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Information processing and strategic decision-making in small and medium-sized enterprises: The role of human and social capital in attaining decision effectiveness

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Abstract

The decision-making literature emphasizes that in high-stake decisions the characteristics of individual decision-makers, their interpretation of decision situations, and their social ties play an important role in decision outcomes. Despite these results, research on small- and medium-sized enterprises has only partially covered these influences. In a sample of 565 small-business owners, this study identifies the extent to which these characteristics and social ties affect decision effectiveness and the extent to which their impact is mediated by evaluative judgements of the decision situation. Our results suggest that the interplay between human capital and social capital affects decision outcomes via evaluative judgments and this effect is moderated by decision content, in such a way that depending on decision content (internal versus external focus) entrepreneurial experience and the breadth of social capital are either assets or liabilities for decision effectiveness.

Keywords

confidence level, decision effectiveness, decision topic, evaluative judgements, human capital, risk acceptance, social capital

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Introduction

Strategic decision-making within smaller firms often resides with a single individual or a small group of people; this clearly differs from the situation in large firms, where the senior management team and strategic planning staff undertake key decisions (Brouthers et al., 1998), and where decision tools support this process (Goodwin and Wright, 2001; Leidner and Elam, 1995). Strategic decision-making in SMEs takes place under bounded conditions in terms of limited processing capability (Simon, 1997) and intelligence gathered (Nutt, 2007), often leading to lower decision comprehensiveness (Smith et al., 1988). These preconditions place the individual decision-maker at the very core of the process and make individual factors related to information processing highly relevant for decision effectiveness. Decision effectiveness is 'the extent to which a decision achieves the objectives established by management at the time it is made' (Dean and Sharfman, 1996: 372). By placing the individual decision-maker at the centre of the strategic decision process, this article looks at the mechanisms that link the human and social capital of the decision-maker to decision effectiveness, thereby providing insight into the micro-complexities of business interaction in the context of small business development.

Previous research has found that micro-foundations and micro-complexities largely determine strategic choice (Gavetti et al., 2005). For example, the consequences of the person making the decision (managers in large firms or entrepreneurs) (Busenitz and Barney, 1997), which decision procedures are maintained (Hickson et al., 1986), and which inputs and outcomes regarding the decision-making process are at play (Liberman-Yaconi et al., 2010) across different decision contexts (Elbanna and Child, 2007b; Iederan et al., 2009), are determined by the specifics that play out at the micro-level through the interaction of decision-specific, environmental and firm characteristics (Elbanna and Child, 2007a). The differences in resource availability between small and large firms affect the comprehensiveness and centralization of the strategic decision-making process (Liberman-Yaconi et al., 2010), decreasing the likelihood that the processes in small and medium sized (SMEs) firms will be scaled-down versions of the processes in large firms.

A growing body of literature explores the role of human and social capital in entrepreneurial strategic decision-making. Levels of expertise and education are factors closely connected to the volume of information engaged in the decision process, and thus, are relevant inputs for the strategic decision process (Hitt and Tyler, 1991; Papadakis et al., 1998). The social ties of executives and senior management teams in large organizations (Geletkanycz and Hambrick, 1997) and in entrepreneurial venture creation (Batjargal and Liu, 2004; Lee and Jones, 2008; Zhang, 2010) have been analysed in strategic decision processes, and were found to have a profound influence on performance (Stam and Elfring, 2008), information search (Nebus, 2006), networking activity (Sawyerr et al., 2003), self-efficacy (Forbes, 2005), and market access (Mesquita and Lazzarini, 2008). Thus human capital and social capital are relevant inputs for strategic decision processes in small firms.

The aim of the article is to test the mediating effect of evaluative judgments in the relationship between the human and social capital of the entrepreneur, on the one hand, and decision effectiveness, on the other. Evaluative judgements are forms of information processing central to the decision-making process. Decisions are based on the mental representations developed as a consequence of these evaluative judgements (Balogun et al., 2008; Hastie, 2001). Thus, the decision situation is reflected by evaluative judgements (the representation of the decision situation for the decision-maker). This article focuses on the role that two such evaluative judgements play – namely, level of

risk acceptance and confidence level – in explaining the effect of human and social capital on decision effectiveness.

The contribution of this article is twofold. First, it contributes to the social capital literature by testing the effect of social ties on evaluative judgements, which in turn impact on strategic decision effectiveness. By building on the information processing perspective, this research contributes to the understanding of the relationship between the structural and cognitive aspects of social capital. Research in the area has identified the importance of social ties in venture creation and enterprise gestation (De Carolis and Saparito, 2006; De Carolis et al., 2009; Lee, 2009), but the effects of social capital (Blackburn and Kovalainen, 2009) and specifically, cognitive social capital (Lee, 2009) on strategic decisions in small businesses are not yet fully understood. With the increasing emphasis in SME research on the interconnectedness of, and flows between, individual actors, we aim to develop our understanding further of how and which social influences are relevant across varying decision situations. More specifically, the structural relations of decision-makers provide access to novel information and allow validation of existing information. Access to content and the opportunity to validate have positive effects on the comprehensiveness of the strategic decision-making process. Validation allows the available information to be evaluated regarding plausibility and importance for the decision situation, enabling decision-makers to process the information more selectively, leading to increased efficiency.

Second, empirical research on strategic decision-making in SMEs focuses typically on the influence of structural and relational aspects of social ties on venture formation and initial enterprise gestation (Batjargal and Liu, 2004; Carter et al., 2003; Lee and Jones, 2008; Yli-Renko et al., 2001). Few studies focus on later phases (see Jack et al., 2010 for an exception). In addition, high-stake decisions for SMEs are often made beyond those initial phases. Empirical research on the effects of social ties on strategic decision-making in large organizations focuses on a wider variety of phenomena than the initial phase of an organization's existence, such as development, innovation and resource procurement. This article aims to extend the insights of the effects of social ties on those decisions in SMEs.

Theoretical framework and hypotheses

Strategic decisions lead to the commitment of resources and people to certain courses of action and not to others. These commitments focus attention and allocate means that are not easily reversed or diverted. The extent to which these decisions are effective – that is, the extent to which decisions achieve the objectives established by management at the time that they are made (Dean and Sharman, 1996) – determines what the organization focuses upon and whether this enables it to develop further and increase performance. When making decisions, decision-makers in SMEs draw on their experience, knowledge and variety of social ties to form their judgement (Westhead et al., 2009).

Although social ties are singled out in venture founding research (Zhang, 2010), their influence on strategic decision-making processes in entrepreneurial studies is acknowledged as a faceless environment that provides information. Research on the ties of external directors (Kor and Sundaramurthy, 2009), the role of third parties such as consultants (Saxton, 1995) and external ties (Yoo et al., 2009) has found that strategic decision-making is affected by the internal (through actors that are a part of the SME, such as employees) and external (through actors that are not a part of the SME, such as business relations with other organizations, but also family) acquisition and

analysis of information. This adds to the stock of information that decision-makers use and shapes the interpretation that precedes their decision (Forbes, 2005; Heavey et al., 2009).

The comprehensiveness and centralization of the decision process will be different between small and large firms as a consequence of differences in resource availability. Comprehensiveness is generally expected to be lower for smaller organizations than for larger ones, due to greater resource availability within larger firms (which varies from capacity to collect information to staff members scrutinizing and testing decisions) when compared to their smaller counterparts (Eisenhardt and Zbaracki, 1992; Liberman-Yaconi et al., 2010). The literature on small businesses presents successful decision-makers as individuals (Escribá-Esteve et al., 2008), suggesting that they are the dominant relevant factor within decision making. This implies that centralization is a positive feature of the strategic decision-making process (Liberman-Yaconi et al., 2010) yet, Forbes (2005) found that a certain degree of decentralization plays a positive role in performance: namely, when decision-makers in small firms involve employees in the process.

In order to understand why some decisions have higher decision effectiveness than others, we have to take both the characteristics and the social ties of the individual decision-maker into account. Given the decision situation, the central decision-maker processes information and knowledge that is available to them by education, experience or social ties. The following sections introduce the main hypotheses to be tested.

Human capital

Human capital refers to the stock of skills and knowledge gained by a worker through education and experience; it is embodied in the ability to perform labour so as to produce economic value (Becker, 1964). Human capital theory contends that acquired knowledge and skills can lead to better performance, as is inherent in any type of capital (Lin, 2001). It refers to the capital vested in individuals (education, experience, and natural talents) which is not easily transferable to others, and the forms which have become public property (the stock of knowledge in the public domain) (Piazza-Georgi, 2002). Human capital can be reflected by attributes (e.g. education) relevant for performance in several areas (economic activities) and more specific contexts (e.g. professional experience) (Westhead et al., 2005, Zhang, 2010).

Due to the highly centralized nature of strategic decision-making in SMEs, human capital is especially important for economic performance, but is not necessarily productive for the survival of small firms (Gimeno et al., 1997). Research on the role of human capital in explaining entrepreneurial development has shown that it is most important at the start-up stage and less so for entrepreneurial progress compared to social capital (Davidsson and Honig, 2003). However, this does not mean that it becomes totally unimportant at later stages. Pre-existing knowledge systems and the skills repertoire of managers are based on their prior professional experience and education (Hambrick and Fukutomi, 1991), meaning that the information processing in a specific decision situation will be affected by the knowledge and procedures that are part of the individual decision-maker's cognition (Kor and Sundaramurthy, 2009). Hence, human capital helps to explain the strategic choices and inclinations of the management team. (Hambrick et al., 2005).

The more decision-makers believe they are knowledgeable and competent, the greater the risk they are willing to accept, or the more confidence they have in decisions undertaken to attain their goals (Heath and Tversky, 1991; Mullins and Forlani, 2005). In addition, they also perceive more opportunities (Erikson, 2002; Krueger and Dickson, 1994). In conclusion, higher levels of human capital lead to increased information processing skills, enabling higher levels of performance at the individual (Coleman, 1988; Kor and Sundaramurthy, 2009) and organizational (Davidsson

and Honig, 2003) level. Therefore, we posit that the impact of human capital on decision outcomes is mediated by evaluative judgements.

Experience

Smith et al. (2009) find that level of experience is an important asset for information processing. Accordingly, experienced entrepreneurs process information differently from novices, since they use domain specific expert scripts and have more elaborate arrangement scripts that consist of an understanding of venture networks, resource possession, idea protection and venture-specific skills. This means that SME decision-makers, like these entrepreneurs, can process information more to their advantage if they possess these relatively elaborate cognitive scripts (cf. Gimeno et al., 1997). Decision-makers with higher levels of experience are advantaged by having dealt with similar situations or contexts previously. This prior experience is useful in assessing the decision situation, since previous experiences are encoded as cognitive schema and scripts (Iederan et al., 2009). Therefore, risk-acceptance levels will be higher with greater experience levels because decision-makers believe they know what will occur and that, based on their prior experience, they can work through the challenges in order to obtain higher levels of decision effectiveness. Therefore, the hypothesis runs as follows:

H1: Entrepreneurial experience positively impacts on level of risk acceptance in the decision situation.

Experienced decision-makers are able to evaluate decision-related information better by relating it to previous experience and thus, can elaborate more complex and accurate cognitive scripts (Iederan et al., 2009; Smith et al., 2009). Ultimately, this will increase their confidence in the decision process. However, the role that decision comprehensiveness can play here is a more important factor. According to McMullen and Shepherd, 'more knowledge can lead to overcoming belief-related doubt that would otherwise prevent action' (in Heavey et al., 2009: 1293). In other words, more information and analyses increase the level of confidence in a decision (Adidam and Bingi, 2000). Therefore, our second hypothesis is as follows:

H2: Entrepreneurial experience positively impacts on level of confidence in the decision situation.

Level of education

Education is an important asset in evaluating the decision situation as it translates into general and abstract knowledge structures. Highly-educated decision-makers have the advantage of more general knowledge and – if they have studied their current professional field – specialized knowledge (Piazza-Georgi, 2002). With increasing education levels, training experience and perspectives become more specialized and focused, thereby creating greater consistency in cognitive models (Hitt and Tyler, 1991). Papadakis et al. (1998) found that highly educated decision-makers required more information and analyses in their strategic decision-making process. Gimeno et al. (1997) confirm the same tendency for entrepreneurs, which may lead to delays in, or present constraints on, information processing. It appears that higher levels of education lead to a greater need for comprehensiveness. However, given the lower availability of resources in SMEs, this need might remain unfulfilled. Higher levels of education do play a significant role in risk identification, as they help to make sense of the situation (Winch and Maytorena, 2009): therefore, we expect risk-acceptance levels to be higher where there are higher education levels:

H3: Education positively impacts on level of risk acceptance in the decision situation.

If fulfilled, the requirement of more information and analyses by decision-makers with higher levels of education (Gimeno et al., 1997; Papadakis et al., 1998) ultimately lead to more comprehensive decisions which generate stronger belief and trust and positively affects the amount of resources and time spent during implementation (Adidam and Bingi, 2000). Therefore, we hypothesize that:

H4: Education positively impacts on level of confidence in the decision situation.

Social capital

Social capital is broadly employed and discussed in the social sciences, political sciences, economics and organizational research (Lee, 2009; Portes, 1998). Various authors indicate that social capital is a multidimensional construct: Nahapiet and Ghoshal (1998) distinguish cognitive, relational and structural dimensions, while Koka and Prescott (2002) distinguish information diversity, volume and richness, and Adler and Kwon (2002) distinguish bridging and bonding, and a combinatory group of these two. The structural dimension of social capital focuses on the position of a particular actor in a group of connected actors (Nahapiet and Ghoshal, 1998); it is an important antecedent of decision outcomes. By being connected to other actors, individual decision-makers in SMEs are influenced by the diverse pools of knowledge that flow from these ties (Stam and Elfring, 2008). Structural social capital is represented by the range of actors that help tackle the preconditions of limited processing capability and intelligence gathering by increasing decision comprehensiveness for the decision-maker (Brouthers et al. 1998, Heavey et al. 2009, Talaulicar et al. 2005). This range of actors consists of those located within the boundaries of firms and beyond, affecting the strategic decision-making process and organizational performance (Houghton et al., 2009; Leana and Van Buren, 1999; Stam and Elfring, 2008).

The effects of social capital on the decision process are deemed important for SME decision-makers in obtaining decision effectiveness because the input for information processing, both in terms of content and validation, in the decision situation is mostly delivered through social ties (cf. Brouthers et al. 1998, De Carolis et al. 2009, Heavey et al. 2009, Smith et al. 1988, Westhead et al. 2005). Social capital becomes a social liability if actor behaviour becomes constrained and suffers from negative ties in the social structure: for example, in terms of promotion chances being blocked by others, or crucial information being withheld (Gabbay and Leenders, 2001). The effects of social capital are not inherently positive (Warren, 2008), but also produce negative outcomes in the form of social liabilities such as coordination failure (Gabbay and Leenders, 2001). Previous research shows that colleagues in commercial banks play an important role when taking decisions (Mizruchi and Stearns, 2001), that social capital is more important for entrepreneurial progress compared to human capital (Davidsson and Honig, 2003), and that employee involvement in strategic decision-making in small firms ultimately benefits performance, whereas the involvement of external advisers does not (Forbes, 2005).

Research on structural social capital is well represented in entrepreneurial and SME research (see Cooke and Wills, 1999; Mosey and Wright, 2007; Westlund and Bolton, 2003) but its relation with cognitive social capital is under-researched (Lee, 2009). This is relevant here since this dimension focuses on the social interactions between actors and their shared understandings (Anderson and Jack, 2002; Lee, 2009), which is a crucial aspect of every strategic decision-making process.

Shared understanding is essential for information processing in decision-making, both in terms of how fast the incoming information is understood and incorporated into already existing cognitive schemas, and the validation of these cognitive schemas. In other words, if these inputs connect well to the decision-makers' current stock of knowledge, information processing will be more efficient and effective. The general discussion on this aspect of social capital states that there are different views on how structural social capital leads to beneficial returns for individuals (Lin, 2001). Social interactions between people who are more or less part of the same collectivity provide certain resources and benefits, while social interactions between people who are not provide other resources and benefits (Davidsson and Honig, 2003). This echoes Burt's (1992, 2000, 2005) work on social capital and structural holes, in which actors that function as a bridge between otherwise disconnected actors constitute benefits and resources otherwise unavailable to the (indirectly) linked actors. This view is juxtaposed with the view that densely connected actors can share valuable resources more easily in order to achieve benefits (Coleman, 1988, 1990).

Social capital works in instrumental actions not accounted for by human capital as it facilitates information flow and exerts influence on individuals (Lin, 1999). According to Wu (2008), information is an antecedent of performance and one of the key benefits of social capital. Therefore, it is relevant to consider structural social capital in order to understand how information and influence shape evaluative judgements and affect decision effectiveness. The presence and use of structural social capital makes further validation of available information possible. Therefore, we posit that the impact of social capital on decision outcomes is mediated by evaluative judgements.

Structural social capital is conceptualized here as breadth of social capital. This refers to the number of sources or channels that the decision-maker relies upon (Laursen and Salter, 2006), being the variety of actors that are active to provide information to inform the evaluative judgement (Borgatti et al., 1998; Harrison and Klein, 2007). Decision-makers influenced by a higher breadth of social capital have the advantage of more information flowing towards them and by definition, have a more comprehensive interpretation of the decision situation (Heavey et al., 2009).

For example, external advisers shape thinking in two critical ways (Forbes, 2005). First, they provide information and behavioural examples unavailable to the SME decision-maker; second, they provide self-development opportunities through interpersonal interaction. Besides the input sought by the decision-maker from these ties, some will actively attempt to gain access to the SME decision nerve centre (cf. Saxton, 1995), either by endorsement of external power holders, authorities or law. However, external advisers do not always prove a more positive influence compared to the contributions by internal employees (Forbes, 2005). The likelihood of information arising through intra-organizational networks being more suitable, or compatible for integration, with the decision-maker's stock of knowledge is higher than if it came from outside the organization, due to more highly developed cognitive social capital. A greater breadth of social capital leads to more diverse information and knowledge concerning the decision situation which leads to increased internalization by the decision-maker if the inputs are absorbed (implying potentially higher comprehensiveness), especially if ties are strong (Liesch and Knight, 1999; Nebus, 2006).

The influence of a more broad range of ties aids the assessment of the decision situation, since the received information supplements or validates the information the decision-maker already has. While it reduces the resource limitations on the one hand, it helps overcome cognitive limitations of the individual on the other, providing decision-makers with a more complete and accurate assessment of the decision situation. Risk identification, as a result of having a more comprehensive picture, will be easier (Winch and Maytorena, 2009). Therefore, risk acceptance levels are

likely to be higher for greater breadth of social capital due to the decision-makers' belief that they have accurately assessed the decision situation:

H5: The breadth of social capital positively impacts on the level of risk acceptance in the decision situation.

Moreover, due to greater comprehensiveness, confidence is also likely to be positively influenced by the breadth of social capital. Belief and trust in the decision by decision-makers is higher (see Adidam and Bingi, (2000) as the information arising from various sources provides a more complete overview of the decision situation. The chances that vital information might be missed is likely to decrease when various sources have made a contribution:

H6: The breadth of social capital positively impacts on the level of confidence in the decision situation.

Evaluative judgements (risk acceptance and confidence)

The manner in which the mental representations of decision makers are shaped has a long history in research. Although Walsh (1988) found that functional domain is not necessarily the limiting factor for ill-structured decisions such as strategic decisions, Dearborn and Simon (1958) did recognize the role that functional domain plays in limiting decision-makers. These limits are a function of their own starting point or their function within the organization. It is information processing that provides the decision-maker with a frame in which the complexity of the decision situation is manageable. Thus, interpretation of individual-level inputs for the strategic decision process (education, experience and social capital) shapes mental representation (Hastie, 2001; Iederan et al., 2009; Mullins and Forlani, 2005).

Inputs stemming from human and social capital can have psychological effects on managers, leaving them better equipped to act decisively in the decision situation (Eisenhardt, 1989). The mental representation built through these inputs provides the basis for judging and subsequent decision-making. Interpretation and unambiguous representations increase confidence in decision processes (Hastie, 2001; Lee and Dry, 2006). In general, higher confidence levels lead to allocating more resources and time to implementing strategic decisions (Adidam and Bingi, 2000), increasing the likelihood that the consequences of these decisions will be favourable. A similar line of reasoning applies to risk acceptance. Mullins and Forlani (2005) argue that risk-taking behaviour operates at the individual level rather than at the organizational level. For low-risk choices, risk perception is more relevant than risk propensity, whereas risk propensity is more relevant in high-risk choices. This means that the risk-taking behaviour depends on an assessment of the risk inherent in a particular situation and thus, is situation-specific (Mullins and Forlani, 2005; Sitkin and Pablo, 1992).

Decision-makers who accept the risk level inherent in a situation are expected to attain higher levels of effectiveness. They rely on their skills to navigate through the steps that entail risks, although this might indicate an illusion of control rather than real control (Mullins and Forlani, 2005), as they believe they know what will occur and how to handle it (Krueger and Dickson, 1994). Hence, they expect to achieve the objectives for which the decision is taken. The higher the confidence level and level of risk acceptance, the higher decision effectiveness will be.

As argued previously, human and social capital are important antecedents of evaluative judgments. The greater the experience, the more likely decision-makers will believe that they recognize the essential combinations of aspects correctly (Sitkin and Weingart, 1995). Decision-makers recognize combinations of aspects from prior situations (e.g. cognitive scripts), or from generic

templates based on their abstract knowledge. This leads to positive effects on the evaluative judgements of the decision situation. Furthermore, Mullins and Forlani (2005) indicate that entrepreneurs who dare to venture into big decisions with greater opportunities for potential gain and loss, do so as their skills and prior history gives them confidence that they will succeed as they recognize the nature of the decision and judge it in terms similar to the situation they believe is being repeated. Based on prior experience and education, it is likely that they will capture the most relevant aspects of the decision situation and work through them in order to obtain higher levels of decision effectiveness.

The influence of structural social capital on outcome variables focuses mostly on positive outcomes, such as knowledge exploitation through knowledge acquisition (Yli-Renko et al., 2001), the creation of cognitive social capital through communication (Lee and Jones, 2008), how networks are created and leveraged within and among companies to nurture innovation (Kelley et al., 2009; Paruchuri, 2010), and its influence on the progress of new venture creation through cognitive characteristics (De Carolis et al., 2009). The structural social capital that is available to the decision-maker creates opportunities for social capital transactions (Adler and Kwon, 2002; Anderson and Jack, 2002). However, the mere presence of ties does little to account for the likelihood that social capital effects will materialize. Benefits such as information and influence do not materialize simply from the presence of ties (Wu, 2008), but also from the interdependence of types of ties such as horizontal versus vertical alignment (Rank, 2008). Hence, structural social capital tells only part of the story. The social interactions of decision makers with actors in their networks facilitate the flow of information, but it is the interpretation and integration of this information that allows social capital effects to materialize for the decision at hand.

In terms of evaluative judgements of the decision situation, this means that the greater the breadth of social capital, the more accurate the judgement, thereby increasing the chances of higher levels of decision effectiveness. The comprehensive picture will facilitate risk identification and provide confidence in the decision situation. The influence of a more broad range of ties aids assessment of the decision situation, since the received information supplements or validates the information that the decision-maker already possesses. It provides a greater sense of having considered all possibilities increasing commitment in terms of the time and resources decision makers have at their disposal in the implementation phase. The above leads us to the following hypothesis on mediation of the evaluative judgements *level of risk acceptance* and *confidence level*:

> H7: The effects of education, experience and breadth of social capital positively impacting on decision effectiveness are mediated by level of risk acceptance and level of confidence.

Figure 1 shows the overall theoretical model. The numbers next to the arrows correspond to the hypotheses.

The final aim of this article is to explore the extent to which the hypothesized relations depend on the context of strategic decisions. Decision characteristics have been demonstrated to be relevant in this respect (Elbanna and Child, 2007a). One of these, decision content, has received limited attention (Bozeman and Pandey, 2004). Decision content has been examined as a reason for participation and for its consequences for strategic decision processes (Hickson et al., 1986). It affects those who will be involved, what will be decided on and how the process will unfold. The matter being decided will affect who is involved in the decision-making and its execution, either by choice, necessity or obligation (Fiegener, 2005; Nebus, 2006). The social and political context of implementing strategic decisions is highly relevant in explaining the success of a strategic

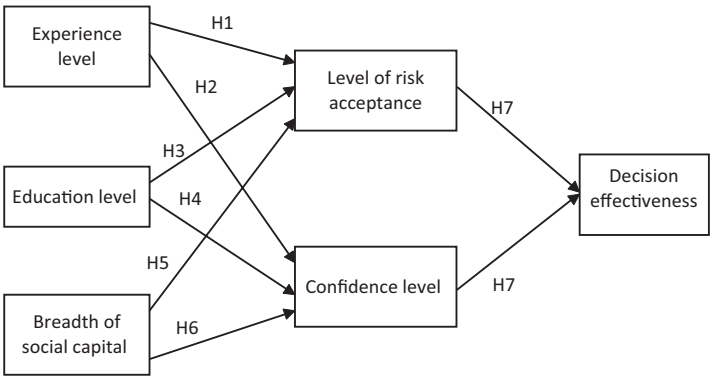

Figure 1. Conceptual Model

decision, but how this unfolds depends on the tactics and managerial activities employed during implementation (Miller et al., 2004). It is expected that this will be visible in the effects of individual level inputs on decision effectiveness, specifically social capital. Therefore, we distinguish between strategic decisions that, for their execution, primarily rely on parties within the organization versus decisions that require outside parties. These two groups are labelled internal and external, respectively.

Method

Sample

The current study uses survey data that were collected by the Dutch research institute EIM Business & Policy Research. Commissioned by the Dutch Ministry of Economic Affairs, this survey aimed to collect statistics and explore how decisions in SMEs are made. It focused on those small business owners who had made at least one important decision in the previous three years (Table 1 reports the average number, which is 2.81). Data were collected by computer-assisted telephone interviewing. The 1203 interviewees were sampled across eight industries: manufacturing, construction, retailing, hospitality, logistics and transport, personal services, financial services and business

Table 1. Respondent, Decision and SME Characteristics

Characteristics	Frequency	Mean	SD
Gender			
Female	58		
Male	507		
Age	565	45.07	9.10
Number of employees	565	35.32	55.77
Investment amount of decision under analysis (* €1,000)	565	1087.6	4702.5
Number of important decisions taken in past 3 years	565	2.81	2.18

N = 565

services (the latter two were later combined into one category, commercial services). The number of organizations initially drawn from each industry was roughly equal, and no organization was to have more than 100 employees. Of these, 700 indicated having been involved in making an important decision in the previous three years. After a closer examination of the 700, 565 qualified for the current research since the decision was of a strategic nature. The number of important decisions taken in the previous three years as reported by the respondent could not be higher than 10 and the investment amount needed to be substantial. The 565 respondents used in the analyses were from manufacturing (13%), construction (10%), retailing (12%), hospitality (13%), logistics and transport (11%), commercial services (13%) and personal services (13%). Note that the data are not completely representative of small firms in the Netherlands at the time that the data was collected. For example, EIM (2004) reports that 5.2 percent of the small firms belong to the hotel and catering industry, whereas 12.5 percent of the small firms in the sample used for this article represent this industry. This means that the small firms in the hotel and catering industry are overrepresented. The preliminary analysis covered descriptive and bivariate statistics (Pearson correlation) in order to explore the data. Subsequent analysis with AMOS structural equation modelling with maximum likelihood procedure was used to test the hypothesized mediation model.

Measures

For the dependent variable, *decision effectiveness*, four items were included that were scaled on three-point Likert scales, including to what extent the strategic decision had contributed to: (1) turnover growth; (2) profit growth; (3) to what extent the decision-maker was satisfied with the decision; and (4) to what extent the decision had led to the expected result (cf. Walker and Brown, 2004). Decision effectiveness is calculated as the sum of these items, with Cronbach's alpha for the scale at 0.664.

For the independent variables constituting *human capital* (*experience level and education level*), an open question was used for the former and an interval scale for the latter. The open question asked how long (in years) the decision-maker had been active as a small business owner. The number of years reported by the respondent was then entered in the analysis. For the education level, a (recoded) scale was used (ranging from 1 = primary school to 7 = university), in line with the suggestion by Piazza-Georgi (2002) that the quality is more relevant than the quantity of education.

For the independent variable *breadth of social capital*, the number of categories of actors were counted that were indicated by the respondent as having influenced the decision (cf. Laursen and Salter, 2006; Stam and Elfring, 2008). The actor categories that could be selected by the respondents were employees, family, advisers, relations with other businesses inside the sector and relations with other businesses outside the sector. This was presented to them as a fixed set of categories for which they could indicate whether actors from that category influenced the decision. This approach captures the types of actors that influence decision-making, resembling a coarse version of the resource generator approach to measuring social capital (Van der Gaag and Snijders, 2005). It is coarse in terms of using only one undifferentiated resource indicator, namely 'influence' to measure the range of accessed influence in decision-making. There is no discrimination as to the type of influence, meaning that in position generator terms there is no difference in prestige (Lin, 2001). Therefore, a sum score was calculated to indicate the breadth of social capital (ranging from 1–5, where 1 = one actor category influencing the decision, 2 = two actor categories influencing the decision, and so on). The interviewees could not further specify the number of actors that influenced the decision within a given category.

For the mediating variables, *level of risk acceptance* and *confidence level*, one item per variable was used, scaled on four-point Likert scales, including: the estimate of size of the risk, ranging from low to high level of risk; and the extent to which the respondent was convinced of the decision, ranging from high doubt to strong conviction.

Results

Descriptive statistics

The results from the descriptive and bivariate statistics are presented in Tables 1 to 3. Table 1 contains information on the sample. As far as the decision-makers are concerned, males outnumber females (mean age, 45 years; mean firm size, 35 employees). The amount of money that was invested for the decision varies quite strongly (mean = €1,087,600).

Table 2 shows that the total number of decisions is unequally distributed over the different topics. These decision topics were coded based on the description provided by the respondents. The coding reflected that employed within the Bradford studies (see Hickson et al., 1986). Based on those topic descriptions, those in the present sample were independently coded by two researchers. The coding resulted in an agreement between the coders of close to 80 percent (Cohen's Kappa = 0.797), which is considered a good level of agreement.

Two actors were mentioned relatively often by the respondents as influencing decisions, *employees* and *advisers*. Together they accounted for more than half of the influences reported by

Table 2. Overview of Decision Topics and Actors Influencing Decisions

Decision topics	% of total decisions	Employees	Family	Advisers	Own sector relations	Other sector relations
Reorganizations	11.7	37	12	42	15	11
Products	1.7	4	1	3	0	1
Services	1.9	3	2	4	4	2
Personnel	10.3	30	16	22	23	8
Inputs	1.9	3	2	2	0	1
Total (internal)	*27.5*	*77*	*33*	*73*	*42*	*23*
Technologies	28.3	46	48	62	41	22
Controls	15.0	32	23	43	25	14
Domains	0.7	3	1	1	2	2
Boundaries	18.4	35	35	45	29	17
Locations	10.1	22	24	21	9	8
Total (external)	*72.5*	*138*	*131*	*172*	*106*	*63*
Total[a]	858	215	164	245	148	86
Theoretical total[b]	2,825	565	565	565	565	565
% of theoretical total	30.4	38.1	29.0	43.4	26.2	15.2

N = 565

[a]The total number of ties that influence the strategic decision is calculated by the number of times an actor is mentioned by the respondents across the topics

[b]The theoretical total is calculated by multiplying the number of cases (*N*) with the number of actor categories in the columns (5)

Table 3. Means, Standard Deviations and Correlations

	Mean	SD	1	2	3	4	5	6
1. Experience level	15.26	13.23	1					
2. Education level	4.82	1.59	−.211**	1				
3. Breadth of social capital	1.52	1.19	−.110**	.164**	1			
4. Level of risk acceptance	2.30	.88	−.137**	.112**	.130**	1		
5. Confidence level	3.51	.66	.025	.040	−.056	−.126**	1	
6. Decision effectiveness	5.18	2.38	−.070	.056	−.025	.003	.157**	1

N =565 ** $p<.01$

the respondents. Interestingly, the number of influences reported is close to one-third (30.4%) of the theoretical maximum (that is, if all parties indicated in the survey were to influence each and every decision). This means that not even one in three possible influences as designed in this questionnaire occurs while small business owners take decisions.

The two groups in Table 2 are the 'internal' and 'external' decisions. The former group refers to decisions that primarily rely on parties within the organization for their execution (27.5%). This group comprises reorganizations (covering internal restructuring of activities through people or organizational units), products (new or modifying products), services (new or modifying services), personnel (issues such as assessment and training), and inputs (finance and other supplies). The latter group refers to decisions that require outside parties for their execution (72.5%).

Structural equation model

First we analysed all cases in the sample (Model overall in Table 4). Next, we selected and analysed only the cases for those decision topics (Table 2, top half) that rely mostly on internal parties for their implementation (Model internal in Table 4). Lastly, we selected and analysed the cases with decision topics that rely mostly on external parties for their implementation (Model external in Table 4).

Data were checked for normality, and since the skewness indices ranged from −.67 to 1.24 and the Fisher Kurtosis Index ranged in the interval −.75 to 1.22, we can conclude that the multivariate normality assumptions were met for all mediator and output variables. The relationships between the variables were tested via AMOS structural equation modelling (SEM) software version 6, using a maximum likelihood procedure. We used SEM as we had included two mediators in the model: SEM allows the simultaneous test of several linear equations, and global fit indices are a better choice for global model evaluation than multiple regression modelling, which enables only partial tests of the model components (Tomarken and Waller, 2005). SEM is a versatile data analytic technique which makes it possible to test several (mediator) variables and their interrelationships simultaneously while providing fit indices for the global model. The path model results are presented in Table 4.

Two categories of fit indices were used in the analysis: absolute and incremental (see Table 4 for the numbers, and Browne and Cudeck (1993) and Widaman and Thompson (2003) for a discussion on the threshold values of the different fit indices). The fit indices for the overall model (right column in Table 4) show that the model is not significantly different from the data and cannot be

Table 4. Results of Structural Equation Modelling Analysis

	Predictor	Outcome	Model overall	Model internal	Model external
H1	Experience	Level of risk acceptance	−0.11	−0.14	−0.1
H2	Experience	Confidence level	0.02	−0.04	0.04
H3	Education	Level of risk acceptance	0.07	0.03	0.08
H4	Education	Confidence level	0.11	0.11	0.1
H5	Breadth of social capital	Level of risk acceptance	0.06	0.07	0.06
H6	Breadth of social capital	Confidence level	0.06	0.14	−0.12
H7	Level of risk acceptance	Decision effectiveness	0.02	−0.11	0.06
H7	Confidence level	Decision effectiveness	0.16	0.26	0.13
	Fit statistics[a]				
	Chi-square		4.163	6.469	2.689
	degrees of freedom		3 (p = 0.244)	3 (p = 0.091)	3 (p = 0.442)
	Root mean square of approximation (RMSEA)		0.026	0.087	0.0001
	Normed fit index (NFI)		0.957	0.851	0.966
	Comparative fit index (CFI)		0.984	0.846	1.000
	Tucker-Lewis index (TLI)[b]		0.891	0.000	1.000

Model overall N = 565, Model internal N = 155, Model external = 410, standardized coefficients reported here.
[a]Threshold values reported between brackets after the explanation of the abbreviation. RMSEA: 0.08, NFI: 0.90, CFI: 0.90, TLI: 0.90.
[b]The TLI scored negatively for the 'internal' model (−0.081), which is rounded to 0.000. It scored above 1.0 for the 'external' model (1.037), which is rounded to 1.000. The deviating values are the consequence of the correction procedures employed by AMOS for this index.

significantly improved (however, the TLI is close to, but below, the threshold level). When looking at the two groups, the model for the 'internal' decisions produces mixed results in terms of the fit indices. Chi-square is only marginally significant, which shows that the model does not significantly differ from the data, while the relative indices show that the model cannot be improved for these decisions. The model for the 'external' decisions produces clear results. The model is not significantly different from the data and cannot be significantly improved. Given the good fit indices, we can conclude that H7 is supported. The impact of human (experience and education) and social capital (breadth of social capital) on decision effectiveness is mediated by evaluative judgements (level of risk acceptance and confidence).

The path analysis of the overall model shows the direction of the relations. H1 is rejected because of the negative coefficient. H2 to H6 are all confirmed because of the positive coefficient. However, looking at the mediation effect of the evaluative judgements, the effects of experience level are mixed. Experience level has a negative effect on decision effectiveness through mediation of the level of risk acceptance whereas, it has a positive effect through confidence level. If the decision-maker accepts low levels of risk, higher experience levels impact negatively on decision effectiveness. If the decision-maker is confident, higher experience levels impact positively on decision effectiveness. The likelihood that decision effectiveness in terms of reaching the

objectives that were intended to be achieved at the time of decision will be realized, varies with the evaluative judgement that is influenced by experience level.

Education level has a positive effect on decision effectiveness through mediation of the level of risk acceptance as well as confidence level. This means that higher levels of education lead to decisions that are more likely to benefit the firm because of decision-makers being confident and willing to accept higher risk levels. The likelihood that decision effectiveness in terms of reaching the objectives that were intended to be achieved at the time of decision are realized, does not vary with the evaluative judgement influenced by education level.

Finally, breadth of social capital has a positive effect on decision effectiveness through mediation of the level of risk acceptance, as well as confidence level. Processing information from these sources and channels leads to decisions that are more likely to benefit the firm because of decision-makers being confident and willing to accept higher risk levels. The likelihood that decision effectiveness in terms of reaching the objectives that were intended to be achieved at the time of decision are realized, does not vary with the evaluative judgement influenced by breadth of social capital. Based on the results of the overall model, we find that the effects of the independent variables *education level* and *breadth of social capital* on decision effectiveness are positive through evaluative judgements, confidence level and level of risk acceptance. The independent variable *level of experience* shows mixed results.

The specified models for the two groups of decisions inform us about the moderation of the decision topic. The moderation effect is visible, as path coefficients and direction for the two models differ, except for H4 (the effect of education level on decision effectiveness through confidence level is positive in all models). The effect of education level on decision effectiveness through level of risk acceptance is positive in the model for which execution of the decision requires outside parties, whereas it is negative in the model for which execution relies primarily on parties within the organization. The effects of experience level and breadth of social capital are also mixed than those of education level. Both these individual-level inputs invoke opposite effects on decision effectiveness, depending on the evaluative judgement through which the effect materializes in the two models. Moderation of the decision topic on the model matters for all individual-level inputs, considering the opposite effects in different models for all but H4. These mixed results can be related to the degree of control that the decision-maker has when implementing the decision, which will be discussed in more detail below.

Discussion

In this study we focus on the mechanisms that explain the impact of human and social capital on decision effectiveness. We extend previous research and show the important role of evaluative judgements in strategic decision processes. Depending on the decision topic, the range of actors influencing the strategic decision has a positive or negative effect through the evaluative judgement *confidence level* as well as *level of risk acceptance*.

For confident decision-makers who take decisions that require outside parties for their execution, negative effects on decision effectiveness materialize if the breadth of social capital is higher. If execution of the decision relies primarily on parties within the organization, positive effects materialize. This is in line with the findings of Adidam and Bingi (2000) and Forbes (2005). With a greater breadth of social capital, comprehensiveness increases and provides more insight into the feasibility and desirability of picking certain options in decision situations (Heavey et al., 2009). The positive link between decision confidence and decision effectiveness is based on

whether decision-makers can devote enough time and resources to the implementation. If they can be influential in decision implementation, then they can make use of their skills and knowledge (cf. Beer and Eisenstat, 2000; Mullins and Forlani, 2005). However, if a broad range of actors influence the decision, this effect turns out differently for internal decisions versus external decisions. In other words, increased breadth presents more information that might alleviate uncertainty in interpreting the decision situation, but does not tell us about the degree of control in the implementation phase. It lessens doubts about the decision itself, but does not directly affect the behavioural uncertainties in the implementation phase. Hence, the negative effects for the external model are vested in the greater extent of behavioural uncertainty or constraints in the implementation phase, as opposed to the internal model (cf. Beer and Eisenstat, 2000; Gabbay and Leenders, 2001; Mullins and Forlani, 2005). A possible explanation for this being that external parties lower the degree of control that the decision-maker has over implementation. If decision-makers rely on internal actors that are employed or hired by their organization, uncertainty about their behaviour, actions, time and resources committed to implementing the decision is relatively low. The dependence of internal parties on the decision-maker is higher than for external actors, because internal parties are in a relatively fixed working arrangement with the decision-maker; the degree of control in terms of behaviour over decisions that require outside parties is lower. This would suggest considering implementation variables that represent the degree of control by the decision-maker.

If decision-makers primarily require internal parties for execution of the decision, risk acceptance will be positively affected by breadth of social capital, but ultimately leads to negative effects on decision effectiveness. If implementing the decision relies primarily on parties outside the organization, positive effects materialize. Decision-makers who accept high levels of risk for their high-stake decisions will be confronted with inertia for the implementation in their own organization. The degree of control that they have over the parties that are involved in the implementation might be higher, but by accepting high levels of risk they create uncertainty for those parties regarding their routines and behaviour. This might be just a matter of resistance to change but especially within smaller firms, where resources are relatively constrained, attention and effort regarding the implementation of strategic change may suffer because limited resources also pertain to undertaking change and everyday work simultaneously. Thus, the higher level of risk acceptance as a consequence of higher breadth of social capital might foster resistance or other obstacles in executing decisions (cf. Nutt, 2008). With these in place, the effectiveness of the decision is likely to be lower. Involving outside parties for implementation requires a choice to be made regarding which party is contacted and contracted, which leads to selecting parties that are considered reliable to take part in decisions that carry risk.

The moderation by decision topics shows that the relation between level of experience and breadth of social capital for the internal versus external model is mirrored. Hence, sources of (in) effectiveness or (in)efficiency regarding information processing for decision effectiveness are configured differently for the different topics, suggesting that higher experience levels and greater breadth of social capital can be an asset or liability, pending the topic of decision and the involved parties for implementing that decision.

Anderson and Jack (2002) posit social capital as a process that permits social capital transactions. This directly connects to another social capital dimension, namely the cognitive dimension. If social capital is considered to be a process, the development of a shared language is a consequence of structural social capital, not a simultaneously operating dimension. Lee and Jones (2008) conducted research that investigates the link between structural social capital and cognitive social

capital. In their study on business start-ups, they find that cognitive social capital facilitates social learning. By approaching the study of social capital as a process in which different structural social capital configurations amount to different effects through information processing by individual key players, we can combine the effects of embedding social structures with actions and understand more precisely how decision-makers in small firms overcome the bounded conditions of intelligence gathering and information processing. In the present research, we scratched the surface by looking at the comprehensiveness and validation of information in the strategic decision-making process and their consequences for decision effectiveness.

The findings of this study indicate the importance of social ties in strategic decision-making and subsequent implementation. The findings support the longstanding practical and research tradition that it is important for entrepreneurs to network in order to get access to clients, resources and other opportunities (Blackburn and Kovalainen, 2009; Lee, 2009). Network events are held to promote economic activity and provide initial business start-up support, stimulating the build-up of structural social capital, identifying entrepreneurial opportunities and providing the structural social capital for overcoming bounded conditions at other moments. Our study does not unequivocally confirm this, but it does suggest that for policymakers it is import to support network maintenance or management rather than only initial networking activities (cf. Hibbert et al., 2008). The structural social capital that arises from networking activities serves as the springboard for later resource and information benefits, or support in implementation (cf. Westhead et al., 2009). Networking activities serve a broader purpose in maintaining economic activity than mere spot transactions. Thus, stimulating enduring collaborative relations might be worthwhile from a policy perspective, as well as a focus for future research.

Limitations of the study and recommendations for future research

This study has several limitations. First, from a content point of view, the argumentation on why certain conceptualizations are deemed appropriate might be convincing. However, the limited conceptualizations of human and social capital measures present the danger that the research did not fully capture the relevant effects, which can lead to underestimation or overestimation of the effects found.

Second, the findings should be interpreted with some caution regarding further development of research on structural social capital. Burt et al. (2000) found that although the structural social capital of successful French and American managers was rich in structural holes, it differed in range (French managers have a more limited range, operating with a less porous social boundary around their firms) and had negative emotions with bridge relationships (it is suggested that this is due to French people's reluctance to coordinate with people outside the chain of command). This suggests that a cross-cultural validation of effects is required, as there is no distinct variation incorporated in this research due to the focus on the Dutch context (cf. Greve and Salaff, 2003).

Finally, the evaluation of the two mediators is based on single-item measures and some of the exogenous variables are not interval scales. Therefore these are limitations for the SEM modelling, as argued by some scholars (Hair, 2009). However, others such as Tomarken and Waller (2005) argue that SEM can be used in experimental designs as well (where exogenous variables are expressed as categorical variables), since these research designs rarely violate the multivariate normality assumption, which 'is more circumscribed than many researchers commonly believe' (Tomarken and Waller, 2005: 47). Low sample size is the most critical concern in using SEM (McQuitty, 2004) and this is certainly not the case in our study, where the sample size is higher than

200, which is a generally accepted rule of thumb for using SEM. The use of single-item indicators for the mediator variables remains a boundary condition of the present study. Furthermore, the use of a mixture of scales with different ranges is not considered problematic because the reliability of Likert-type scales does not depend on the number of points on the scale (Aguinis et al., 2009). In order to avoid statistical problems, it is important that the scale and the number of response options correspond with the respondents' ability to logically discriminate values for the underlying variable (Beal and Dawson, 2007).

Future research into the use and nature of inputs in strategic decision-making seems essential to understand the effects of human and social capital. De Carolis et al. (2009) point to the incorporation of cognitive factors to understand the impact of the social embedding in small firms in order to capture the processing of intra- and inter-individual cues that lead to action and performance. The increase in studies stressing the relevance of cognitive approaches for understanding strategic decision-making, combined with the relative absence of knowledge on the role of social ties in core processes for SMEs (Davidsson and Honig, 2003; Hoang and Antoncic, 2003) as compared to large firms, presents a relevant avenue for future research. By exploring not only the presence of information, resources and social ties, but rather what is done with the information, resources and influence stemming from social ties, we can improve our understanding of the dynamics of small firm core processes (Shaw, 2006) such as strategic decision-making. Furthermore, as Davidsson and Honig (2003) find in their research on venture creation and development, the effects of human and social capital can differ depending on the moment that they impact on the process under study. The present study suggests that the interplay between human capital and social capital depends not only on the moment in a flow of business activities, but on whether internal or external parties are involved in executing a decision: one is more conducive to positive effects on decision effectiveness than the other.

Another interesting avenue concerns research on group social capital, which introduces an interesting opportunity to add proximity aspects of social capital to the equation. The current research uses coarse categories of actors to identify the influences on strategic decision-making and treats them as atomic categories. The work on group and local social capital (Oh et al., 2006; Westlund and Bolton, 2003) lays a foundation for understanding the effects of the resources that become available through the (local) social relationships of group members, by looking at the characteristics of the relations as well as what would flow through them. A re-examination of the categorization of actors for this type of research would allow for so-called multiplex ties (interpersonal or organizational ties that contain more than one type of relationship, as playing tennis with your boss on the weekends) to be incorporated, and make measurements more valid and reliable. A family member also may be an employee. In the current set-up, the respondent was forced to choose between actors rather than accurately typify the relationship. By using more fine-grained measures for mapping social ties, crudeness in data-gathering is reduced and the sources and effects of uncertainty become clearer.

The workings of the micro-foundations and micro-complexities that determine choice are clearly context-dependent as far as the decision topic is concerned, as well as the range of ties that is included in strategic decision-making. This study has demonstrated that the effects of human and social capital for decision effectiveness are not straightforwardly beneficial as hypothesized. By researching the effects of these types of capital in varying strategic decision situations, we found that their effects are contingent on the characteristics of the strategic decision in terms of decision content. This becomes visible only if evaluative judgements as mediating variables and decision topic as a moderator variable are included. The trade-off between experience and breadth of social

capital in having effects on decision effectiveness through information processing particularly suggests a form of interplay between human capital and social capital. In line with earlier research, the present research results confirm the effects of human capital and social capital on small firm processes. It shows in which cases human capital is more of an asset than social capital, and vice versa. It also shows in which cases human capital is more of a liability than social capital, and vice versa. This means that the content of a decision in terms of whether primarily inside or outside actors are involved in its implementation plays a role in attaining decision effectiveness, despite the involvement of both internal and external actors in the phases preceding implementation. This is due to their role being different, since in the pre-implementation phase the internal and external actors influence the effectiveness and efficiency of the strategic decision-making process in terms of information content (comprehensiveness) and processing (validation); they are involved as their knowledge makes a difference to the process. In the implementation phase, internal and external actors are involved because of their action potential in implementing the decision.

Conclusion

This article aimed to make two contributions. First, a contribution to the literature by clarifying the role of social capital in strategic decision-making in small firms. The information processing perspective employed indicates that the input from social ties is processed and affects decision effectiveness. Liao and Welsch (2005) and Lee and Jones (2008) argued and demonstrated that structural social capital is a condition that must be fulfilled in order to create cognitive social capital. The present study shows that comprehensiveness and validation enable decision-makers to integrate knowledge more, providing benefits in terms of higher decision effectiveness. Structural relations are beneficial for decision-makers in smaller firms to arrive at an informed evaluation of the decision situation and confirm the condition-like nature of structural social capital. This effect is visible in, and contingent on, which parties are involved in the implementation of the strategic decision.

Second, the article has extended the scope of empirical research on strategic decision-making in smaller firms in terms of social capital. As far as strategic decision-making is concerned, the focus has been mainly on high-stake decisions in the early stages of venture formation and initial development (Batjargal and Liu, 2004; Carter et al., 2003; Lee and Jones, 2008; Yli-Renko et al., 2001). By researching a wider variety of strategic decision topics that require the attention of decision-makers in SMEs, we have found that information processing by the central decision-maker is a mechanism explaining decision effectiveness. The trade-off between level of experience and breadth of social capital in realizing decision effectiveness depends on involvement of primarily external or internal parties in implementation. This trade-off informs us about the interplay between the experience and social capital of decision-makers, being contingent on the parties involved in the implementation stage. For decision-makers in SMEs, this means that breadth of social capital and experience are either assets or liabilities for processing information effectively and efficiently in order to achieve decision effectiveness. Whether they are an asset or a liability for decision effectiveness through information processing depends on the extent to which the parties primarily involved in the implementation of the decision are internally or externally based. In this, they mirror one another in the sense that if breadth of social capital is an asset, experience is a liability, and vice versa. This informs decision-makers that there is no one best way to achieve decision effectiveness, and calls for future research to explore configurational approaches to strategic decision-making in SMEs.

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