (0, \bar{c})$ . The cooperation between the entrepreneur  $i$  and network actors is bilateral, allowing the entrepreneur to share research on behalf of the firm to reduce costs. The marginal costs incurred by entrepreneurs  $s$  dealing with the aggregation of research efforts and network members  $g$  are ( $j$  being  $i$  network close partners)  $c_i(s|g) = (\bar{c} - s_i + \sum_{j \in N_i(g)} s_j)$ . It is also assumed that the research effort requires a cost,  $Z(s_i) = as_i^2$ , and this cost is  $a > 0$ , if  $a$  is large enough. Subsequently, the profit function is concave with respect to the network actor's own effort. Simultaneously, given  $c = c_1, c_2, c_3 \dots c_n$ , the firm's choice of output promotes profit

maximization. Additionally, it is assumed that network actors compete with output in the market, where the output selected by enterprises is  $q = q_1, q_2, q_3 \dots q_n$ , and the total output is  $Q = \sum_{j \in N} q_j$ . Therefore, the economic profit obtained by the firm  $i$ , from the close cooperation network of entrepreneurs  $g$ ,  $\pi(s|g) = [1 - q_i(g) - \sum_{j \neq i} q_j(g) - c_i(g)]q_i(g) - as_i^2(g)$  is  $q_i \frac{1 - nc_i \sum_{j \neq i} q_j}{n+1}$ , and the equilibrium output of the firm can also be obtained as  $q_i \frac{1 - nc_i \sum_{j \neq i} q_j}{n+1}$ . Based on Goyal and Moraga-Gonzalez (2001) derivation, research effort  $s$  can be directly used to express the economic benefits of enterprises in the social network  $g$  of entrepreneurs  $i$  when they face the research set:

$$\pi(s|g) = \frac{[1 - \bar{c} + s_i(n - \eta_i) + \sum_{j \in N_i(g)} s_j[n - \eta_j(g)] - \sum_{l \in N \setminus \{i\}} s_l[1 + \eta_l(g)]^2}{(n + 1)^2} - as_i^2(g),$$

where,  $l$  is any other network actor. The payoff function shows the positive bound externality effect of closely related actions and the negative bound externality effect of non-closely related actions in the network. The actions of closely related actions are strategic complementarity, whereas the actions of non-closely related actions are strategic substitution. Thus, close cooperation of network actors can produce a series of out-of-bounds benefits.

Second is the influence of contact frequency (times) on network relationship strength on enterprise performance. According to the above conclusion and hypothesis, the problem of contact times,  $k$ , is further discussed. Assume that the number of interactions between entrepreneurs and network actors is  $k$ , which is also taken as a parameter. Thus, in a social network  $g^k$  with a number of  $is$   $k$ , the revenue function of the corresponding enterprise is:

$$\pi(s|g^k) = \frac{[1 - \bar{c} + s_i(n - k) + \sum_{j \in N_i(g)} s_j[n - \eta_j(g)] - \sum_{l \notin N_i(g) \cup \{i\}} s_l(k + 1)]^2}{(n + 1)^2} - as_i^2.$$

Furthermore, to realize the symmetry of research effort in the network of degree  $k$ , the equilibrium effort level function  $s_i^*(g^k) = \frac{(1-\bar{c})(n-k)}{a(n+1)^2 - (n-k)(k+1)}$  can be substituted into the above revenue function. According to Goyal and Moraga-Gonzalez (2001), the following expression can be obtained:

$$\Pi_i^*(g^k) = \frac{(1 - \bar{c})^2 a [a(n + 1)^2 - (n - k)]}{[a(n + 1)^2 - (n - k)(k + 1)]^2}$$

We find that the profits in the network of degree  $n - 2$  are greater than in the network of degree  $n - 1$ . In other words, when

the profits change in degree, they are not monotonic. They get the maximum value at some intermediate degree; that is, with the increase in the number of contacts, the profits rise first and then fall.

In this section, we deduce the role of the contingent effect of relationship strength from the perspective of relationship scenarios such as cost and time, environmental elements, and cultural norms of social networks. Entrepreneurs can increase their ability to mobilize resources by investing more time and energy in stakeholders to improve communication quality. Resource mobilization in social enterprises differs from that in commercial enterprises. A strong network relationship can enhance the legitimacy of social entrepreneurship, which raises the utilization of resources held by stakeholders. The mutually beneficial symbiotic relationship thus formed also increases stakeholders' acceptance and recognition of social entrepreneurial ventures. Regarding environmental elements, the discovery view suggests that the process of developing social entrepreneurship is full of ecological uncertainties. Environments with high trust enable entrepreneurs to effectively exchange ideas with stakeholders, leverage partners' core competencies to serve the startup's benefit, and improve business performance (Wu and Liu, 2017).

Conversely, the environment is often reflected in the degree of marketization of the area where the business activities are carried out (Marquis et al., 2013). For example, market-oriented regions can influence social entrepreneurs' overall quality of resources (Phillips et al., 2013). In terms of cultural norms, a study by Xu et al. (2021) on the impact of the proportion of Buddhist entrepreneurs on social entrepreneurship based in some regions revealed that the ratio of entrepreneurs believing in Buddhism was positively correlated with the level of prosocial behaviors such as philanthropy. Moreover, they were more likely to establish corporate Buddhist values derived from the Four Immeasurable Minds in less developed regions. These values could encourage philanthropic behaviors and social entrepreneurial activities.

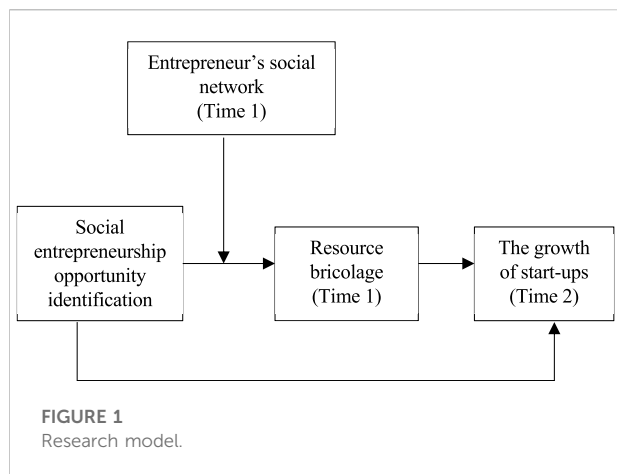
Therefore, we propose the following hypotheses:

**H3.** Entrepreneurs' social networks positively moderate the relationship between social entrepreneurship opportunity identification and resource bricolage.

**H4.** Entrepreneurs' social networks positively moderate the mediating relationship of social entrepreneurship opportunity identification that affects business growth through resource bricolage.

Explained in detail, the more robust an entrepreneur's network, the more significant the role of social entrepreneurship opportunity identification in affecting business growth through resource bricolage.

The model constructed in this paper is illustrated in Figure 1.



## 2 Research design

### 2.1 Data sources

This study's research data are split into two groups based on the study by [Zahra and Wright \(2016\)](#). The first is nonprofit organizations and businesses that use new business models to improve their social services, and the second is for-profit businesses that meet social needs to improve their competitive advantage and profitability. Organizations and businesses in the Yangtze River Delta and Pearl River Delta were surveyed for this study. To minimize homologation bias, we used an anonymous questionnaire. The questionnaires were distributed in two periods: The first stage (Time 1) was from September to December 2020, and the survey covered background information, social networks, opportunity identification, and resource bricolage of commercial startups. We obtained a list of commercial entrepreneurial organizations with the help of the organizing committee of "The China Social Entrepreneurs Annual Meeting and Social Enterprise Week." We identified 442 new startups that met the definition provided in this article. To increase the reliability and authenticity of the questionnaire, the researchers called the entrepreneurs mentioned above in advance to inform them of the purpose, anonymity, and things to be noted during the study. 264 entrepreneurs were surveyed, and 231 valid questionnaires were collected. The survey's second phase (Time 2) lasted from January to March 2021. The survey sought information on the growth level of enterprises, and the respondents were the entrepreneurs who filled out the valid questionnaires at the first stage. After screening for questionnaires with highly irregular answers and missing data, we recovered 177 valid questionnaires; thus, the recovery rate was 76.62%. Before data analysis, we conducted an independent sample t-test on the questionnaires recovered, employing different techniques, and found no significant difference among them.

### 2.2 Measurement of variables

Based on the above research hypotheses, we examined the variables of opportunity identification, resource bricolage, social network, and business growth of social entrepreneurs. The questionnaire was scored on a 5-point Likert scale (where "1" means strongly agree and "5" means strongly disagree). This study's design of the measurement scale follows standard practices within the academic community.

#### 2.2.1 Startups' growth performance

Using multidimensional indicators to measure organizational performance is of great significance. The existing growth performance is measured by the increase in "quantity" and "quality" of innovation, including metrics such as solvency, profitability, operational capacity, and growth capacity. However, startups have three growth paths to prioritize economic value, social value, and equal emphasis on economic and social value. Given the above and the commercial attributes of the enterprise, following [Pless \(2012\)](#), we designed a questionnaire that contained seven categories, including "sustained sales growth" and "the increase in the number of beneficiaries," aimed at measuring the growth of startups from the perspectives of economic and social value.

#### 2.2.2 Social entrepreneurship opportunity identification

Based on the implications of social entrepreneurship opportunities, we focus on overall social objectives and treat economic stability as a prerequisite for sustainable success. We used the scale developed by [Murphy et al. \(1996\)](#). We prepared nine questions in the questionnaire, including "My enterprise's new projects can provide products or services that are in short supply in society."

#### 2.2.3 Resource bricolage

[Baker and Nelson \(2005\)](#) indicate that companies can solve problems and find opportunities if they act quickly and make the most of their resources, including physical materials, human resources, skills, and market and institutional systems. Based on the above conceptual framework, we draw on the measurement scale designed by [Senyard et al. \(2014\)](#); the questionnaire consisted of eight questions, including "My company is more innovative than others in using resources at hand."

#### 2.2.4 Entrepreneur's social network

We draw on studies by [Yang \(1994\)](#) and [Qiao and Lu \(2014\)](#) to measure entrepreneurs' social networks through four questions, including "I have close ties with potential or existing suppliers and manufacturers."

TABLE 1 Variable reliability test.

Variables	Measurement indicators	Factor load	C.R. value	AVE	Variables	Measurement indicators	Factor load	C.R. value	Variables
OI	OI1	0.84	0.85	0.72	SN	SN1	0.89	0.71	0.63
	OI2	0.90				SN2	0.81		
	OI3	0.60				SN3	0.85		
	OI4	0.78				SN4	0.75		
	OI5	0.90				SN5	0.86		
	OI6	0.86				SN6	0.82		
	OI7	0.65							
	OI8	0.89							
	OI9	0.84							
RB	RB1	0.64	0.75	0.74	SG	SG1	0.61	0.87	0.81
	RB2	0.61				SG 2	0.75		
	RB3	0.70				SG 3	0.69		
	RB4	0.66				SG 4	0.88		
	RB5	0.82				SG 5	0.78		
	RB6	0.60				SG 6	0.80		
	RB7	0.73				SG 7	0.72		
	RB8	0.66							

Notes: (1) N = 177; (2) OI, opportunity identification; RB, resource bricolage; SN, social network; SG, start-up growth.

TABLE 2 Variable validity tests.

Model	$\chi^2$	df	CFI	RMSEA	SRMR
Four-factor model (OI, RB, SN, SG)	853.68	371	0.91	0.10	0.07
Three-factor model (OI + RB, SN, SG)	1101.63	374	0.83	0.14	0.09
Two-factor model (OI + RB, SN + SG)	1771.73	376	0.76	0.15	0.10
One-factor model (OI + RB + SN + SG)	2896.80	377	0.45	0.19	0.13

Notes: (1) N = 177; (2) OI, opportunity identification; RB, resource bricolage; SN, social network; SG, start-up growth.

The background variables, such as gender, age, and education, were control variables.

( $\chi^2 = 853.68$ ;  $df = 371$ ;  $CFI = 0.93$ ;  $RMSEA = 0.10$ ;  $SRMR = 0.07$ ), and shows better discriminant validity.

### 2.2.5 Reliability and validity test

SPSS 20.0 and MPLUS 7.0 software were used in factor analysis to test the reliability and validity of the above measurement scales. The results are presented in Table 1 and Table 2. Table 1 shows that the combined reliability (C.R. values) of all factors is greater than 0.7 and the average variance extracted (AVE) is greater than 0.5, indicating high internal consistency in the measurement scales according to Hair et al. (2009). Table 2 displays the model fit indices and compares the four-factor measurement model constructed by opportunity identification (OI), resource bricolage (RB), entrepreneur social network (SN), and startup growth (SG) with the three alternative models involving three-factor, two-factor, and one-factor models. The result is that the four-factor model is a better fit for the actual data

## 2.3 Empirical analysis

### 2.3.1 Common method bias

We adopted Harman’s one-way test to check for common method bias. The exploratory factor analysis was conducted for all the questions on the measurement scale of social opportunity identification, resource bricolage, entrepreneur’s social network, and startup growth. The results demonstrated that when the data were not rotated, all the factors with eigenvalues greater than one explained 72.76%, and the unrotated factor explained 32.78% of the data lower than the critical value of 40%. Therefore, we concluded that common method bias did not exist and proceeded with subsequent analyses.



TABLE 3 Means, standard deviation, and correlation of the main variables.

	1	2	3	4	5	6	7
1. Gender	1						
2. Age	0.030	1					
3. Education	0.066	-0.199**	1				
4. OI	0.038	-0.045	-0.083	1			
5. RB	0.054	-0.093	-0.191*	0.581**	1		
6. SG	0.064	-0.147	0.100	0.488**	0.276**	1	
7. SN	0.150*	0.189*	-0.255**	0.309**	0.185*	0.249**	1
Average value	1.5	1.86	2.21	3.80	3.82	3.80	3.94
Standard deviation	0.46	0.77	0.56	0.78	0.56	0.65	0.88

Notes: (1) N = 177, \* means  $p < 0.05$ ; \*\* means  $p < 0.01$ . (2) OI, opportunity identification; RB, resource bricolage; SN, social network; SG, start-up growth.

TABLE 4 Test of mediating effect.

Variable	Start-up growth				Resource bricolage	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Gender	-0.032	-0.048	-0.095	-0.054	-0.094	0.031
Age	0.154**	0.189**	0.089	0.150**	0.085	0.042
Education	0.091	-0.020	0.001	-0.112	-0.076	0.075
OI		0.577***		-0.164	0.639***	0.465***
RB			0.581***	0.758***		
SN						-0.408
OI*SN						0.523**
Model statistics						
R2	0.146	0.181	0.337	0.352	0.417	0.49
R2 adjusted	0.142	0.167	0.333	0.337	0.409	0.475
F	4.142**	12.749***	89.14**	165.822***	50.164***	21.874***
ΔR2	—	0.035	0.279	0.015	—	0.29
VIF (max)	1.506	1.954	2.538	2.538	1.785	2.285

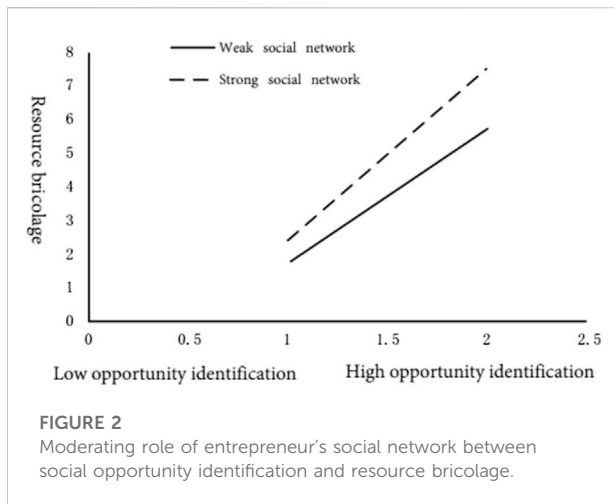
Notes: (1) N = 177, \* means  $p < 0.05$ ; \*\* means  $p < 0.01$ ; \*\*\* means  $p < 0.001$ . (2) OI, opportunity identification; RB, resource bricolage; SN, social network; SG, start-up growth.

### 2.3.2 Descriptive statistics and correlation analysis

Before testing the hypotheses, descriptive statistical and correlation analyses were performed on the above variables, and the results are presented in Table 3. Social entrepreneurship opportunity identification is positively correlated with resource bricolage ( $r = 0.581, p < 0.01$ ), and social opportunity identification is positively correlated with startup growth ( $r = 0.488, p < 0.01$ ). Resource bricolage is positively correlated with startup growth ( $r = 0.276, p < 0.01$ ), indicating that the relationship between the variables is consistent with previous theoretical hypotheses. However, regression is needed to verify the hypothesis.

### 2.3.3 Hypothesis testing

We adopted multiple regression models to test the hypotheses, as shown in Table 4. The regression models are expressed as follows:  $Y_{SG} = \beta_0 + \beta_1 OI + \beta_2 RB + \beta_3 SN + \beta_4 SN \bullet OI + \epsilon$ . OI is opportunity identification abbreviations, RB is resource bricolage abbreviations, SN is social network abbreviations, and SG is startup growth abbreviations. The maximum VIF value for each model is 2.538, indicating no severe multicollinearity issues. Nonetheless, the independent and moderating variables are centered before the analysis of interaction effects. Model 1 presents the effect of the control variables on the growth of startups. After the independent variable of entrepreneurship opportunity identification is added, Model 2 shows that entrepreneurship opportunity identification significantly and



positively affects the growth of startups ( $\beta = 0.577, p < 0.001$ ); hence, H1 is true.

We used the causal steps approach proposed by Baron and Kenny (1986) to test the mediating effect. Model 5 shows that entrepreneurship opportunity identification positively affects resource bricolage ( $\beta = 0.639, p < 0.001$ ). Model 3 indicates that the effect of resource bricolage on startup growth is significant ( $\beta = 0.581, p < 0.001$ ). We also compared Models 2 and 4 after adding opportunity identification and resource bricolage for regression. We found that the effect of entrepreneurship opportunity identification on startup growth becomes insignificant ( $\beta = -0.164$ ), while the positive effect of resource bricolage on startup growth becomes more significant ( $\beta = 0.758, p < 0.001$ ). Therefore, resource bricolage fully mediates between entrepreneurship opportunity identification and startup growth, implying that H2 is verified.

To test the moderating effect analysis, we added the control variables, independent variables, moderating variables, and product terms to the regression equation, with resource bricolage as the dependent variable. Model 6 shows that the moderating effect of social networks between resource bricolage and entrepreneurship opportunity identification is significant ( $\beta = 0.523, p < 0.01$ ). It suggests that the stronger the entrepreneur's social network, the more significant the relationship between entrepreneurship opportunity identification and resource bricolage. Therefore, H3 is true. To visualize this moderating effect, we draw different effects of entrepreneurship opportunity identification on resource bricolage at different levels of the entrepreneur social network. With one standard deviation above the mean and one standard below the mean as the benchmark, the interaction effect diagram is illustrated in Figure 2.

In H4, we hypothesize that an entrepreneur's social network can indirectly moderate entrepreneurship opportunity identification and growth of startups through resource

bricolage. We use Model 4 of the process macro program for conditional process modeling to test this first-stage moderating model with mediation. Table 5 shows the results based on 5,000 bootstrap samples. The findings show that when the entrepreneur has a strong social network, the indirect effect of entrepreneurship opportunity identification affecting startup growth through resource bricolage is 0.336 [Boot 95% CI = (0.235, 0.421)]. When the entrepreneur has a weak social network, the indirect effect of entrepreneurship opportunity identification through resource bricolage on the growth of a social enterprise is 0.279 [Boot 95% CI = (0.153, 0.407)]; the difference between groups is 0.057 [Boot 95% CI = (0.225, 0.388)], reaching the level of significance. In addition, the index calculated by process shows that the determining index of the moderating effect of an entrepreneur's social network on entrepreneurship opportunity identification that indirectly affects the growth of startups is 0.202 [Boot 95% CI = (0.001, 0.083)], with a confidence interval excluding 0. The above results prove the existence of a moderating effect with mediation, and H4 is verified.

### 3 Conclusion and implications

The opportunity process of social entrepreneurship is cooperative and open rather than closed and individual action. The operating subjects of enterprise social entrepreneurship coexist with multiple factors. Only with the participation of multiple factors and cooperative innovation can the effectiveness and prospect of social entrepreneurship practice be fundamentally improved and the social value of enterprises be realized. Previous studies on social entrepreneurship focus more on the growth of social enterprises, whereas this study focuses on the growth of commercial, entrepreneurial organizations. In this study, we recruited 177 social entrepreneurs as survey subjects and used multiple regression analysis to explore how social entrepreneurship opportunity identification impacts enterprise growth. The findings demonstrated that identifying social entrepreneurship opportunities significantly fosters the expansion of startups.

Social entrepreneurship opportunity identification boosts startups' growth performance by improving resource bricolage. The entrepreneur's social network, which serves as a resource channel, significantly contributes to the mediating effect of resource bricolage, meaning that the more "strong relationship" resources there are in the social network of entrepreneurs, the more influential the impact of social entrepreneurship opportunity identification on business growth performance.

Social entrepreneurship opportunity identification has a significant positive impact on the growth of startups. Although the impact of entrepreneurship opportunity identification on organizational development has been

TABLE 5 Analysis of moderating effect with mediation.

## Opportunity identification → Resource bricolage → Startup growth

	Grouping of moderating variables	Indirect effects	BootSE	Boot LLCI	BootULCI
Conditional indirect effect	Strong social network (+1SD)	0.336	0.052	0.235	0.421
	Weak social network (-1SD)	0.279	0.063	0.153	0.407
	Difference between groups	0.057	0.051	0.225	0.388
Moderation with mediation	Determining Index	Index	BootSE	BootLLCI	BootULCI
		0.202	0.016	0.198	0.247

Notes: (1) 5,000 samplings. (2) LLCI, low level confidence interval; ULCI, up level confidence interval; SE = standard error.

examined in past research, some studies have also explored the relationship between entrepreneurial orientation and business performance by using startups as research subjects. However, prior studies have two shortcomings. First, they did not examine corporate social entrepreneurship from the perspective of economic and social value creation, and thus, no consensus has been reached on the definition of social entrepreneurship opportunities. Second, they lack empirical tests on social entrepreneurship opportunity identification. Therefore, we explored the underlying logic of social entrepreneurship opportunities from economic and social value perspectives and solved the problem of insufficient “cumulative fragmentation” found in previous studies. In addition, social entrepreneurship opportunity identification’s impact on the growth of startups responds to what Halberstadt et al. (2021) advocates, deepens the mechanism of social entrepreneurship opportunity identification, and provides new ideas for the relationship between social entrepreneurship opportunities and the high-quality growth of startups.

Second, regarding the origination of resources for social entrepreneurship and the results created, Dwivedi and Weerawardena (2018), as well as Liu et al. (2021), explored the influence of entrepreneurs’ social networks on resource bricolage besides opportunity identification. Based on the social network theory, this study supports Baker and Nelson’s (2005) assertion that resource bricolage is the process of constructing environmental resources. It also adds to the body of knowledge regarding the link between social entrepreneurial resources and business growth, broadening the definition of social bricolage. The impact of opportunity identification on the growth of startups was finally examined from the perspective of entrepreneurs’ social networks; earlier research (Zhao and Tian, 2021) used entrepreneurs’ identity as a boundary condition while ignoring social networks, a vital social entrepreneurial resource. Numerous studies have confirmed that entrepreneurs’ social networks are an essential condition for the development of startups. Pan and Li (2014) found that the emotional connection of entrepreneurs in entrepreneurship

contributes to acquiring entrepreneurial resources. In this study, we developed the boundary conditions of social entrepreneurship opportunity identification for the growth performance of startups, realized the integration of entrepreneurs’ social networks and opportunity identification, and enriched the theoretical implications of social entrepreneurship and social networks.

### 3.1 Entrepreneurial implications

During the initial phase of social entrepreneurship, pursuing economic profits and long-term strategic relationships with informal groups, NGOs, local associations, educational and research institutions, and using one’s hybrid identity to create social values is critical. Social entrepreneurship can be difficult initially. Still, the results of this study show that connections such as relatives, marital relatives, clan members, compatriots, friends, classmates, comrades, former subordinates, and former leaders can be utilized and transformed into close and stable relationships. Social entrepreneurship can provide more significant and better social networks, information access, and a greater amount of donations or financial support and help avoid legal and social problems as well as risks of failure arising from the unreasonable integration of external resources. Entrepreneurs need to fully grasp the essence of the social aspect of social entrepreneurship to comprehensively promote the quality and efficiency of startups, explore new approaches to social innovation, and promote high-quality development of social entrepreneurship.

### 3.2 Limitations and future directions

This study has some shortcomings that need to be improved in future studies. First, although we collected data across a

certain period, future research can reveal the process of how social entrepreneurship opportunity identification impacts business growth performance by adopting a tracking method and dynamic simulation. Second, this study focuses on the social network of entrepreneurs and the social entrepreneurship opportunity identification effects on the growth performance of startups. Although the study reveals the startup chain based on the social bricolage theory, whether the startup chain exists in other contexts such as social entrepreneurship and stakeholder involvement and their differences is unclear. Future research may consider cross-case comparative studies among various forms of social entrepreneurship to identify different management strategies in various contexts and examine the boundary roles of social entrepreneurship and stakeholder involvement.

## Data availability statement

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

## Ethics statement

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

## References

- Baker, T., and Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Adm. Sci. Q.* 50 (3), 329–366. doi:10.2189/asqu.2005.50.3.329
- Balagopal, V. (2011). A matching theory of entrepreneurs' tie formation intentions and initiation of economic exchange. *Acad. Manage. J.* 54 (1), 137–158. doi:10.5465/amj.2011.59215084
- Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Personality Soc. Psychol.* 51, 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Charles, Y., Murnieks, A. C., and Klotz, D. A. (2020). Entrepreneurial motivation: A review of the literature and an agenda for future research. *J. Organ. Behav.* 41 (2), 115–143. doi:10.1002/job.2374
- Choi, N., and Majumdar, S. (2014). Social entrepreneurship as an essentially contested concept: Opening a new avenue for systematic future research. *J. Bus. Ventur.* 29 (3), 363–376. doi:10.1016/j.jbusvent.2013.05.001
- Dacin, P. A., Dacin, M. T., and Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *Acad. Manage. Perspect.* 24 (3), 37–57. doi:10.5465/amp.2010.52842950
- Dees, J. G. (1998). Enterprising nonprofits. *Harv. Bus. Rev.* 76 (1), 54–67. doi:10.1023/A:1008675230233
- Doherty, B., Haugh, H., and Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *Int. J. Manag. Rev.* 6 (4), 417–436. doi:10.1111/ijmr.12028
- Dorado, S. (2006). Social entrepreneurial ventures: Different values so different process of creation, no? *J. Dev. Entrep.* 11, 319–343. doi:10.1142/s1084946706000453
- Dwivedi, A., and Weerawardena, J. (2018). Conceptualizing and operationalizing the social entrepreneurship construct. *J. Bus. Res.* 86 (86), 32–40. doi:10.1016/j.jbusres.2018.01.053
- Ellsworth, R. R. (2002). *Leading with purpose: The new corporate realities*. Stanford, CA: Stanford University Press. doi:10.2307/30040758
- Garud, R., and Karne, P. (2003). Bricolage versus breakthrough: Distributed and embedded agency in technology entrepreneurship. *Res. Policy* 32 (2), 277–300. doi:10.1016/s0048-7333(02)00100-2
- Gerometta, J., Haussermann, H., and Longo, G. (2005). Social innovation and civil society in urban Governance: Strategies for an inclusive city. *Urban Stud.* 42 (11), 2007–2021. doi:10.1080/00420980500279851
- Gerometta, J., Moulaert, F., Martinelli, F., Swyngedouw, E., and Gonzalez, S. (2005a). Towards alternative model(s) of local innovation. *Urban Stud.* 42 (11), 1969–1990. doi:10.1080/00420980500279893
- Goyal, S., and Moraga-Gonzalez, J. L. (2001). R&D networks. *Rand J. Econ.* 32 (4), 686–707. doi:10.2307/2696388
- Halberstadt, J., Thomas, N., Sascha, K., Gadaf, R., Paul, Jones., and Kailer, N. (2021). Social entrepreneurship orientation: Drivers of success for startups and established industrial firms. *Ind. Mark. Manag.* 94 (94), 137–149. doi:10.1016/j.indmarman.2020.06.012
- Hockerts, K. (2006). "Entrepreneurial opportunity in social purpose business ventures," in *Social entrepreneurship*. Editors J. Mair, J. Robinson, and K. Hockerts (London: Palgrave), 142–154.
- Hu, X. T., Susan, M., Angelika, Z., Lee, M., and Regina, F. (2019). Understanding opportunities in social entrepreneurship: A critical realist abstraction. *Entrepreneursh. Theory Pract.* 44, 1032–1056. doi:10.1177/1042258719879633

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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- Jack, S. L., and Anderson, A. R. (2002). The effects of embeddedness on the entrepreneurial process. *J. Bus. Ventur.* 17 (5), 467–487. doi:10.1016/s0883-9026(01)00076-3
- Kraus, S., Niemand, T., Halberstadt, J., Shaw, E., and Syrjälä, P. (2017). Social entrepreneurship orientation: Development of a measurement scale. *Int. J. Entrepreneurial Behav. Res.* 23 (6), 977–997. doi:10.1108/ijeb-07-2016-0206
- Li, F., and Zhu, Z. D. (2014). Empirical research on the entrepreneurial bricolage and its functions: The mediating role of dynamic capabilities. *Chin. J. Manag.* 11 (4), 562–568.
- Liu, Z., Xiao, Y. Z., Jiang, S. Y., and Hu, S. (2019). Social entrepreneurs' personal network, resource bricolage, and relation strength. *Manag. Decis.* 59 (11), 2774–2791. doi:10.1108/md-05-2019-0674
- MacCallum, D., Moulaert, F., Hillier, J., and Vicari, S. (2009). in *Social innovation and territorial development* (Aldershot: ashgate). (eds).
- Mair, J., and Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *J. World Bus.* 41 (1), 36–44. doi:10.1016/j.jwb.2005.09.002
- Marcus, E., Hochschule, K. T. W., and Gestaltung, K. (2016). “Complexity, cultural evolution, and the discovery and creation of (social) entrepreneurial opportunities: Exploring a memetic approach,” in *Complexity in entrepreneurship, innovation and technology research* (Cham: Springer), 63–92.
- Marquis, C., Davis, G. F., and Glynn, M. A. (2013). Golfing alone? Corporations, elites, and nonprofit growth in 100 American communities. *Organ. Sci.* 24 (1), 39–57. doi:10.1287/orsc.1110.0717
- McDermott, Kevin, Elizabeth, C., Kurucz, B., and Colbert, Barry A. (2018). Social entrepreneurial opportunity and active stakeholder participation: Resource mobilization in enterprising conveners of cross-sector social partnerships. *J. Clean. Prod.* 183 (3), 121–131. doi:10.1016/j.jclepro.2018.02.010
- Murphy, G. B., Traylor, J. W., and Hill, R. C. (1996). Measuring performance in entrepreneurship research. *J. Bus. Res.* 36 (1), 15–23. doi:10.1016/0148-2963(95)00159-x
- Murphy, P. J., and Coombes, S. M. (2009). A model of social entrepreneurial discovery. *J. Bus. Ethics* 87, 325–336. doi:10.1007/s10551-008-9921-y
- Pablo, R., and Ricardo, M. (2021). From opportunity recognition to the start-up phase: The moderating role of family and friends-based entrepreneurial social networks. *Int. Entrep. Manag. J.* 17, 1159–1182. doi:10.1007/s11365-020-00734-2
- Park, S. H., and Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. *Strateg. Manag. J.* 22 (5), 455–477. doi:10.1002/smj.167
- Phillips, N., Tracey, P., and Karra, N. (2013). Building entrepreneurial tie portfolios through strategic homophily: The role of narrative identity work in venture creation and early growth. *J. Bus. Ventur.* 28 (1), 134–150. doi:10.1016/j.jbusvent.2011.12.002
- Pless, N. M. (2012). Social entrepreneurship in theory and practice an introduction. *J. Bus. Ethics* 111 (3), 317–320. doi:10.1007/s10551-012-1533-x
- Sagawa, S., and Segal, Eli. (2000). *Common interest, common good: Creating value through business and social sector partnerships*. Boston, Massachusetts, USA: Harvard Business Press.
- Salunke, S., Weerawardena, J., and Mcoll-Kennedy, J. R. (2013). Competing through service innovation: The role of bricolage and entrepreneurship in project-oriented firms. *J. Bus. Res.* 66 (8), 1085–1097. doi:10.1016/j.jbusres.2012.03.005
- Sarkar, S. (2018). Grassroots entrepreneurs and social change at the bottom of the pyramid: The role of bricolage. *Entrepreneursh. Regional Dev.* 30 (34), 421–449. doi:10.1080/08985626.2017.1413773
- Saul, J. (2010). *Social innovation, inc: 5 strategies for driving business growth through social change*. San Francisco: Jossey-Bass, 29–127.
- Schwartz, B. (2012). *Rippling: How social entrepreneurs spread innovation throughout the world*. New York: John Wiley and Sons Inc.
- Sebastian, I. C., Eduard, G. C., Marian, P. C., and Gurjeet, D. (2020). Analysis of social media impact on opportunity recognition. A social networks and entrepreneurial alertness mixed approach. *Entropy* 22 (3), 343. doi:10.3390/e22030343
- Senyard, J., Baker, T., Steffens, P., and Davidsson, P. (2014). Bricolage as a path to innovativeness for resource-constrained new firms. *J. Prod. Innov. Manag.* 31 (2), 211–230. doi:10.1111/jpim.12091
- Servantie, V., and Rispal, M. H. (2018). Bricolage, effectuation, and causation shifts over time in the context of social entrepreneurship. *Entrepreneursh. Regional Dev.* 30 (3-4), 310–335. doi:10.1080/08985626.2017.1413774
- Shaker, A., Zahra, E., Gedajlovic, D., and Neubaum, J. M. (2008). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *J. Bus. Ventur.* 24 (5), 519–532. doi:10.1016/j.jbusvent.2008.04.007
- Sunduramurthy, C., Zheng, C. C., Musteen, M., Francis, J., and Rhyne, L. (2016). Doing more with less, systematically? Bricolage and engineering in successful social ventures. *J. World Bus.* 51 (5), 855–870. doi:10.1016/j.jwb.2016.06.005
- Tu, X., Liu, L., Zhang, Y., Peng, Y., and Lin, C. (2020). How prosocial motivation and helping behavior influence contextual performance: The mechanism and context situation of cognitive trust. *Nankai Bus. Rev.* 23 (2), 203–213.
- Virginie, V., and Katia, R. H. (2021). A conceptual system of antecedents and processes in social entrepreneurship opportunity identification. *Front. Psychol.* 12, 698892. doi:10.3389/fpsyg.2021.698892
- Wang, H. H., Xie, P. P., and Xiong, L. J. (2019). Study on relationship among entrepreneurial network, resource bricolage and new venture performance. *J. Manag. Sci.* 32 (3), 50–66. doi:10.3969/j.issn.1672-0334.2019.02.004
- Wu, L., and Liu, H. (2017). Resource patchwork and firm innovation performance: A moderated mediating effect. *J. Chongqing Univ.* 4 (57), 193–208.
- Xu, Z., Liu, Z., and Wu, J. (2021). Buddhist entrepreneurs, charitable behaviors, and social entrepreneurship: Evidence from China. *SSRN J.* doi:10.2139/ssrn.3930625
- Yang, M. H. (1994). Gifts, favors, and banquets: The art of social relationships in China. *J. Asian Stud.* 56 (3), 789.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., and Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *J. Bus. Ventur.* 24 (5), 519–532. doi:10.1016/j.jbusvent.2008.04.007
- Zahra, S. A., and Wright, M. (2016). Understanding the social role of entrepreneurship. *Jour. Manage. Stud.* 53 (4), 610–629. doi:10.1111/joms.12149
- Zhao, L., and Tian, Z. R. (2021). Entrepreneurship bricolage, opportunity identification and social enterprises performance—the moderating role of stewardship culture. *Sci. Technol. Prog. Policy* 38 (7), 115–124.
- Zhou, J. M., Zhang, X. S., and Zhou, Y. W. (2019). Impact of resource bricolage and R&D team's impromptu creation on the new product development performance of startups. *Sci. Res. Manag.* 40 (1), 52–60. doi:10.19571/j.cnki.1000-2995.2019.01.006