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Are social enterprises technological innovative? A quantitative analysis on social entrepreneurs in emerging countries

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12 October 2024

Are social enterprises technology innovative? A multilevel quantitative study of social entrepreneurship

Abstract

This study provides evidences of how social entrepreneurship is tied to innovation, by originally using a multilevel perspective. We adopt a contingency approach to the phenomenon as a means to fill a relevant gap in extant works. We consider how individual, meso and macro factors affect innovation. In fact, technological innovation is the new backbone for companies. Exploiting and exploring new knowledge increase the chance of survival in the current dynamic market. However, economic and social disparities between Countries have led to the emergence of new modes for facing up business, social and political challenges. Social entrepreneurship may be a way to solve such challenges, leveraging new economies and building wealth, environmental systems. In this vein, the present research provides a quantitative analysis on a sample of 142 social entrepreneurs, whose business is located in an emerging Country. We tested whether social entrepreneurship, entrepreneurial characteristics, and entrepreneurial ecosystems are predictors of innovation or not. The results confirm the hypothesis at a very relevant level. Thus, governments are called to support entrepreneurship in a less-traditional and linear way. As instance, stimulating social proactiveness and offering ad-hoc education programmes.

Technological innovation, social entrepreneurship, emerging Country, entrepreneurial ecosystem, entrepreneurial characteristics

Introduction

In the last decade, a new collective feeling has emerged for that people are becoming more and more social-conscious. The increased social-consciousness is not just a philosophical trend. So far, it was resulting in a growing number of initiatives and various kinds of activities aimed at improve social wellness. Among other initiatives, the category of social entrepreneurship deserves a particular attention for that it can provide substantial advancements to economy and society. In brief, social enterprises seek a social mission by nature (Sullivan Mort,

Weerawardena, and Carnegie, 2003, Peredo and McLean, 2006; Weerawardena and Mort 2006). The social mission relies on different stakeholders such as charity organizations, government, investment funds, etc. (Defourny and Nyssens, 2008). It can be a new enterprise or the re-structuring of existing business activities (Zappalà 2001). Often, the social mission is achieved by helping out local communities (Wallace, 1999, Chell 2007, Zahra et al. 2009). This common sense for what the social good is tied to a local dimension of geographical proximity, somewhat diminishes the relevance of social entrepreneurship, banishing these firms from becoming international and having a wider scope. In contrast with the paramount view, we originally argue that social entrepreneurship starts locally, for contingency factors, but it can become the fly-wheel of economies, such as those of emerging Countries, through technological innovation. Thus, current study primary focuses on contingency factors fostering innovation in social entrepreneurship.

We consider innovativeness as one of the essential traits of social entrepreneurship (Perrini and Vurro 2006; Kong, 2010). As the consequence, we assume that social firms are strictly for-profit. As a matter of fact, the effort of innovation activities per se requires a congruous reward, which is achieved only in case of satisfactory profits.

Basing on this premise, this study aims to investigate whether social entrepreneurship might be a facilitator of innovation or not in emerging Countries.

We originally argue that the existence of a context favourable to social entrepreneurship - such as the presence of a growing number of social ventures - the entrepreneurial orientation and mindset of individuals, along with the existence of entrepreneurial ecosystems positively impact innovation.

Generally speaking, a social entrepreneur acts as a profit entrepreneur. He/she is entrepreneurial oriented and so he/she gets benefits from being autonomous, proactive, aggressive against competitors, risk lover, and innovative (Clarysse and Moray 2004; Martens et al. 2016; Secundo et al. 2017). Hence, he/she provides new products and\or services (Perrini, 2006; Alvarez & Barney, 2007; Elkington & Hartigan, 2008). Being innovative is the crucial aspect of any authentic entrepreneur. Indeed, as stated by Schumpeter (1934) and then followed by a wealth of other Authors (for example, see Bessant and Tidd, 2007), an entrepreneur is an innovator who build up a successful enterprise. Innovation can be classified as radical and incremental, where the first one creates a breakthrough business idea; the latter seeks to improve existing products\services. As stated by Bessant and Tidd (2007), a radical innovation makes a revolution in society. It changes completely the way of living thanks to the

involvement of new technologies. Differently, an incremental innovation improves what was already originated in the past. Nowadays, innovation is also employed to assist communities in their daily challenges. Therefore, "social innovative initiatives" are mainly based on addressing social problems (Latour, 2005; Mulgan, 2012). In a similar fad, social innovation is stimulated by the need to fix an existing social concern. Nonetheless, its ulterior, but quintessential aim is the one of profiting from being "good". Scholl (2013) asserts that a social innovation becomes the fundament of modern social enterprises.

Scholars are also increasingly paying attention to entrepreneurial ecosystems (McMullen, 2018). They are concerned on how to disseminate entrepreneurship and to support the birth, development, and success of this genus of ecosystem. This has been evoked due to the increasing demand of new knowledge from entrepreneurs who are prone to grow their network (Swart & Henneberg, 2007) At large, a vast stream of scholars claims for the government support of entrepreneurship (Midgley & Livermore, 1998; Fontan & Shragge, 1998). As a matter of fact, the government should seek the social interest by definition, facilitating all social activities (Mawson, 2001; Pearson, 2001). The consequence of all the interest around entrepreneurship has resulted into a raise in privatizations and, thus, in the number of entrepreneurial initiatives (Considine, 2000) along with the support of the wealth system (Gray et al., 2003; Botsman & Latham, 2001). Though, all considered, evidences show that government are not actually very supportive, has they should have been (Lyons, 2001). The existence of many unsolved social issues is the primary rational for social entrepreneurship.

In this vein, we build our empirical research based on a sample of 142 social enterprise located in an emerging Country. We decided to vert our focus of analysis in an emerging Country due to the fact that previous studies have analysed this economic market for their limitations in resources (Desa & Basu, 2013), experience, and feeling of social entrepreneurs (Bacq & Alt, 2018). Thereby, we aim to extend these researches by offering a quantitative study exploring how entrepreneurial characteristics, social entrepreneurship goals and entrepreneurial ecosystem interplay with innovation.

In a nutshell, we argue that the social fabric might be the trigger for entrepreneurship. In those Regions where most social problems are still unsolved, social entrepreneurship may become the trigger for the creation of entrepreneurial ecosystems. Our findings provide a strong evidence of the relevance of this model. All hypotheses are confirmed, indeed. Thus, the results seem to suggest that future studies should embrace a more multidisciplinary, contingency-based view of the phenomenon.

At practical level, the study suggests that emerging Countries have a huge growth potential through social entrepreneurship and innovation. Yet, governments should provide more support to entrepreneurship by different means, including ad-hoc education programmes. Therefore, the article presents a literature review and a development of hypotheses, by arguing the concept of social entrepreneurship is linked to innovations, entrepreneurial ecosystem and entrepreneurial characteristics. This part is followed by the empirical research. Finally, discussion of the literature along with research limitations and implications are provided.

Theoretical framework and hypotheses development

Social enterprises: the need for an evidence-based understanding in developing countries

Social enterprises are private organisations that adopt business strategies to achieve socially-oriented purposes (Dacin et al., 2011; Granados et al., 2017; Campos-Climent & Sanchis-Palacio, 2017). They are defined by their combination of a social mission and a commercial orientation (Austin et al., 2006; Doherty et al., 2014; Mair & Martì, 2006), encompassing organisations along a continuum, from purely non-profit through to purely for-profit, all with a social mission of some kind (Defourny & Nyssens, 2016). This emphasis on both social and financial objectives makes social enterprises different from other social ventures. As their main source of revenue generation is selling products or services in the market, they often need to distance themselves from purely philanthropic sources of income, and seek out trading income (Dees, 1998; Lyon & Owen, 2019). This poses a number of challenges particularly in the context of developing countries, where there are no recognised business models for these kinds of organisations (Mair & Schoen, 2007), or simply the bank system and the microfinance sector are unwilling or unable to finance them (Sonne, 2012). According to Saebi et al. (2019), social entrepreneurship is a multilevel phenomenon, whose understanding implies a larger focus on the microfoundation of this species of initiatives. The authors also state that there are three main level which explains the phenomenon: situational aspects, action-formation mechanisms, and transformational mechanism. Prior studies in this research field mostly focus on a single level of analysis, thus failing to prescribe a general recipe useful for policy makers and operators. Typically, most contributions explore the personality of the social entrepreneur (Lee and Tsang 2001, Nga and Shamuganathan 2010). The social entrepreneur is generally deemed a sort of hero, someone with a different moral compass than average individuals. Thus, studies of this stream entirely bestow the genesis of the social venture upon personality traits. However, one of the main problems is the lack of empirical evidences, since most contributions are conceptual or based on qualitative investigations (Datta and Gailey 2012, Alvord, Brown, and Letts 2004, Dees 2017). In fact, despite these works offer valid cues to frame the phenomenon, they are poorly generalizable and replicable. Moreover, they typically tend to over-estimate the figure of the social entrepreneur. Other studies are misled by the concept of social, and so they question whether they are for profit-firms or not (Shaw and Carter 2007, Dacin, Dacin, and Tracey 2011). This approach has self-evident criticism since it skews the traditional consideration of the entrepreneur as an innovator. At large, studies may be grouped

into four main categories, according the following research questions: what triggers social entrepreneurship?, what kind of opportunity catcher is the social entrepreneur?, what are the process peculiarities?, what are the outcomes?. An interesting insight is offered by Dees (2017), who argues that social entrepreneurship entails a revolution in the value creation process. In a similar vein, other authors explore the sustainability orientation in social entrepreneurship (Calic and Mosakowski 2016). Nonetheless, there seem to be an extreme reductionism in the research field which ultimately obstructs the pathway toward a comprehensive and usable knowledge of the phenomenon.

Incremental innovation and socially-oriented business

Innovation is the cornerstone of a continued socio-economic development. Bessant and Tidd (2007, p.29) describe innovation as "the process of translating ideas into useful –and used, new products, processes and services". The relevant literature includes different classifications of innovation, generally grouped into total innovation, expansionary innovation, evolutionary innovation, and developmental or incremental innovation (Bessant, 1998). In their recent work, however, Bessant and Tidd (2007, p.14) contrast the concepts of 'incremental' and 'radical' innovations and describe the differences between them as follows: "*Running from minor incremental improvements (incremental innovation) right through to radical change…sometimes they are so radical and far-reaching that they change the basis of society – for example the role played by steam power in the industrial revolution or the ubiquitous changes resulting from today's communications and computing technologies*". Innovation and innovation-related activities such as knowledge transfer are generally guided by goals, derived from a strategic intent (Mintzberg, 1994; Quintane et al., 2011; Segarra-Ciprés & Bou-Llusar, 2018; Edvinsoon et al., 2004; Korbi & Chouki, 2017). When innovative activities and services are motivated specifically by the goal of meeting a social need and are predominantly developed and diffused through organisations whose primary purposes are social, these as described as a social innovation (Latour, 2005; Mulgan, 2012). Social innovation occurs as a solution to social issues such as unemployment, resource scarcity and wasted, environmental catastrophe, and health diseases, among others (Santoro, Ferraris, and Vrontis 2018). Thus, social innovation is driven by social rather than economic concerns. This view seems to suggest that, by nature, the more the openness of the firm, the greater the social benefit that can be achieved through social entrepreneurship (Tardivo, Santoro, and Ferraris 2017). While working to develop new ideas and applying these to improving social conditions, social innovation becomes an intrinsic component of socially oriented businesses (Scholl, 2013). Bessant's (1998) described incremental (or developmental) innovation as the type of innovation where the services of an organisation to its existing user group are modified or improved. In a social context, the expectation is that there would be more developmental innovation activity than other types, particularly radical innovations. This is because incremental innovation activities are less risky developments seeking efficiency to known processes or products, and known end users (Walker et al., 2002; Dvir & Pasher, 2004). Walker

et al. (2002) also argue that organisations in charge of public services would be more likely to innovate to provide new products or processes to known end users rather than expanding to provide to new end users, given their nature and purpose. Giddens (1984) describes social innovation as a co-evolutionary process that either reproduces established institutions without change (failed social innovation), that reproduces them differently (gradual or incremental social innovation), or that replaces them altogether (radical social innovation). However, research by Reinstaller (2013) has shown that major social innovations are more likely to diffuse in social systems unless these have very strong norms of consensus and compromise, in which case actors will seek compromise and, as a consequence, institutional changes will be more gradual. Amid all the fuss around social-oriented innovation and the emergence of a plethora of labels often pinpointing at the same concept, it remains unclear if social innovation occurs with social entrepreneurship or they refer to completely different domains. One of the greatest criticism is the existence of blurred boundaries between concepts such as corporate social responsibility, social entrepreneurship, and social innovation (Phillips et al. 2015).

Social entrepreneurship and innovation

In his seminal works, Schumpeter (1934) described entrepreneurs as innovators who drive the 'creative-destructive' process of capitalism. More recently, Bolton and Thompson (2000) defined an entrepreneur as "*a person who habitually creates and innovates to build something of recognised value around perceived opportunities*". Lyon & Owen (2019) referred to entrepreneurs –bot individuals and teams, as the change agents in the economy, and ones that move the economy forward by serving new markets or creating new ways of doing things.

Despite for decades the very logic of entrepreneurship was strictly tied to the entrepreneur's capability of disrupting the market, this still remains mostly at a conceptual level in social entrepreneurship studies. Perhaps, this can be deemed as the main motive why some authors also consider non-profit organization in the category of social entrepreneurship, along with the reason why it is not clear if ethics in business perfectly overlaps with social entrepreneurship or not. This sense of fuzziness went to such a length that part of the literature completely disregards the idea social entrepreneurship may entail innovation.

In this sense, Sullivan Mort et al. (2003) referred to a lack of a clear conceptualisation of social entrepreneurship, and a need to conceptualise the construct more clearly, to facilitate the work of practitioners, researchers and funding bodies. Lately, Bacq & Janssen (2011, p. 374) defined social entrepreneurship as "the process of identifying, evaluating and exploiting opportunities aiming at social value creation by means of commercial, market-based activities and of the use of a wide range of resources". Similarly, other scholars propose that social entrepreneurship has five dimensions: innovativeness, proactiveness, risk management, effectual orientation, and social mission orientation (Dwivedi and Weerawardena, 2018). Grasping on above cues and the detected gap, we suggest that, on the converse, social ventures are a funnel for innovation.

Precisely, we suggest that social entrepreneurship might entail a peculiar form of social innovation, which is the adoption of creative ideas that have the potential to positively impact people's quality of life (Pol & Ville, 2009). Consistently, we propose that social entrepreneurship is likely to be positively associated to innovation in the context of developing countries, as in the following hypothesis:

H1: The presence of a social entrepreneurship context and initiatives enables innovations in developing countries.

Entrepreneurial traits required for innovation

There is consensus in the literature on the importance of entrepreneurship for socio-economic development through both the growth of small business and the formation of new businesses. For developing countries in particular, entrepreneurship becomes an engine for economic progress, job creation and social adjustment. Most of the debate on entrepreneurship focuses on the entrepreneur as the dominant factor determining whether any business venture will succeed or fail. While the entrepreneur is usually envisaged as a dynamic and risk-taking individual, team or even organisation, over time scholars have pointed to a range of more specific characteristics defining the entrepreneur. These have ranged from the motivation, personal characteristics, situation and heredity of the entrepreneur (Storey, 1994), to innovativeness, risk-taking, and proactiveness (Miller 1983; Covin and Slevin 1986, 1989). Also, recently some studies have proposed resilience as the salient trait of entrepreneurial personality for starting up a business (Santoro et al 2018). However, regardless of their perception of what the key entrepreneurial characteristics are, there is agreement in the literature on the fact that an individual who has entrepreneurial characteristics will have a higher chance to transform into a founder of an enterprise as he or she will be able to foresee innovation in a concept and will have the motivation to accomplish the task (Lachman et al., 1980; Koh, 1996; Begley and Boyd, 1987; Chatterjee and Das, 2015).

Precisely, there is an accumulated body of knowledge that defines the entrepreneurial mindset and orientation as a cognitive capability (Haynie et al. 2010; García – Villaverde et al., 2018), or "the ability to rapidly sense, act, and mobilize" (Ireland et al. 3003, p. 963). According to adaptation theorists, having an entrepreneurial mindset means to posses the capability to adapt (Krauss et al. 2005). More in depth, this capability includes the ability to easily develop strategies and tactics after the goals are set (Fiske and Taylor, 1991) and to frame opportunities (MCMullen and Shepherd, 2006). Being a strategic thinker is related to social cognition (Fiske and Taylor, 1991). This more traditional view seems to be slightly in contrast with the general description of the social entrepreneur. In fact, scholars of this other stream pinpoint to ulterior characteristics, such as sustainability orientation (Schaltegger and Wagner 2011), empathy, altruism, and complex moral judgments (Mair and Noboa, 2006, Tan, Williams, and Tan, 2005). By criticizing the latter view, we argue that entrepreneurial mindset and orientation at both individual and team level facilitate innovation through the birth of social ventures.

Thus, on the basis of the previous analysis and the views of entrepreneurship by scholars such as Mueller & Thomas (2000) and Jack & Anderson (1999) as a potential catalyst and incubator

for technological progress, product and market innovation, the following hypothesis is proposed:

H2: The presence of entrepreneurial characteristics in the individuals/teams has a positive effect on the implementation of innovations in developing countries.

Entrepreneurial ecosystem

In addition to presence of key entrepreneurship characteristics in people, the extant literature shows that the economic and institutional context where those people operate has a significant effect on the level and type of new business formation (Sternberg, 2011) and on the actual effects that new businesses have on innovation (Qian et al., 2013) and development (Fritsch, 2013).

In the preface to their work, Leitão et al. (2018) argue that 'new firms emerge and grow not only because there are entrepreneurs that created and developed them but also because they are located in an ecosystem made up of private and public stakeholders, which nurture and sustain them, supporting the inventive and innovative action of entrepreneurs'. However, despite its growing relevance, the concept of entrepreneurial ecosystem as been criticised as being 'underdeveloped' (Stam and Spigel 2016) and 'undertheorised' (Spigel 2017), especially in relationship to social entrepreneurship.

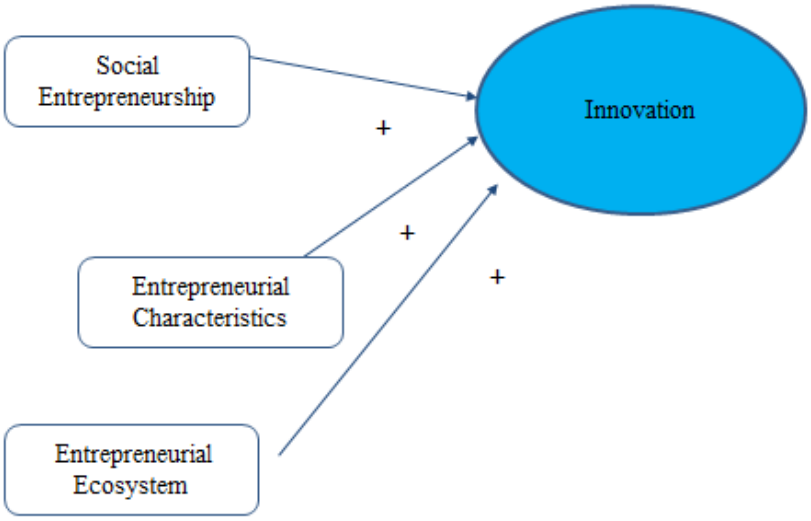
Audhoe (2018) identified recent research in this area (e.g. Isenberg 2010; Spigel 2017) which has succeeded in identifying the different components or elements that are manifest in successful cases of entrepreneurial ecosystems. Audhoe (2018) cites the work of Spigel (2017), which provides details of the material attributes (policies, universities, infrastructure, open markets, supportive systems), social attributes (networks, worker talent, investment capital, mentors and role models) and cultural attributes (supportive and history of entrepreneurship) needed for productive entrepreneurship. Yet, Youssef et al., (2018) declares that innovation and supportive public bodies convert entrepreneurial activities in sustainable developments. Indeed, entrepreneurship has been more and more studied in the recent knowledge economy (Landström, 2008).

Given the analysis above and the views of entrepreneurship as a "systemic" phenomenon determined by its economic and institutional context (Fritsch and Kublina, 2018), we hypothesise that:

H3: The presence of an entrepreneurial ecosystem has a positive effect on the implementation of innovations in developing countries.

Consistently with these considerations, current research proposes the structural model shown in Figure 1, which could be briefly described as follows: the presence of an entrepreneurial mindset at both individual and team level, the existence of an entrepreneurial ecosystem and of a context favourable to social entrepreneurship are predictors of innovation, especially in emerging Countries.

Figure 1. Proposed conceptual model



Source: Our own elaboration

Methodology

In order to investigate, at the microlevel, if the social entrepreneurship along with other contingency factors drive innovation, we conduct a research on 142 young entrepreneurs located in an emerging country, id est Ghana.

According to the British council (2016), Ghana is one of the most emerging countries where the social entrepreneurship is highly increased since the previous year – from 726 to 958 social enterprises on a total number of 26,000. The majority is founded by women who are willing to enhance the occupancy rate, wealth system, and to reduce the poverty, among others.

Due to the high economic and political instability started from 1957 – independence year – in 1981 the Ghanaian government introduced a revolutionary economic adjustment giving more power to the private sector than the state. Since then, the economy of this territory has improved. In fact, according to the World Bank (2018), notwithstanding the problems dealt in 2016 Ghana economy outlook has reported positive performance: the GDP is resulted to be 8.5% (2017) against the 3.7% in 2016 even the inflation rate is diminished moving from a score of 15.4 to 11.8. However, this latter is still high due to the high dependency on primary commodities such as oil, cocoa, and gold – which are impacted by a volatility international prices.

Overall, the economic growth has leveraged the born of more enterprises with a main focus on helping the local community. Hence, because of their social mission they categorised as social enterprises (Dess, 2017; Christie & Honig, 2006).

On this basis, the empirical research was made of three phases:

1. A desk – based analysis of the existing news related to social enterprises in Ghana;
2. Data collection by a face-to-face survey;
3. Hypotheses testing through the three-way Anova method.

The first and second phases were conducted with the help of two master students from Ghana, studying at the department of Management at the University of Sapienza in Rome, Italy.

The desk analysis is based on a search of online academic studies and reports on social enterprises in Ghana. The platforms used where Google search, Google Scholar, and online European and Ghanaian media. For instance, we noticed that the British council has released a social enterprise program to help people in Ghana and so a few pieces of research were developed by them.

After collecting and tabulating results of our interview, we used a three-way Anova to explore the validity of our hypothesis. This method allowed us to study whether innovation is affected by the three identified factors. Generally speaking, a full-factorial Anova is deemed a method particularly fitting with the need to explore a new model and to test the strengths of hypotheses (Vaughan and Corballis 1969; Zelaya-Zamora & Senoo, 2013).

Data collection

The second phase concerns the data collection activities which were advanced by the preparation of a questionnaire composed of 26 close-ended questions, divided by 6 ancillary questions (e.g. gender, age, business sector, business size, and among others) and 20 topic – based ones (Bryman, 2006). The latter lasted a month (id est September) and each question was measured on a 7 Likert –scale.

Alongside, the questionnaire was split up in four macro-topics: 1. Entrepreneurial Characteristics; 2. Social entrepreneurship, 3. Entrepreneurial ecosystem, and 4. Innovation

The questionnaire was administrated face-to-face. All participants were asked to reading the questions carefully, in order to check the understanding of each single question. Before answering the questionnaire, each participant was introduced to the research scope and asked for signing a document for data protection. The questionnaire was in English, which is one of the official languages in the country. Yet, to validate the questionnaire a pre-test was conducted on a focus group of 20 young entrepreneurs which was representative of the entire sample (Lewis et al., 2005). No biases emerged in this phase.

Sample

The 142 participants, either female and male, were selected on the basis of the following definition on "entrepreneur": An entrepreneur is who recognises market opportunities, exploit them even though he needs to take a risk. An entrepreneur is also well- connected with the community and aims to improve it, reducing poverty, increasing the employability rate, and

offer new, innovative ideas (Schumpeter, 1949; Dess, 2017; Hagerdoon, 2006; Goody, 2018). With this regard, we selected four measures for social entrepreneurship (see table 2).

Table 2. Factors, Categories and References

Factors	**Categories**	**References**
Social Entrepreneurship	Social Mission - Poverty reduction - Youth empowerment - Gender equality - Philanthropic initiative - Economic and environmental responsibility - Education initiatives.	Dess, 2017; Christie & Honig, 2006; Surie and Groen, 2017; Surie, 2017; Ramani et al., 2017; Rao-Nicholson et al., 2017
Entrepreneurial characteristics	- Optimistic - Self confidence - Introvert	Schumpeter, 1949; Cui et al., 2016
Entrepreneurial Ecosystem	- Micro loans and finance - Family &Friends support Government support needed - Entrepreneurial Education - Infrastructure - Regulatory environment	Gurău & Dana, 2018; Omri, 2018; Asongu et al., 2018
Innovation	- Incremental Innovation - Radical Innovation	Schumpeter, 1949

We also took in consideration the social challenges that the participants have to face up – mainly related to social aspects such as poverty, political conflict, scarce educational programmes, etc. In addition, they are also classified as young entrepreneurs because of their age. Indeed, each entrepreneur was belonging the age frame between 18 to 35 with only three people lesser then 18 (Table 1).

Table 1. Sample characteristics

Sample	*Total*	*Sum*	*Mean*	*Variance*
Gender (Female=1, Male=0)	142	54	0.380282	0.237339
Age (20 and younger=0, 21+=1)	142	132	0.929577	0.065927
Education(Other - Secondary education=0, Bachelors - Graduate =1)	142	59	0.415493	0.244581
Which sec.do you operate in ?(Edu; 1=Present 0=absent)	142	12	0.084507	0.077914

Which sector do you operate in?(Agric;1=Present 0=absent)	142	18	0.126761	0.111477
Which sector do you operate in? (Tech; 1=present 0=absent)	142	2	0.014085	0.013985
Which sector do you operate in? (Fashion & art; 1=present 0=absent)	142	16	0.112676	0.100689
Which sector do you operate in? (Tourism &S ; 1=present 0=absent)	142	12	0.084507	0.077914
Which sector do you operate in? (Consumer products ; 1=present 0=absent)	142	22	0.15493	0.131855
Which sector do you operate in? (Media &Marketing; 1=present 0=absent)	142	20	0.140845	0.121866
Which sector do you operate in? (Bus. Services; 1=present 0=absent)	142	12	0.084507	0.077914
Which sector do you operate in? (Construction; 1=present 0=absent)	142	20	0.140845	0.121866
Which sector do you operate in? (Artisanry; 1=present 0=absent)	142	8	0.056338	0.053541
Size of current business (Micro 1-9 employees; 1=present 0=absent)	142	88	0.619718	0.237339
Size of current business(Small 10-49 employees; 1=present 0=absent)	142	36	0.253521	0.19059
Size of current business (Med 50-249 employees; 1=present 0=absent)	142	12	0.084507	0.077914
Size of current business(Large 250+ ; 1=present 0=absent)	142	6	0.042254	0.040755

Results

Data Measurement. Three-way Anova Test

The third phase was based on the data measurement via Three-way Anova Test. This methodology was recognised appropriate for this research because it estimates the influence of data y on a fitted y value (yi) (Hoaglin & Welsch, 1978).

In this specific case, we analyse the linear relationship between social entrepreneurship and innovation, entrepreneurial characteristics and innovation, and entrepreneurial ecosystem and innovation. Innovation is categorised as a dependent variable, whereas social entrepreneurship, entrepreneurial characteristics, and entrepreneurial ecosystem, are considered independent variables (see figure 1). Hence, we examine the linear effect of input variables X= (XI, …….., X,) on an output variable Y=f(X) (Archer et al., 1997).

The first linear correlation regards social entrepreneurship and innovation which resulted to be highly significant, with F=8.157025> F_{sig}= 0.004943 (see table 3). Therefore, the *H1 "The presence of a social entrepreneurship context and initiatives enables innovations in developing countries" is supported.*

Table 3. ANOVA Analysis

	Gdl	*SQ*	*MQ*	*F*	*Significant F*
Regression	1	0.382813	0.382813	8.157025	0.004943
Residual	141	6.617187	0.04693		
Total	142	7			

p<.01.

The second linear correlation shows a marked positive effect on entrepreneurial characteristics on innovation with F=21> F_{sig}= 1.01E-05 (see table 4). Hereafter, the *H2 "The presence of entrepreneurial characteristics in the individuals/teams has a positive effect on the implementation of innovations in developing countries" is supported.*

Table 4. ANOVA Analysis

	Gdl	*SQ*	*MQ*	*F*	*Significant F*
Regression	1	0.907407	0.907407	21	1.01E-05
Residual	141	6.092593	0.04321		
Total	142	7			

p<.01.

Finally the third linear regression is measured between entrepreneurial ecosystem and innovation which is resulted to be likewise highly significant with F=4.533333> F_{sig}= 10.000322 (see table 5). Hence, the *H3 "The presence of an entrepreneurial ecosystem has a positive effect on the implementation of innovations in developing countries" is not supported.*

Table 5. ANOVA Analysis

	Gdl	*SQ*	*MQ*	*F*	*Significant F*
Regression	6	1.166667	0.194444	4.533333	0.000322
Residual	136	5.833333	0.042892		
Total	142	7			

p<.01.

Discussion, practical implications and research limits

As we were expecting, the existence of an entrepreneurial ecosystem is positively correlated to innovation. Our results show that this relationship is not simply significant, it is extremely

relevant. Similarly, entrepreneurial characteristics and social entrepreneurship has a positive and huge impact on innovation.

In line with studies of Latour (2005) and Mulgan (2012), social entrepreneurship is tied to a specific type of innovation that can be called social innovation. The peculiarity of innovation in social entrepreneurship is that it is generated to assist local community. Poverty, social and political issues, mainly in emerging countries, are still not solved and so this evokes a need for more help. Individuals are prone to scale up their current status and doing something which can provide benefits to the entire society. By using Mintzberg's concepts (1994), innovation – related activities involve strategic goal. Enforcing Scholl's study (2013), social innovation is a backbone of social oriented business.

From our results, it also emerged a willingness for being innovative tied to the achievement of social goals. This is also consistent with the traditional view of the entrepreneur (Schumpeter 1934, Bolton and Thompson 2000), thus we retain that a social entrepreneur is innovative and desires to creates something valuable for the community. He introduces new means to do things (Lyon & Owen, 2019).

Additionally, a clear concept of social innovation can be raised up by facing up social concerns, acting towards social goals, leveraging on entrepreneur's characteristics which also involves the support of the entrepreneurial ecosystem (Sullivan Mort et al., 2003). The latter evokes an involvement of policymakers to forecast future social improvements on a commercial base. This asks for a flow of various activities on "identifying, evaluating and exploiting opportunities" (Bacq & Janssen, 2011, p. 374) which aims to spur social entrepreneurship on a market-based approach. The specific context of Ghana territory is one of the most social entrepreneurship-oriented Country, thanks to the introduction of the social entrepreneurship programmes by external public bodies (British council, 2016). This has improved community's life quality enormously, which is exactly the main goal of a social enterprise (Pol & Ville, 2009).

Supporting the idea that social entrepreneurship is the engine of emerging country's economy, we also need to validate that fact that entrepreneurial characteristics such as optimistic, self - confidence, and introvert are crucial for the development of a social innovation. Scholars have offered studies from motivations, personal characteristics, situation and heredity of the entrepreneur (Storey, 1994), to innovativeness, risk-taking, and proactiveness (Miller 1983; Covin and Slevin 1986, 1989). Yet, entrepreneurial characteristics can be converted into innovative businesses (Lachman et al., 1980; Koh, 1996; Begley and Boyd, 1987; Chatterjee and Das, 2015) or in line with our study, transformed into a social innovative business.

So, differently from the past, our study on social entrepreneurship and innovation proposes an integrated view of the phenomenon by examining different levels of analysis (micro, meso, and contextual factors). We anchor social entrepreneurship to both a more traditional view of entrepreneurial personality and to the new theories on entrepreneurial ecosystems. By adopting a multilevel perspective, we extend and novel the existing body of knowledge in the research field.

Limitations of the study and future research pathways

Our study has an explorative intent. A more robust analysis should include further testing activity, such as a Confirmatory Factor Analysis and a Structure Equation Modelling. In addition, the test should be replicated on larger samples and in different geographies. Yet, the constructs under analysis should consider more or different characteristics, e.g. those linked to entrepreneurial mindset. Also, although we assumed that social innovation includes a radical and an incremental form of innovation, we did not investigate if social enterprises in Ghana tend to introduce more incremental or radical innovations.

This limitation can be addressed by exploring what are the precursors of social innovation, starting from a micro-level prospective to a macro-level. On this regard, using the lens of Giddens' study (1984), there are three forms of social innovations: failed social innovation, gradual or incremental social innovation, and radical social innovation. These three forms should be more investigated in the current realm. Besides, there is a common sense that incremental innovations are more likely introduced in a social context because they are less risky. Yet, public bodies are more prone to support the improvement of existing products\services\processes rather than creating something ex-novo Walker et al., 2002). Hence, what is the most likely type of innovation to succeed in socially-oriented businesses?

Originality and implications of the study

This empirical research aims to provide a contingency view to social entrepreneurship, by explaining how micro-meso and other contextual factors impact innovativeness of a Country by stimulating the birth of social ventures. Our findings emerge as a huge step forward in the research field, because we adopt a holistic model of the phenomenon and we directly explore its societal impact on emerging economies. In fact, the research domain of social entrepreneurship is mostly populated by conceptual or qualitative studies with a very reductionist view. Moreover, to the best of our knowledge, there are no studies exploring the contingency factors of social entrepreneurship thus far. This approach marks a radical change of perspective in comparison to prior contributions. At a practical level, discovering the factors fostering social entrepreneurship and innovation has multiple implications. First, social innovation and social entrepreneurship mark a radical change in the semantic of progress, which is far from the unsustainable, egoistic drift society has been experiencing so far. Thus, today we deem that the value of progress is attached to "how much good is done for society, to repair past damages". Similarly, by studying what are the factors that triggers social entrepreneurship and innovation, Countries may propose ad-hoc programmes to favour the emergence of innovative and social entrepreneurial ecosystems. As instance, the promotion of entrepreneurship studies at various education levels may contribute to create a collective entrepreneurial mindset that could the fly-wheel in emerging economies.

Conclusions

Is the pro-social attitude something that we are born with or something that we develop over-time? Perhaps, if the answer is that we learn to be pro-social, we must also accept that many contingency factors may foster or hinder this attitude. However, the social orientation of the individual cannot be, in itself, the reason for becoming a social entrepreneur. More resources are required, as instance as: having an entrepreneurial mindset, both at individual and team level, being in a context favourable to social entrepreneurship, having the possibility to rely on an entrepreneurial ecosystem. All these factors may occur as contingencies and they unavoidably affect innovativeness of the business. This original study adopts a multilevel perspective to provide evidence of the phenomenon. Aforementioned contingencies ultimately affect the achievement of innovation by starting a social venture, as our analysis confirm. This multilevel approach to entrepreneurship should provide the lead to future scholars to investigate the phenomenon further.

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