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The effects of network reliance on opportunity recognition: A moderated mediation model of knowledge acquisition and entrepreneurial orientation

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ABSTRACT

Opportunity recognition is one of the most important aspects of entrepreneurship. It is particularly crucial for new enterprises, as the identification of opportunities is an indispensable initial step for entrepreneurial activities. This study investigates the internal mechanism through which network reliance affects opportunity recognition. To reveal this internal mechanism, we propose a moderated mediation model of knowledge acquisition and entrepreneurial orientation. Using survey data from 278 startup managers in South Korea, hierarchical regression analysis and bootstrapping analysis are used to investigate mediation and moderation effects. The results show that knowledge acquisition positively mediates the relationship between network reliance and opportunity recognition. Moreover, entrepreneurial orientation negatively moderates not only the relationship between knowledge acquisition and opportunity recognition, but also the overall mediation model. This demonstrates that low entrepreneurial orientation individuals recognize opportunities better when they have accumulated enough business knowledge. Based on these findings, we conclude that opportunity recognition may be achieved more effectively through the complex process of networking, knowledge acquisition, and entrepreneurial orientation.

1. Introduction

Issues related to new ventures have arisen in recent times, notably after the venture boom of the 2000s. The world currently seems to be in the grip of venture fever. In 2014 alone, venture capitalists invested >47.3 billion USD in 4000 startups, which was the largest investment since 2001. The number of startups that achieved valuations of one billion dollars skyrocketed in 2014 (CBI insights, 2015). Additionally, there were 8 startups among the top 10 firms listed on *NASDAQ,* indicative of the global startup trend.

Nonetheless, not every startup is successful; there are no shortcuts to success. According to a survey report by Startup Alliance (2014), a public-private network association supporting startups in South Korea, many entrepreneurs consider networking to be the key to success, despite numerous difficulties associated with establishing and managing business networks. Some studies have also confirmed the importance of networking. It has been found that entrepreneurs may discover innovative ways more effectively through a combination of external networks and internal resources (Gulati and Singh, 1998). As such, it would be important to investigate early-stage entrepreneurs, who have been operating for less than five years and are striving to find opportunities through their networks (Korunka et al., 2003). However, studies related to such networks have mainly focused on large firms and small- and medium-sized companies older than five years.

In addition, entrepreneurship research has mostly focused on business performance, including Initial Public Offerings (IPOs) or the amount of seed capital raised, as the dependent variable, which only captures the entrepreneurial outcome at a particular point of time. However, financial results are not the only concern of entrepreneurs. Although measuring financial performance is necessary, entrepreneurs' performance should also be analyzed in terms of the entrepreneurial process, as entrepreneurial activities reflect the work of the startup over its entire life and are not just a one-stop exercise. Opportunity recognition is a continuous entrepreneurial process across all stages: prestartup, startup, and growth of a venture. Analyzing opportunity recognition allows researchers to forecast the power of potential gains, which cannot be captured simply through monetary outcomes (Singh et al., 1999b). Moreover, according to De Carolis and Saparito (2006), a combination of networks and cognition give birth to successful opportunity recognition. An entrepreneur's network is a critical resource in expanding bounded rationality. Entrepreneurs are more successful in recognizing opportunities when they perceive that vital technical or

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market knowledge can be gained from the networks. Therefore, it is beneficial to examine opportunity recognition as a consequence of an entrepreneur's networking process. However, previous research has not fully accounted for these mechanisms through the identification of suitable mediators or moderators (Wasdani and Mathew, 2014).

Hence, the main contributions of this study are as follows. First, we extend previous entrepreneurship research by examining the initial level of entrepreneurial performance in terms of opportunity recognition. Second, we investigate how an entrepreneur's external network is connected to entrepreneurial outcome by analyzing the relationship between the entrepreneur's network reliance and opportunity recognition. We suggest that entrepreneurs who rely highly on their networks are likely to acquire useful knowledge for running their startups, which in turn might increase their capacity to perform effectively in the market. Third, we expand the entrepreneurship literature by confirming the factors that prompt positive outcomes from an entrepreneur's external network. Specifically, we measure entrepreneurial orientation as a moderator of the relationship between knowledge acquisition and opportunity recognition. We then identify a moderated mediation effect by evaluating the extent to which the effect of network reliance on opportunity recognition through knowledge acquisition is contingent on entrepreneurial orientation. Building on theories of entrepreneurship and psychology, our study investigates the early process of entrepreneurship from a cognitive point of view, and then suggests how to use this mechanism effectively.

2. Theoretical background and hypotheses

We propose a novel integrated model of entrepreneurship, which jointly examines knowledge acquisition as a mediator between network reliance and opportunity recognition, and introduces entrepreneurial orientation as a moderator. We simply refer to this as a moderated mediation model in this study. All the underlying hypotheses are shown in Fig. 1.

2.1. Network reliance

Entrepreneurs rely on social networks to acquire strategic resources including useful knowledge and business information. A social network is defined as the sum of the links between actors among individuals and organizations (Brass, 1992). In the field of entrepreneurship, an entrepreneur's networks are usually described as all the relationships established for exchanging business resources (Dodd and Patra, 2002). The entrepreneurship literature has emphasized the effect of social networking as a key determinant of entrepreneurial performance (Aldrich et al., 1987; Hoang and Antoncic, 2003). Social networks have long been considered an important predictor of business success (Johannisson, 1990). According to meta-analysis results, an entrepreneur's social network is positively associated with small firm performance (Stam et al., 2014).

Scholars have generally accepted the importance of social networking with respect to recognizing opportunities (Hills et al., 1997; Ma et al., 2011; Ramos-Rodríguez et al., 2010). For example, Hills et al. (1997) reported that entrepreneurs who sought opportunities through their networks discovered more opportunities than those who explored them on their own. Singh et al. (1999a) confirmed similar results in their empirical study. They indicated that an entrepreneur's network is positively associated with idea identification and opportunity recognition. This means that entrepreneurs who actively interact with their networks acquire additional insights for business growth. In other words, the more information entrepreneurs get from their networks, the more they want to connect with them, and vice versa.

Researchers have investigated the relational aspect of social capital for exchanging resources between strong and weak ties. Some scholars argue that weak ties enable entrepreneurs to access more novel information while others stress the benefits of strong ties in the attainment of vital resources (Batjargal, 2003; Granovetter, 1973). Similarly, weak ties may be in line with network breadth; by contrast, strong ties are associated with network depth. Network breadth refers to the number of networks needed for firms to innovate, which necessitates the seeking of various types of knowledge. Network depth refers to the importance of information sources; hence, researchers have used it to measure the qualitative aspects of networking (Boh et al., 2014; Laursen and Salter, 2006).

Network reliance is one of the key characteristics of strong ties. Since network size is relatively restricted in the early stages of entrepreneurship, entrepreneurs' assessments of the criticality of their networks is worth investigating. Entrepreneurs are often confronted with information asymmetry, which functions as an inhibitor of venture success. Such information asymmetry could be noticeably mitigated if entrepreneurs and their resource-providers were to rely on each other, as people are more likely to share important knowledge with those they trust (Tsai and Ghoshal, 1998). For instance, entrepreneurs who frequently behave in a trustworthy-manner receive additional investment from angel investors (Maxwell and Lévesque, 2014). In addition, time-consuming activities, such as bargaining or cross-checking, may be reduced once faith is established (Dyer and Singh, 1998). Nevertheless, questions related to the impact of network reliance on entrepreneurial performance in early developmental stages remain unanswered. Therefore, the effect of network reliance on the entrepreneurial process needs to be investigated in detail.

In this study, we follow Ganesan (1994)'s definition of network reliance, which is the extent to which entrepreneurs are willing to depend on and trust their partners' expertise, purpose, and motives.

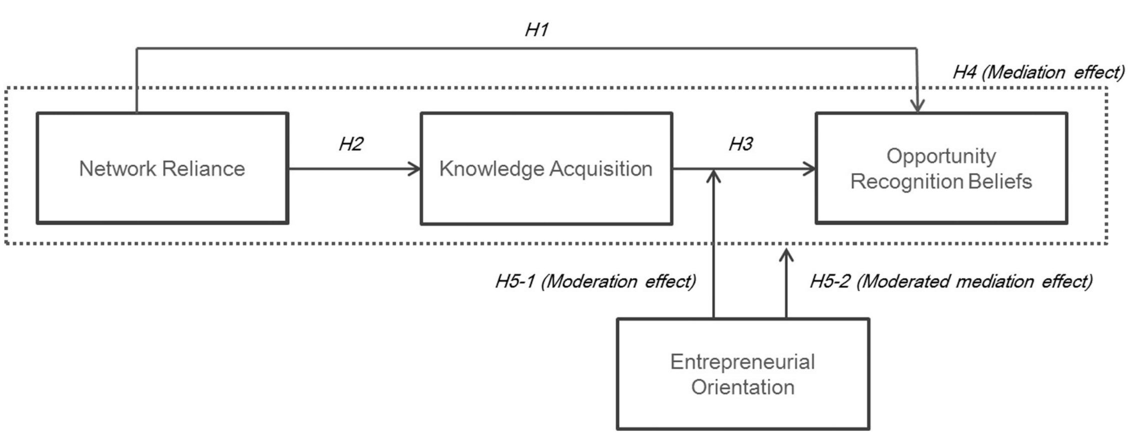

Fig. 1. The research model.

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