Implications of Social Cohesion in Entrepreneurial Collaboration: a Conceptual Model and Research Propositions

Jawad Minhas [1] · Stavros Sindakis [2,3]

Abstract
This paper explores how the moderation of social cohesion could sustain optimal synergy in entrepreneurial collaboration. Modern firms increasingly engage entrepreneurs in the pursuit of innovation as a means to gain competitive advantage. Managers that oversee such initiatives are hesitant to interfere with the social linkages between entrepreneurs fearing that they will somehow upset the creative process. The consensus that entrepreneurs are inherently collaborative and adept at mitigating conflict also fuels this hands-off approach. Using a systematic literature review, the authors demonstrate that, without moderation of social cohesion, the expectation of sustainable innovation arising from the entrepreneurial collaboration is unwise. Organisations may overspend time, money, and technological assets without successful innovation occurring. The dangers range from poor and even risky decision-making to group disintegration. This paper proposes a conceptual model and research propositions to steer future research in managerial interventions designed to moderate social cohesion towards sustaining optimal synergy amongst collaborating entrepreneurs. This paper concludes with a commentary on the implications to business, society, public policy, and teaching.

Keywords Social cohesion · Entrepreneurial collaboration · Organisational synergy · Innovation

✉ Jawad Minhas
mohamedjawad.minhas@online.liverpool.ac.uk

Stavros Sindakis
ssindakis@sharjah.ac.ae; ssindakis@ctbu.edu.cn

[1] University of Liverpool, Liverpool L69 3BX, UK

[2] Department of Management, College of Business Administration, University of Sharjah, Sharjah University City, P.O. Box 27272, Sharjah, United Arab Emirates

[3] National Research Base of Intelligent Manufacturing Service, Chongqing Technology and Business University, Chongqing 400067, China

Introduction

Bringing entrepreneurs together to support innovation is a growing trend across the globe for organisations seeking to overcome market challenges (Carayannis et al. 2014; Carayannis et al. 2015; Chen et al. 2017; Frigotto 2016). This paper develops a conceptual model in support of sustaining innovative capacity in entrepreneurial collaboration following a systematic literature review of the topic by the authors. A rigorous selection process was undertaken to identify academic resources. Concepts related to the topic of this study were traced rather than any particular bias or viewpoint held by the authors (Klopper et al. 2007; MacLure et al. 2016; Webster and Watson 2002). This methodological approach reveals many favourable, inherent qualities of individual entrepreneurs that encourage their collaboration. In particular, consensus supports the notion that entrepreneurs introduce new and novel ideas to problem-solving, owing to their inventive nature (Chen et al. 2017; Schlaile and Ehrenberger 2016; Schultz et al. 2016; Stevenson and Jarillo 2007; Quince 2001). Entrepreneurs have a penchant for innovation and creativity, as well as being able to foster a nurturing environment for others (Birley 1985). It is naïve for any manager to assume that these archetypical traits will translate into sustainable innovation capacity even when supported by other entrepreneurs (ibid.). There is no guarantee that an entrepreneurial cadre will achieve, let alone maintain the optimal synergy necessary for sustained innovation. Innovation requires the synthesis of diverse perspectives and intelligence through the social exchange of collaborating entrepreneurs (Chen et al. 2017; David et al. 2020). The literature is silent in terms of how this social exchange can be facilitated critically. Instead, managers prefer to avoid interfering with collaborating entrepreneurs because they believe such intervention will stifle the very creativity for which the entrepreneurs were brought together (Stevenson and Jarillo 2007). Organisational support of social exchange is reported by some researchers to maximise the conversion of market challenges to market opportunities in the hands of entrepreneurs (Clar and Sautter 2014; Sulistyo and Ayuni 2020). Such performance is the enduring result of innovation, as argued by Carayannis et al. (2015). However, innovation cannot happen unless collaborating entrepreneurs are achieving something that exceeds the sum of their individual effort and contribution, known as synergy (Corwin et al. 2012). Innovation requires optimal or positive synergy, which does not exist when social cohesion is excessive (Goold and Campbell 1998; Wise 2014). Excessive social cohesion is a likely occurrence in groups that may appear to be getting along well but at the expense of criticality and quality decision-making and wasting organisational resources, particularly time and money (Dundon 2002; Wong 1992). However, the power and value of co-constructed knowledge require a shift towards criticality as a matter of effort and motivation, not tension and dissent (Huffman 2013; Minhas 2019).

McNish and Silcoff (2015) showcase how organisations tend to justify the engagement of entrepreneurs as necessary not only in the pursuit of innovation but also as a matter of competitiveness and survival. They do not consider the need to have optimal synergy for entrepreneurial collaboration to produce innovation, as posited by Dundon (2002). That optimal synergy relies upon the interpersonal relationships between the collaborating entrepreneurs, the very links through which innovation is created (Birley 1985; Burgelman and Hitt 2007; David et al. 2020; Larson and Starr 1993; Najmaei

2016). Therefore, the authors argue that organisational resources allocated (i.e. time and money) for social cohesion must target the creation and maintenance of optimal synergy while curtailing excessive social cohesion. Exploring the body of knowledge highlights the existence of a gap insofar as how the aforementioned links (i.e. the social cohesion) of collaborating entrepreneurs can be exploited to foster optimal synergy in the pursuit of innovation. The implication of this research gap is to encourage active managerial involvement and facilitation with the objective of sustaining innovative capacity in a cost-effective manner. This study challenges the tendency of managers to maintain a hands-off approach in their oversight of entrepreneurial collaboration and argues for more firms to engage entrepreneurs with efficient use of organisational resources. In the following sections, the theoretical background supporting the development of the conceptual model and research propositions is deliberated using the relevant literature, and findings are discussed in summary, concluding with implications of the study to policy and practice along with limitations.

Theoretical Background and Conceptual Model Development

Collaboration requires interaction between participating entrepreneurs, necessitating the optimisation of social cohesion through their interconnectedness and individual interactions (Muhlenhoff 2016; Najmaei 2016; Quince 2001; Stacey 2011). Universally, managers persist in their avoidance of interference with entrepreneurial cadres. Nevertheless, the rationalisation of resources in the pursuit of innovation requires managerial involvement beyond the mere assembly of a roster and external observation (Corwin et al. 2012; Dundon 2002; Kempster and Cope 2010; Larson and Starr 1993; Stacey 2011; Stevenson and Jarillo 2007; Quince 2001). Constituting an entrepreneurial cadre with diverse participants does not necessarily enable action. Over the past 70 years, the study of entrepreneurial collaboration repeatedly points to the interpersonal relationships that constitute social cohesion as the key challenge and motivation to the pursuit of innovation (Carayannis et al. 2015; Carayannis and Rakhmatullin 2014; David et al. 2020; Quince 2001). However, the tendency of entrepreneurs to mitigate discord in no way assures management that optimal synergy will be maintained, especially where social cohesion may become excessive to the detriment of decision making quality, let alone the generation of novel ideas (Fox 2019; Huczynski and Buchanan 2013; Janis 1973; Leavitt 1974; Wise 2014). Therefore, managers must overcome their fear of triggering conflict, especially given that collaborating entrepreneurs inherently moderate conflict when empowered to co-create innovation. How entrepreneurs behave towards one another in social settings, not only impacts action but also the dynamism and responsiveness of the group because of the inescapable impact on their sense-making (Najmaei 2016). Managers can be understandably satisficed by the performativity of key contributors within an entrepreneurial cadre. They may be overlooking the fact that these stalwarts are anchored in one manner of status quo for decision-making and strategy until they find the next, better status quo (i.e. dynamic conservatism) (Argyris et al. 1985). Managerial involvement in moderating social cohesion can create an invaluable opportunity for disruption of subgroups comprised of stalwart performers who may be masking dynamic conservatism and thwarting true innovation.

In confronting novel problems, the exact purpose of the entrepreneurial cadre, let alone its individual members, cannot always be fully known. While an organisational problem or market challenge is still being understood, the a priori primacy of task cohesion cannot be relied upon in driving innovation, especially since innovativeness is not impacted by the mere functional diversity of participants (Chen et al. 2017; Sethi et al. 2001). Managers can play a key role in facilitating reflexive processes amongst the participants, given that success, failure, and sustainability of entrepreneurial collaboration hinge on social cohesion (Quince 2001; Sethi et al. 2001). It is these interpersonal relationships that potentiate mutuality in respect, trust, and goals in entrepreneurial collaboration. Given the volatility and dynamism of the global marketplace, simply assembling a diverse, cross-functional roster cannot rely on the inherent moderation of conflict in entrepreneurial collaboration. The cognitive differences of the participants that are valued for their innovativeness assure that conflict will arise (Chen et al. 2017; Sethi et al. 2001). This finding encourages the authors' study of how managerial intervention could exploit social cohesion in entrepreneurial collaboration to optimise positive synergy. Within the organisational setting, managers need to have some means of evaluating the level of social cohesion within the entrepreneurial cadre. Although newer, emerging, external technologies such as proximity tags and advanced audio-visual analytics exist, the authors advocate for the sociometric technique as a well-established, well-suited, and descriptive instrument for small groups in entrepreneurial environments, particularly as it assigns the assessment of the phenomenon to an individual for whom it represents a shared experience with the other members of the entrepreneurial cadre (Barile et al. 2018). In the sociometric technique, the subject represents, visually, the structure of social relationships between the members of the group at a particular time to include their perceptions of leadership and rejection (ibid.). In larger organisations, newer technologies can provide further insights, especially as a means of triangulation, but the authors also present the conceptual model in Fig. 1 as a means for smaller firms to consider entrepreneurial collaboration in their strategic planning. The authors emphasise that the choice of sociometric technique is not in opposition to newer technologies. Rather, it is a practicable suggestion to overcome the challenge of resource constraints, especially in SMB firms where the inclusion of entrepreneurial collaboration may be considered an extravagance reserved for large, multinational corporations.

The conceptual model must provide a distinct consideration of the social cohesion of entrepreneurial collaboration as a central phenomenon that exists at any level (low, optimal, or high) at a given point in time in the life cycle of the project or organisation for which the cadre was assembled. The level of social cohesion existing within the cadre is considered an independent variable (IV) because, at the outset of the life cycle of the entrepreneurial collaboration, challenges arising from the market and organisational challenges are often still ill-defined. Entrepreneurial collaboration benefits an organisation for problem definition as much as for problem-solving, and the social cohesion of the entrepreneurial collaboration is not immediately affected by any of the other processes or phenomena in the conceptual model. If the cadre persists and is left unchecked, the activities of the collaborating entrepreneurs may not directly affect the level of synergy; rather, they affect the level of social cohesion. The level of social cohesion can become excessive to the detriment of innovative capacity when no efforts are made to enhance managerial sense-making, leading to sub-optimal

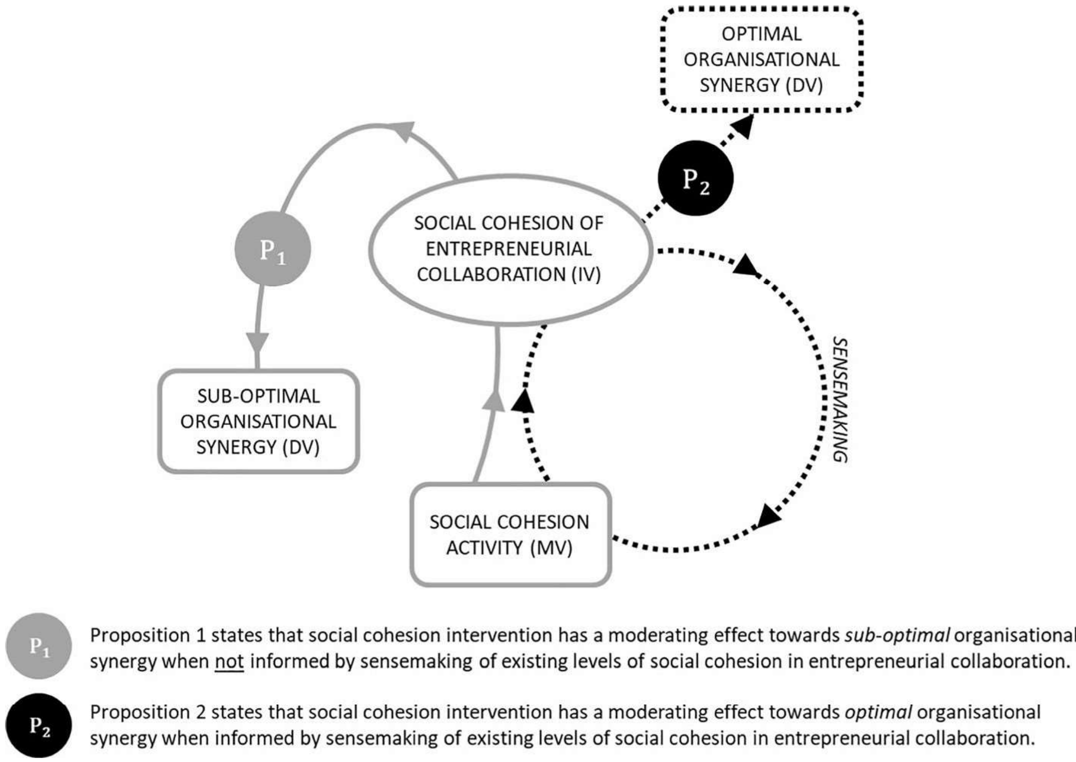

Fig. 1 Conceptual model

organisational synergy as a dependent variable (DV). The conceptual model must support the ease of its use by managers who will have to alter their metacognitive skills as they adapt their sense-making. Therefore, social cohesion activity undertaken as a means of intervention is a moderating variable (MV). Accordingly, the first proposition (P_1) considers that social cohesion intervention has a moderating effect towards sub-optimal organisational synergy when not informed by sense-making of existing levels of social cohesion in entrepreneurial collaboration. This proposition is rounded in the literature, as discussed in the section reporting on organisational synergy below.

Again, social cohesion activity impacting the level of social cohesion of entrepreneurial collaboration is a moderating variable (MV) because it does not directly affect the level of synergy within the entrepreneurial collaboration. Rather, it affects the level of social cohesion, which, in turn, can be moderated to the benefit of innovative capacity when efforts are made to enhance managerial sense-making. Therefore, optimal organisational synergy is a dependent variable (DV). Sense-making is used where managers can gauge the level of social cohesion with collaborating entrepreneurs and co-construct intervention in the effort to prevent social cohesion from dropping below what is necessary to maintain the cadre and exceeding what is necessary for optimal synergy. Accordingly, the second proposition (P_2) considers that social cohesion intervention has a moderating effect towards optimal organisational synergy when informed by sense-making of existing levels of social cohesion in entrepreneurial collaboration. This proposition is also grounded in the literature, as discussed in the "Organisational Synergy" section below. Of course, the exact activity selected, such as current popular group activities to promote collaboration and criticality, for example, "Escape Room" (cf. Borrego et al. 2017), could be of value whether social cohesion is too high (or too low). Managers must allow for the input and preferences of the group if they are to establish a credible agency. That activity would then become social cohesion activity as an intervention. Therefore, the conceptual model shown in Fig. 1 supports the timely and cost-effective moderation of social cohesion in entrepreneurial collaboration while respecting the aversion of entrepreneurs to employee status. For the organisational sponsors of entrepreneurial collaboration, this conceptual model liberates managers from having to sit idly and hope for innovation to occur. A key part of that enhancement is helping managers to recognise when social cohesion is adequate to allow collaborative entrepreneurs to continue being inventive without intervention or further expenditures.

The authors call attention to the conceptual model presented in Fig. 1 for the consideration of sustaining innovation through entrepreneurial collaboration, not just performativity for a given problem, task, or project beyond which the collaborating entrepreneurs may or may not remain engaged. The proposed conceptual model incorporates a sensitivity of the inclination of managers to avoid interfering with entrepreneurial collaboration (Stevenson and Jarillo 2007) with the aversion of entrepreneurs to leading or being led (Kempster and Cope 2010). Ultimately, by involving the collaborating entrepreneurs in an assessment of the level of social cohesion, the judicious planning of suitable intervention activities, and the implementation thereof, the conceptual model in Fig. 1 seeks to facilitate the collaboration of entrepreneurs to perform beyond the sum of their individual abilities and contributions.

This conceptual model merits the attention of scholars and practitioners alike. The resources allocated to bringing entrepreneurs together for the purposes of innovation must also encompass the effort to define and refine the understanding of organisational problems. That undertaking demands criticality alongside an increased managerial willingness to actively monitor and moderate social cohesion. This paper reports below on the relevant literature contributing to the development of the conceptual model and the research propositions.

Entrepreneurial Collaboration

In the effort to systematically integrate thought leadership into this study, a number of issues arose in the literature insofar as terms of reference, which merit clarification at the outset of this section. Collaborative entrepreneurship and entrepreneurial collaboration are used interchangeably, confounding institutional processes that support or leverage entrepreneurship with the individual-centred phenomenon of entrepreneurs working with one another. While this tendency is understandable given the interrelation of the institutions and organisations supporting individual entrepreneurs and entrepreneurial activity, the authors argue for a standardisation of the terminology. Widespread agreement exists within the body of knowledge to prioritise the interactions between individual entrepreneurs above the process of bringing them together within an organisation since the manner in which entrepreneurs relate to one another may not be readily known to the sponsors of the collaboration (Corwin et al. 2012; Dundon 2002; Quince 2001; Stacey 2011). Based on the primacy of interconnectedness of the individual entrepreneurs over the institutional process supporting their aggregation, the authors adopt the following terminology:

> Entrepreneurial collaboration describes the phenomenon of individual entrepreneurs working jointly in pursuit of innovation.

> Collaborative entrepreneurship describes the marshalling of entrepreneurial processes, especially in collaborations between (educational) institutions and businesses.

The term entrepreneurial collaboration, as argued by the authors, describes the phenomenon of individual entrepreneurs working jointly in pursuit of innovation. This study seeks to contribute to the body of knowledge through the development of a better description of the phenomenon of entrepreneurs collaborating and, in particular, how to enhance the likelihood that such collaboration will not only lead to innovation but also do so in a sustainable fashion. Over the past 70 years, increasing knowledge has been created regarding entrepreneurs insofar as how they function and how they interact with others. Entrepreneurs are accepted as inventive, giving them the ability to come up with new ideas, uses, or combinations to address a challenge. These unique attributes are very tantalising to business firms seeking competitive advantages in the marketplace (Schlaile and Ehrenberger 2016; Schultz et al. 2016; Stevenson and Jarillo 2007; Quince 2001). For modern firms, the ability to innovate has evolved beyond an idea that is advocated by theorists or academics (Senge 1990; Stacey 2011). In fact, the need for organisations around the world to develop their capacity to innovate has become a matter of key strategic advantage. The motivation to develop sustainable, innovative capabilities is a matter of economic significance that ensures the survival of the firm (McNish and Silcoff 2015; Senge 1990; Stacey 2011). Consequently, organisations must endeavour to include entrepreneurs within their fold, but these same organisations may struggle with how such individuals can be engaged effectively, sustainably, and, of course, profitably (Dundon 2002; Najmaei 2016; Schlaile and Ehrenberger 2016; Senge 1990). Bringing entrepreneurs together can permit the participants to begin to cooperate and construct solutions together, creating an opportunity and challenge to overcome controversy in favour of more critical decision-making (Chen et al. 2017). The value and necessity of entrepreneurs to the innovative capacity of firms are clear, but the inclusion of such individuals presents a host of challenges, particularly in the rationalisation of the expense to support the effort.

Furthermore, entrepreneurs are not particularly interested in being employed in a conventional sense or under the thumb of a positional leader, much to the chagrin of hierarchical firms that still seek to include such archetypes in their pursuit of competitive advantage in the marketplace (Kempster and Cope 2010). Researchers report that entrepreneurs are also good collaborators, but managers rarely involve entrepreneurs to establish expectations and compliance with the budgetary and operational concerns of the firm (Burgelman and Hitt 2007; Koellinger 2008; Stevenson and Jarillo 2007). The mistake in this approach is the assumption that entrepreneurial collaboration is somehow magically optimised to forever produce innovation. As it turns out, for innovation to be possible, entrepreneurial collaboration has to come together synergistically (Dundon 2002). Not understanding this issue further contributes to managers taking a very passive role when assigned to the oversight of entrepreneurial cadres, leaving their firm vulnerable to not only an inefficient use of organisational resources but also an unproductive engagement, no matter what the cost (Dundon 2002; Wong 1992). Most disappointingly, managers that adopt this passive approach are leaving innovation to chance instead of finding a way to navigate the idiosyncrasies of entrepreneurs engaged by the firm. This ambiguity leaves firms in the position of following an appropriate trend for seeking competitiveness but without any visibility, let alone certainty as to the expense to be incurred for the privilege. All too often, companies are content to tolerate this uncertainty because engaging entrepreneurs is considered necessary for innovation and, in some cases, even survival (McNish and Silcoff 2015). However, businesses must consider what the literature makes clear. The quality of entrepreneurial collaboration rests in the strength as well as the quality of the linkages of interpersonal relationships, known as social cohesion, which dictate the likelihood of successful innovation (David et al. 2020; Hoigaard et al. 2006; Najmaei 2016; Sulistyo and Ayuni 2020; Quince 2001). It is at this point in consideration of the literature that a deficiency in how social cohesion could be exploited to optimise organisational synergy in entrepreneurial collaboration is exposed. This spectrum of performance with respect to social cohesion is clearly defined through the systematic literature review process and discussed in detail in the next section.

Social Cohesion

Social cohesion and group cohesion are used interchangeably, conveying the willingness of individuals to cooperate in order to survive and prosper with a sense of belonging (Dyaram and Kamalanabhan 2005) but are more often adopted according to a given discipline. While management science uses the term group cohesion, political science and economics tend to use social cohesion to describe the same phenomenon in their context. However, the latter disciplines' use of social cohesion focuses on national or macro-level interactions of innovative groups. But, thought leadership in the field of entrepreneurial collaboration emphasises the inclusion of the interconnectedness of individuals and micro-levels of social relationships in the use of the social cohesion (Mulunga and Nazdanifarid 2014). Using the term social cohesion for the context of entrepreneurial collaboration extends beyond social cohesion as the establishment of social bonds that potentiate the persistence of a group in a unified fashion undertaken by the participants (Carron 1982). The very validity of social cohesion as a concept is hindered by inattention to micro-level behaviour because the term is anchored in the trust and mutuality that comprises the bonds between individuals (Berman and Phillips 2004; Chan et al. 2006; Smith and Polanyi 2008; Vveinhardt and Banikonyte 2017). The reader is justified to question, at this point, why task cohesion is not the issue central to this study. However, as organisational problems are still being defined, let alone the individual entrepreneurs being assembled, task cohesion remains underdeveloped and unreliable in the pursuit of novel solutions and cannot be assumed to merit a priori primacy (Chen et al. 2017; Sethi et al. 2001).

Further to its explication in the "Introduction" section of this paper, the term social cohesion is used by the authors in place of group cohesion without interchange in the context of entrepreneurial collaboration because the literature accepts the term as a dynamic process appropriate for referring to the bonds that potentiate the persistence of a with particular attention to the micro-level behaviour relating to trust and mutuality (Berman and Phillips 2004; Carron 1982; Chan et al. 2006; Smith and Polanyi 2008; Vveinhardt and Banikonyte 2017). The body of knowledge is clear that where social cohesion is absent, collaboration cannot take place, which might seem intuitive to the reader (Dion 2000; Oketch 2004; Wong 1992). However, when social cohesion is too high, innovation does not happen either because entrepreneurial collaboration is diminished in its criticality and the quality of decision-making (Stewart et al. 2008; Wise 2014). The issue is not that social cohesion has as direct and positive relationships with innovation as posited by Wong (1992), or that it has an upper limit beyond which it simply fails to produce innovation as argued by both Stewart et al. (2008) and Wise (2014). Rather, social cohesion impacts the level of organisational synergy (Dundon 2002; Witges and Scanlan 2015). However, none of these studies explore the moderation of social cohesion in optimising synergy.

Given the deficiency in the literature in providing direction as to how social cohesion intervention can be utilised to optimise organisational synergy in entrepreneurial collaboration, the authors explored thought leadership through the systematic literature review into the implications of social cohesion itself on the phenomenon of entrepreneurial collaboration. The adept manager must endeavour to find when and how social cohesion can be just right for entrepreneurial collaboration, but this cannot happen if a hands-off approach is maintained. A delicate balance is required between maintaining sufficient strengths in the bonds between the collaborating entrepreneurs to sustain the group while constantly monitoring the quality of those same bonds. Beyond necessitating managerial involvement, such a process demands enhancement to the sense-making efforts of the manager. One of the key goals of this study is to encourage SMB firms to engage entrepreneurs in their efforts to gain strategic advantages, even where those firms lack the budget of larger corporations. In that process, the literature revealed a relatively simple, low-cost method that not only serves as a means to gauge the level of social cohesion but also to promote critical thinking and the taking of greater interpersonal risk where the self-assessment of strengths and interactions is key to entrepreneurs being able to innovate and learn collaboratively (Clar and Sautter 2014). Fifty years from its inception, researchers still praise sociometric technique for its relevance in gauging the level of social cohesion amongst the members of a group, even amongst advocates of the latest external technologies (Barile et al. 2018; Forsyth 2010; Hung and Gatica-Perez 2010). The authors wish to emphasise that sociometric technique is a qualitative, descriptive instrument that describes what is happening in a small group with respect to the level of interpersonal dynamics constituting social cohesion but does not reveal why those bonds have formed (Forsyth 2010). Subjects draw their perceptions of social relationships, rejection, and leadership roles for their group at a given point in time preceded by a short set of questions, prior to assigning the task of representing the linkages of the group, for example, "With whom do you work the best within the group?", "With whom would you like to work within the group?" and "With whom can you share your ideas?" (ibid). The subject simply draws a circle to represent each group member according to their perception of their linkage and uses lines to indicate their connectedness with arrows to represent the directionality of interactions. Providing managers which simple, low-cost tools to gauge social cohesion in entrepreneurial collaboration establishes them as a facilitator of success to the collaborating entrepreneurs rather than a positional leader imposing operational constraints on the innovative process. Despite the revelation of actionable knowledge by the systematic literature review, the authors emphasise that the optimisation of organisational synergy hinges on the quality—not just the strength—of social cohesion in entrepreneurial collaboration, as discussed in the next section.

Organisational Synergy

Historically, synergy connotes cooperative output, which typically conveys the whole being greater than the sum of its parts (Ward 1918; Werth 2002). The notion that synergy is always a matter of positive, the cooperative output is challenged in the management context where organisational synergy can be either optimal (positive) or sub-optimal (negative) (Goold and Campbell 1998; Huczynski and Buchanan 2013; Frigotto 2016). This distinction is of vital importance to the understanding of entrepreneurial collaboration, and the further exploration of the research gap of how social cohesion intervention can be utilised to optimise entrepreneurial collaboration because, without the linkages that comprise and constitute social cohesion, organisational synergy could not occur (Lawford 2003; Najmaei 2016; Oketch 2004; Wise 2014). All too often, collaboration is erroneously presumed to ensure (optimal) synergy, especially in firms that have committed to the engagement of entrepreneurs (Goold and Campbell 1998). This presumption is referred to as synergy bias and typically leads to an underestimation of the organisational resources that will be allocated for entrepreneurial collaboration (Goold and Campbell 1998; Lawford 2003). At this juncture in the process of systematic literature review, the authors are able to ground the first proposition (P_1) in the literature and articulate it as:

> P_1: Social cohesion intervention has a moderating effect towards suboptimal organisational synergy when not informed by sensemaking of existing levels of social cohesion in entrepreneurial collaboration.

Organisational synergy may very well be present to the extent that an external observer, especially a manager assigned to the oversight of entrepreneurial collaboration, may be heartened by the apparent enhancement of the collective ability of the participating entrepreneurs. However, it could be sub-optimal, masking the diminished quality of decision-making and criticality of the group members with no other indication that innovation is unlikely to occur (Dundon 2002; Goold and Campbell 1998; Huczynski and Buchanan 2013; Lerner et al. 2015). Sociability and proximity amongst group members in no way confirm optimal synergy and may represent the squandering of organisational resources more so than any hope of innovation (Camuffo and Gerli 2016; Dundon 2002; Lawford 2003; Liening et al. 2016). Therefore, managers must create personal responsibility amongst the collaborating entrepreneurs to balance the need for facilitation against any known idiosyncrasies of entrepreneurs, such as their dislike of positional leadership or conventional employment status (Stevenson and Jarillo 2007; Kempster and Cope 2010). The sociometric technique has been described above as an apt tool to permit engagement by the manager. This provides the manager with the very cost-effective means to gauge the appropriateness of the level of social cohesion to foster optimal synergy in the entrepreneurial collaboration. At this juncture in the process of systematic literature review, the authors are able to ground the second proposition (P_2) in the literature and articulate it as:

> P_2: Social cohesion intervention has a moderating effect towards optimal organisational synergy when informed by sensemaking of existing levels of social cohesion in entrepreneurial collaboration.

Because the very purpose of the entrepreneurial collaboration is innovation, the roster of entrepreneurs must be assembled with the understanding that mere cooperation is not collaboration. Without greater reflection and scrutiny of the inclusion of entrepreneurial collaboration, organisations may be doing little more than succumbing to a management fad that moors them, at best, in technocratic unimaginativeness or, at worst, in a desperate grasp for results (Van Maanen 1995).

Discussion

There is a knowledge gap in the understanding of how social cohesion intervention can be utilised to optimise organisational synergy in entrepreneurial collaboration. Managerial involvement must find a way to navigate the disdain entrepreneurs hold for positional leadership while not leaving innovation to chance (Birley 1985; Dickel and Graeff 2016; Frigotto 2016; Kempster and Cope 2010; Namjoofard 2014; Oketch 2004; Wong 1992). The merits of involving entrepreneurs as a matter of organisational strategy and competitiveness are well-developed (Carayannis et al. 2014; Carayannis et al. 2015; Chen et al. 2017; Frigotto 2016). The conceptual model and research propositions developed in this study challenge managers to rethink their passive approach to entrepreneurial collaboration. This study finds that, by taking a more active role in moderating the social cohesion amongst collaborating entrepreneurs, managers can more efficiently use organisational resources to support innovation. Problems needing resolution may still require further exploration before being properly defined, let alone understood. Firms cannot presume that task cohesion will bind the group sufficiently to distill innovation, nor can they be satisfied with attributes like cross-functionality or diversity in the teams they assemble (Chen et al. 2017; Sethi et al. 2001). Innovation requires optimal synergy, and optimal synergy requires social cohesion, but not too much (Dundon 2002; Witges and Scanlan 2015). The study shows that diversity is very important to enabling action, but in no way assures the sponsoring firm that entrepreneurial collaboration will lead to innovation or that recurrent recombination of the roster will address deficient performance (Huffman 2013). Rather, synthesis of the literature clarifies that the spark of innovation is held in the bonds that link the collaborating entrepreneurs, known as social cohesion. If innovation is to be sustained, then it is not just the strength of those links, but rather the quality of those links that must fall under the purview of the adept manager (Birley 1985; Burgelman and Hitt 2007; Larson and Starr 1993; Najmaei 2016; Vveinhardt and Banikonyte 2017). Managers can and should balance the preferences of entrepreneurs with organisational demands and constraints. The significance of the conceptual model presented in Fig. 1 of this paper is to practicably address the knowledge gap revealed through the systematic literature review undertaken by the authors.

This study seeks to encourage smaller firms to engage with entrepreneurial collaboration. The implications of this conceptual model to business are that it empowers managers to moderate social cohesion in entrepreneurial collaboration and allows for more efficient allocation of organisational resources without unduly interfering in the process of innovation or the resistance of entrepreneurs to positional leadership. As modern society creates more freelance workers, this paper offers important directions towards their individual success and the networks that they comprise. While the boundaries between freelance and self-employment are often indistinct, they do represent a form of entrepreneurship (Baitenizov et al. 2019). Improving the understanding of how freelancers can optimise synergy with their collaborators through the moderation of social cohesion can contribute to their sustainability as well as that of their stakeholders across society. Constantly refreshing the constituents of an entrepreneurial cadre may provide diminishing returns. The implications to practice and policy are significant for both participants and sponsors in terms of efficacy and retention. While diversity may offer an advantage to problem-solving and innovative performance (Vveinhardt and Banikonyte 2017), ongoing relationships are necessary to augment the quality of social bonds over merely their strength. The conceptual model validates the primacy of social cohesion activity as the apt locus of intervention to optimise synergy in entrepreneurial collaboration. Practically, recruiting and engaging entrepreneurs in organisational efforts can squander managerial budgets, also robbing the very stakeholders tasked with distilling innovation of the precious time. Organisations must curtail the promotion of social cohesion without purpose or specificity in place of meaningful group activities that promote interconnectedness with criticality and mutuality. By shifting emphasis from the quality of social bonds to their strength, new generations of managers can be taught to enhance the sense of belonging amongst collaborating entrepreneurs as well as their willingness to learn and share in the path of innovation.

Conclusion

This study synthesises thought leadership in entrepreneurial collaboration in the pursuit of the key competitive advantage being sought by firms, namely, innovation. The notion of non-interference by managers in entrepreneurial collaboration is challenged and revealed to be naïve not only from the perspective of optimising synergy but also with regards to the efficient use of organisational resources. Those organisational resources include, but are not limited to, time, money, human resources, and technological assets. The authors argue that entrepreneurial collaboration can and should be actively managed through the moderation of social cohesion towards optimising synergy in the pursuit of innovation. The antecedence of social cohesion to synergy and that of synergy to innovation is not a matter of debate (Dundon 2002; Witges and Scanlan 2015). In the context of entrepreneurial collaboration, a lack of social cohesion will not only squander organisational resources but also be unlikely to deliver innovative solutions (David et al. 2020; Huczynski and Buchanan 2013; Fox 2019; Sulistyo and Ayuni 2020; Wise 2014). However, so long as an entrepreneurial cadre persists, the greater peril is unlikely to come from deficient social cohesion causing the group to break up, but rather from excessive social cohesion causing diminished criticality and stifling novel ideas (Goold and Campbell 1998; Wise 2014). Using simple sociometric testing, managers can actively monitor the level of social cohesion, thereby facilitating and involving entrepreneurs in the evaluation of their individual interactions with their fellow group members. In so doing, social cohesion activities can be designed and delivered in a timely and ongoing fashion throughout the life cycle of projects. The limitation of this study arises from its encouragement of smaller firms to engage with entrepreneurs by advocating for low-cost methods, namely, a sociometric technique in gauging the level of social cohesion in entrepreneurial collaboration. The intent of the authors is not to dismiss the emerging technologies that allow external observation of social bonds but rather to create a starting point as a means to create access for smaller firms to greater innovative capacity. While the systematic literature review process substantiates sociometric technique as being appropriate and meaningful for use in entrepreneurial cadres, newer, external technologies such as proximity tags and advanced audio-visual analytics should be considered where organisational resources are more abundant (Barile et al. 2018; Hung and Gatica-Perez 2010). From a research perspective, neither sociometric technique nor the aforementioned modern technologies provide insight into why social bonds have formed, but while sociometric technique helps managers gauge what is happening in a group in terms of social cohesion, proximity tags and advanced audio-video analytics provide finer grain data about the strength and efficiency of those bonds. Integrating these internal and external techniques is an important recommendation for future directions arising from this study. By triangulating social cohesion in entrepreneurial collaboration, future research could only help in providing greater specificity in the design and timing of social cohesion activity as an intervention (Barile et al. 2018; Forsyth 2010; Hung and Gatica-Perez 2010). The first-person involvement of entrepreneurs in assessing the level of social cohesion in their cadre is instrumental in elevating their commitment to criticality, sustaining credible agency for their managers, and evolving the culture of the firm towards greater sustainable capacity not only in innovation but also learning itself.

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