

# Individual social entrepreneurship orientation: towards development of a measurement scale

Measurement  
scale

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## Abstract

**Purpose** – While the literature has described social entrepreneurs as overwhelmingly occupying a pivotal role in social entrepreneurship (S-ENT) process, there is a high inconsistency prevailing with respect to entrepreneurial traits, attitudes and skills of social entrepreneurs. One explanation for this may be the lack of a suitable scale measuring entrepreneurship orientation of social entrepreneurial individuals. The purpose of this study is to address this gap by proposing an initial assessment tool for individual S-ENT orientation (ISEO).

**Design/methodology/approach** – A mixed methods research design, along with a two-stage Delphi process, helped in generating appropriate constructs for ISEO. While the items for the first dimension of scale were directly derived from the Delphi study, the items of the remaining dimensions were mainly found based on the three individual entrepreneurial orientation dimensions presented by Bolton and Lane. By means of exploratory factor analysis, the final examination of the ISEO items was undertaken through a survey of 71 social entrepreneurs across India. The process eventually resulted in reliable and valid measures for four dimensions of ISEO.

**Findings** – The scale-development process eventually resulted in a 13-item scale, measuring four dimensions of ISEO (social passion, innovativeness, risk-taking and pro-activeness). By developing a set of relevant ISEO indicators, the study answers the call for a scale development of ISEO in S-ENT literature.

**Research limitations/implications** – There is a need to further validate this instrument among other stakeholders (students) as well as in samples with different demographic characteristics across different regions of the country and the world. To further evaluate the reliability and validity properties and to confirm the newly established subscales and their relationship with the ISEO construct, there is need for conducting a confirmatory factor analysis using larger sample sizes.

**Practical implications** – The measurement of ISEO at an individual level will assist in S-ENT education, training and development of present and prospective social entrepreneurs, as well as assist individuals who want to assess the strength of their orientation towards S-ENT. The understanding of ISEO at the individual level will be equally useful for S-ENT incubators, the government and other S-ENT stakeholders who are considering supporting S-ENT proposals.

**Originality/value** – The paper is the first to develop an ISEO scale which is based on empirical data in S-ENT field.

**Keywords** Social entrepreneurship, Scale development, Social entrepreneurs, Individual, Entrepreneurship orientation, Social passion

**Paper type** Research paper



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## 1. Introduction

There has been an increased recognition of the role of social entrepreneurship (S-ENT) in addressing social and economic problems worldwide (OECD, 2013). Within developing countries (especially India), the practice of S-ENT becomes all the more important because of the prevalence of a large divide between social development and economic discrimination in such countries (Chell, 2007; Seelos and Mair, 2005). As a result, both government and tertiary institutions have put forward numerous efforts to encourage social businesses within India (ADB Report, 2012; Government's Twelfth Five Year Plan-2012/2017; Planning Commission, 2013). However, in situations where opportunity cost of education is too high for youngsters, opting for a daunting S-ENT career may be highly calculative (Satar and John, 2016). Nevertheless, India has witnessed an up-rise in the budding number of social entrepreneurs in the past decade (Ashoka's growing list of Indian social entrepreneurs, 2015). However, the rate of S-ENT growth is still deemed slow as compared to the population growth within India (Datta and Gailey, 2012). While S-ENT within India presents an exceptional opportunity to explore, analyse, challenge and rethink the central concepts and assumptions related to the social and economic development (Satar and John, 2016), the current slow rate of its growth may omit out a novel path to support its citizens (Datta and Gailey, 2012).

Additionally, India is projected to become the world's youngest country with a major percentage of population in the working age group (Bureau, 2015); promoting S-ENT among youth will arguably unlock an ocean of opportunities for sustained socio-economic development. Accordingly, a central question emerging for policy debates is how to enhance the level of S-ENT activities within the nation? Consequently, an understanding of individual's S-ENT intention becomes crucial in the process of S-ENT development (Tran and Von Korflesch, 2016). Meanwhile, recognizing the nature of entrepreneurship as an intentional and planned behaviour (Krueger *et al.*, 2000; Yurtkoru *et al.*, 2014), while simultaneously appreciating the role of education in enhancing entrepreneurial intention (Kirkley, 2017; Othman *et al.*, 2015), an understanding of *what makes an individual to become social entrepreneur* is important in developing new social entrepreneurs.

In this direction, a specific aid in conventional entrepreneurship research so far has been to have an account of individual entrepreneurship competencies through varied individual entrepreneurship orientation (IEO) scales. However, owing to some distinct incongruences (discussed later) in S-ENT research, there is no such scale in the S-ENT context so far. Thus, the present study is a response to the strong stimulation of developing a validated measure of IEO in S-ENT context (hereafter mentioned as ISEO). Subsequently, the assessment of individual S-ENT competencies through ISEO scale would be helpful for students, faculty members, social entrepreneurs and government, as well as for other S-ENT stakeholders.

An essential advancement in our understanding of entrepreneurship behaviour is entrepreneurship orientation (EO) (Rauch *et al.*, 2009; Wiklund and Shepherd, 2003). There have been considerable discussions on the topic of EO and its impact on firm performance (e.g. Al Mamun and Fazal, 2018; Covin and Slevin, 1991; Lumpkin and Dess, 1996; Rauch *et al.*, 2009; Wales *et al.*, 2013). Thus, analysing and interpreting the EO at and across different organizational levels can provide valuable insights into our understanding of entrepreneurial decisions (Kropp *et al.*, 2008). Subsequently, EO construct has been demonstrated to be applicable to the societal (individual) level as well (Bolton and Lane, 2012; Harris and Gibson, 2008). A validated individual entrepreneurship orientation (IEO) scale, developed by Bolton and Lane, (2012) is being widely used in many contexts (Koe, 2016; Hu and Pang, 2013).

As one can define S-ENT as essentially an entrepreneurial process (Austin *et al.*, 2006; Bacq and Janssen, 2011; Certo and Miller, 2008; Mair and Marti, 2006; Roberts and Woods, 2005;

Satar and John, 2016) with much similarity with conventional entrepreneurship (Austin *et al.*, 2006; Granados *et al.*, 2011; Satar *et al.*, 2016), analysing EO in S-ENT thus attains crucial applicability. Interestingly, the examination of the interface between commercial and S-ENT has elicited intriguing academic curiosity (Satar *et al.*, 2016). Although, EO attributes in S-ENT individuals have been indirectly earmarked in some academic research (Kim *et al.*, 2010; Li *et al.*, 2009; Lumpkin *et al.*, 2013; Morris *et al.*, 2011; Satar and John, 2016; Satar, 2018; Sharir and Lerner, 2006; Sullivan *et al.*, 2003; Tiwari *et al.*, 2017; Weerawardena and Sullivan, 2006), there has not been a consolidated assessment and validation of the IEO construct in S-ENT literature so far. As IEO has been proven beneficial in terms of informing the policymakers, educators and the practitioners on number of entrepreneurship behaviour aspects (Harris and Gibson, 2008), developing a validated measure in S-ENT is a must stipulation. The need is more accentuated on account of the fact that much of the S-ENT literature has emphasized on individualism with explicit focus on social entrepreneurs (SnP's) as 'heroic' individuals, spearheading social change and establishing a large part of planning and reasoning process in S-ENT phenomenon (Andres, 2013; Austin *et al.*, 2006; Christie and Hong, 2006; Dees, 1998, 2001; Drayton, 2002; Sharir and Lerner, 2006; Sullivan *et al.*, 2003; Thompson *et al.*, 2000; Weerawardena and Mort, 2006). Alternatively, the extant literature suggests social enterprises (SEs) particularly as the result of an individual's core ideology attempting to capture social value/impact (Certo and Miller, 2008; Dees, 1998, 2001; Drayton, 2002; Sullivan *et al.*, 2003; Weerawardena and Mort, 2006).

SEs are largely characterized by distinctive features (discussed later); any analysis of EO in S-ENT arena has to take care of such unique aspects. Successively, of particular significance to our study's interest is examining if and to what extent the existing research on IEO can be suitable for developing IEO in the S-ENT context. Meanwhile, considering the widely emerging typologies of SEs (Defourney and Nyssens's, 2017), scholars must first be able to identify the social ventures among other types of organizations before any examination of relevant phenomenon can occur (Peattie and Morley, 2008). For our research, we are aligned most strongly with the SE categories (for-profits, non-profits and hybrids with primacy of social mission and using commercial entrepreneurship strategies for generating their revenue), as identified by Satar and John (2016).

## 2. Literature review

While the research addressing IEO is evolving continuously, a dominant percentage of IEO studies are focussed on entrepreneurial propensity or intentions of individuals and attempt to examine the traits and attitudes correlated with a higher likeability to be successful entrepreneur (Zhao *et al.*, 2011). Therefore, most of the studies dealing with individual traits and attitudes have entrepreneurial intention as the dependent variable in their analysis (Bolton and Lane, 2012; Koe, 2016). Correspondingly, a higher IEO scores arguably indicate a higher individual entrepreneurial propensity as intention to become an entrepreneur is found to be correlated with actually becoming one (Zhao *et al.*, 2011). There is a significant consensus over individual entrepreneurial attitudes and personality traits as contributing to the likelihood of being in business and vice-versa (Harris and Gibson, 2008). Nevertheless, while individual's traits are often examined as part of his/her entrepreneurial tendencies (Zhao *et al.*, 2011), the trait research did not yield consistent results because of diversity of personality "traits" that defined a successful entrepreneur (Zhao *et al.*, 2011; Zhao and Siebert, 2006). For example, through meta-analysis of 60 studies, Zhao *et al.* (2011) concluded that "openness to experience" and "conscientiousness" are the only two personality traits highly associated with entrepreneurial intention. Likewise, traits such as "internal locus of control", "need for achievement" and "tolerance for ambiguity" were found having an influence on EO of used car

salesmen (Okhomina, 2010). Further, while pro-activeness as an EO competency is argued to stem from “need for achievement”, “extraversion” and “openness to experience” (Claes *et al.* 2005; Lumpkin and Dess, 2001), competitive aggressiveness has a relationship with “extraversion” and “need for achievement” (Lumpkin and Dess, 2001).

With the inconsistency in trait research, another stream of studies examining the entrepreneurial attitudes started emerging with the pioneering work of Robinson's *et al.* (1991). With the recognition of the fact that attitudes can either be positive or negative which are subjected to change with outside influences (Robinson *et al.*, 1991), the researchers successively began examining how entrepreneurial attitudes might be influenced by teaching and other experiences (Harris *et al.*, 2007; Packham *et al.*, 2010). Correspondingly, factors such as “family business influence”, “personal business or working in an entrepreneurial firm” were found to have impact on one's tendency to venture out (Harris and Gibson, 2008; Levenburg and; Robinson *et al.*, 1991; Levenburg and Schwarz, 2008; Zampetakis *et al.*, 2009). Eventually, Harris and Gibson, (2008) recommended four basic entrepreneurial attitudes (personal control, innovation, self-esteem and achievement with respect to business involvement) at the individual level which are linked to entrepreneurship intentions. Remarkably, the measurement instrument was constructed explicitly with respect to respondents who were entrepreneurs or those actually involved in business (Robinson *et al.*, 1991). Therefore, the authors of such studies have attempted to evaluate entrepreneurial attributes in individuals with a variety of measures such as self-esteem (Harris *et al.*, 2009; Harris *et al.*, 2007; Robinson *et al.*, 1991), self-management (Parnell *et al.*, 2003), self-efficacy (Gelderen *et al.*, 2008), need for achievement (Harris *et al.*, 2007; Harris and Gibson, 2008; Okhomina, 2007; Robinson *et al.*, 1991), locus of control (Levenburg and Schwarz, 2008; Okhomina, 2007), risk-taking (Levenburg and Schwarz, 2008), innovativeness (Cho and Lee, 2018; Harris and Gibson, 2008; Robinson *et al.*, 1991), self-efficacy and entrepreneurial intentions (Zhao *et al.*, 2011), creativity, pro-activity and emotional intelligence (Zampetakis *et al.*, 2009), alertness, perseverance, creativity and self-efficacy leading to behavioural self-control (Gelderen *et al.*, 2008). Similarly, in the study of individual entrepreneurs, the EO measures of Covin and Slevin (1989), involved a mix of traits and attitude.

Thus, the extant studies examining the entrepreneurial characteristics at individual level demonstrated a mixture of both traits and attitudes variables. Nevertheless, there were pioneering attempt towards scale development for entrepreneurial attitudes by Robinson *et al.* (1991). The research basically addressed the assessment of attitudes of entrepreneurs and was subsequently applied to students. The scale was successively used by different authors in many contexts (Harris and Gibson, 2008). Eventually using student sample, Bolton and Lane, (2012) proposed, developed and validated a measure of IEO. The scale demonstrated innovativeness, pro-activeness and, risk-taking as three core elements of IEO. The scale identified and developed ten items of the five-point Likert scales as measures of three IEO constructs (4 items for innovativeness, 3 items for pro-activeness and 3 for risk-taking). The authors modified/reworded the validated measures provided by Lumpkin *et al.* (2009) from “firm” level to “individual” level. Interestingly, the study found only three main items as consistent (innovative,  $\alpha = 0.80$ ); proactive ( $\alpha = 0.765$ ); and risk-taking ( $\alpha = 0.767$ ). The other two dimensions from Lumpkin and Dess (1996), scale i-e; autonomy and, competitive aggressiveness were thus not considered at individual level owing to low consistency ( $\alpha$ -values of 0.208 and 0.585 respectively). The implications from this study have enabled other authors to study IEO from different perspectives. For example, by adopting ten items of Bolton and Lane (2012), a recent study by Dingilian (2015), reconfirmed the similar range of consistency (0.70 and 0.75) of innovativeness, pro-activeness and risk-taking items. Further investigation of the scale was undertaken by Bolton (2012) by testing the instrument with a

sample of 340 entrepreneurs in Western Kentucky. The results demonstrated the instrument is a reliable and valid measure of entrepreneurial orientation at the individual level. Thus, the instrument as a reliable measure of IEO has gained wide applicability in different contexts (Koe, 2016; Hu and Pang, 2013).

The listed research studies point out that the majority of research has rightly attempted to have a measure of an individual's perceptions of his/her behaviour, especially willingness to take risks, innovativeness, autonomy and pro-activeness that indicate how successful he/she might be as an entrepreneur. Correspondingly, the literature evidences have suggested that the innovativeness, pro-activeness and risk-taking attributes alone give reliable results when examining the IEO (Bolton and Lane, 2012). Therefore, it can be inferred that IEO treats the entrepreneur as the pivot of the entrepreneurial process. Interestingly, in the context of S-ENT as well, it is more appropriate to analyse EO at an individual level as social entrepreneur's EO is projected as more of an individual-level phenomenon (Hu and Pang, 2013).

### *2.1 Research addressing entrepreneurship orientation in social entrepreneurship*

There has been an inexplicit empirical attention in the mainstream SEO discourse. Nevertheless, there has been miniature scientific contribution into researching entrepreneurship behaviour in the non-profit sector (Chen and Hsu, 2013). For example, Barrett *et al.* (2005) through correlation analysis found entrepreneurial management style as having positive association with performance of non-profits health-care and education sector. Likewise, the study of Morris *et al.* (2011) revealed that while EO has no relationship with financial performance of 145 non-profit organizations in New York, it has a positive link with aspects of market orientation. Furthermore, while analysing the relation between EO and performance, Pearce *et al.* (2010) found EO as playing a significant role in enhancing member attendance and contributions. Furthermore, the pertinent study by Lumpkin *et al.* (2013) found that S-ENT processes differ from their commercial counterparts mainly in their social mission/motivation, opportunity identification, access to capital/funding and distinctive engagement of multiple stakeholders. In a study to measure the "social-value-orientation" of an SE, Miles *et al.* (2013) used the EO scale suggested by Covin and Slevin (1989) and revealed "social-value-orientation" as moderately increasing the levels of "social-performance". The results correspond with the Coombes *et al.*'s (2011) examination of the influence of non-profit boards as strategic resources shaping the organization's EO and performance. A more recent study has pioneered in contributed to the development of EO scale at firm (SE) level (Kraus *et al.*, 2017). The proposed scale is based on existing EO scales (Miles *et al.*, 2013) with a modified version of the items specific to SEs. Eventually, SEO scales were developed, consisting of the three dimensions of innovativeness, risk taking and pro-activeness, with the additional dimension of "socialness". The description of the scale indicates explicit focus on the three primary dimensions of EO, innovativeness, risk taking and pro-activeness adjusted to the social mission of SEs. Similarly, a recent study by Hu and Pang (2013) developed the SEO scale for non-profit organizations in China. The developed scale carried four SEO factors (innovativeness, pro-activeness, risk-taking and reciprocity) and it was further revealed that degree of SEO is positively associated with performance of non-profit organizations in China. Interestingly, their study contended social entrepreneur's EO as more of an individual-level phenomenon, having a reciprocal relationship with their firm. Although, this area of investigation seems promising on account of its potential to advance both entrepreneurship theory and practice, the current literature contains no consolidated scale measuring ISEO.

### 3. Methodology

#### 3.1 Item generation – stage 1

At the outset, a comprehensive literature review was undertaken to identify the concepts of ISEO and its associated components as well as existing scales within the broader themes of EO, IEO, S-ENT, S-ENT orientation, social entrepreneur competencies, attitudes, traits and behaviours of SnP's and SE intricacies. Subsequently, the reference lists of studies were checked via a snowballing technique, to find other pertinent literature. [Table I](#) presents a summary of the literature review, illustrating the relevant SnP's' attributes, traits and competencies (as proxies of S-ENT intention) that are considered influential for informing on ISEO. Subsequently, the authors extracted and developed the scale items from the former list. The items were then subjected to expert reviews for style and format check. The process eventually resulted in 46 items for 8 dimensions to be tested in a Delphi study ([Table II](#)).

SN	Factor	Reference
1	Innovativeness	Bhuiyan <i>et al.</i> (2012), Lumpkin and Dess (1996), Miller (1983, 2011), Rauch <i>et al.</i> (2009), Lyon <i>et al.</i> (2000), Keh <i>et al.</i> (2007), Li <i>et al.</i> (2009), Sullivan and Weerawardena (2006), Zhao <i>et al.</i> (2011), Covin and Slevin (1991), Rauch <i>et al.</i> (2009), Harris <i>et al.</i> , (2009), Harris and Gibson (2008), Robinson <i>et al.</i> (1991), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015) and Koe (2016)
2	Risk taking	Lumpkin and Dess (1996), Miller (1983, 2011), Rauch <i>et al.</i> (2009), Lyon <i>et al.</i> (2000), Keh <i>et al.</i> (2007), Li <i>et al.</i> (2009), Sullivan and Weerawardena (2006), Zhao <i>et al.</i> (2011), Covin and Slevin (1991), Rauch <i>et al.</i> (2009), Levenburg and Schwarz (2008), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015) and Koe (2016)
3	Pro-activeness	Bhuiyan <i>et al.</i> (2012), Covin and Slevin (1989), Miller (2011), Rauch <i>et al.</i> (2009), Lyon <i>et al.</i> (2000), Keh <i>et al.</i> (2007), Li <i>et al.</i> (2009), Sullivan and Weerawardena (2006), Zhao <i>et al.</i> (2011), Covin and Slevin (1991), Rauch <i>et al.</i> (2009), Zampetakis <i>et al.</i> (2009), Claes <i>et al.</i> (2005), Lumpkin and Dess (2001), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015) and Koe (2016)
4	Autonomy	Pearce <i>et al.</i> (2010)
5	Competitive aggressiveness	Pearce <i>et al.</i> (2010), Lumpkin and Dess (1996), Lumpkin and Dess (2001), Claes <i>et al.</i> (2005) and Lumpkin and Dess (2001)
6	Internal locus of control	Okhomina, 2010; Claes <i>et al.</i> , 2005; Lumpkin and Dess, 2001, Levenburg and Schwarz, 2008 and Okhomina, 2007
7	Need for achievement	Okhomina (2010), Claes <i>et al.</i> (2005), Lumpkin and Dess (2001), Harris and Gibson (2008), Harris <i>et al.</i> , (2009), Harris <i>et al.</i> (2007), Harris and Gibson (2008), Okhomina (2007) and Robinson <i>et al.</i> (1991)
8	Tolerance for ambiguity	Okhomina (2010)
9	Family business influence	Harris and Gibson (2008), Levenburg and Schwarz (2008), Robinson <i>et al.</i> (1991) and Zampetakis <i>et al.</i> (2009)
10	Experience	Harris and Gibson (2008), Levenburg and Schwarz (2008), Robinson <i>et al.</i> (1991), Zampetakis <i>et al.</i> (2009) and Robinson <i>et al.</i> (1991)
11	Innovation	Harris and Gibson (2008)
12	Self-esteem	Harris <i>et al.</i> , (2009), Harris <i>et al.</i> (2007) and Robinson <i>et al.</i> (1991)
13	Self-management	Parnell <i>et al.</i> (2003), Gelderen <i>et al.</i> (2008) and Harris and Gibson (2008)
14	Creativity	Zampetakis <i>et al.</i> (2009) and Gelderen <i>et al.</i> (2008)
15	Self-efficacy	Gelderen <i>et al.</i> (2008) and Zhao <i>et al.</i> (2011)

**Table I.**  
Summary of the  
literature review

SN	Factor	Relevant themes analysed from the literature review	Reference
1	Innovativeness	Willingness to break free from established structures or systems Being transformatory by re-inventing organizations, communities and neighbourhoods Being innovative by creating new products, services or combination thereof for the benefit of the community at large Possessing a typical mindset manifested by a constant urge to solve social problems and thereby identify opportunities and summing resource to relentlessly pursue that opportunity Being resourceful by not being limited by resources at hand Experimenting with new or unusual approaches of problem solving Breaking the status quo by trying a unique way when learning new things rather than doing it like everyone else does	Hu and Pang (2013), Satar and John (2016, in press), Bornstein (2004), Kao (1995), Weerawardena and Sullivan (2006), Nga and Shamuganathan (2010), Mair and Marti (2006), Korosec and Berman (2006), Austin <i>et al.</i> (2006), Alvord <i>et al.</i> (2004), Sullivan <i>et al.</i> (2003), Zahra <i>et al.</i> (2008), Dees (1998a), Ernst (2018), Tiwari <i>et al.</i> (2017), Zampetakis <i>et al.</i> (2009), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015), Koe (2016), Drayton (2002), Sullivan <i>et al.</i> , (2003), Roberts and Woods (2005) and Light (2009)
2	Risk taking	Willingness to take bold action for social problem solving Willing to invest a lot of time and/or other resources in the areas of social problem solving, with uncertain returns Tendency to engage in activities with higher personal risk, when perceived benefits to others are huge Acting “boldly” in situations where risk is involved	Hu and Pang (2013), Zhao and Siebert (2006), Satar and John (2016, 2019), Miller (2011), Kao (1995), Weerawardena and Sullivan (2006), Barendsen and Gardner (2004), Covin and Slevin (1991), Rauch <i>et al.</i> (2009), Levenburg and Schwarz (2008), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015), Koe (2016), Sullivan <i>et al.</i> (2003) and Light (2009)
3	Pro-activeness	Seeing opportunities where others see mere social problems Acting in anticipation of future social problems, needs or changes Ready to take action rather than wait for someone else to do it Aim to make the world a better place Forecasting problems and their solutions ahead	Hu and Pang (2013), Kao (1995), Weerawardena and Sullivan (2006), Bornstein (2004), Covin and Slevin (1991), Rauch <i>et al.</i> (2009), Zampetakis <i>et al.</i> (2009), Claes <i>et al.</i> (2005), Lumpkin and Dess (2001), Bolton and Lane (2012), Hu and Pang (2013), Jelenc <i>et al.</i> (2015), Koe (2016) and Sullivan <i>et al.</i> (2003)
4	Social passion	Willingness to work quietly Manifest strong compassion and commitment to alleviate suffering of others Enthusiastic about and committed to creating positive social value Ability to generate authentic trust among diverse agents Consider non-financial factors while taking decisions	Austin <i>et al.</i> (2006), Sharir and Lerner (2006), Christie and Hong (2006), Lumpkin <i>et al.</i> (2013), Bornstein (1998, 2004), Miles <i>et al.</i> (2013), Coombes <i>et al.</i> (2011), Dees (1998a), Martin and Osberg (2007), Adler and Kwon (2002), Dees (1998a), Anderson and Jack (2002), Emerson and Twersky (1996), Satar and John (2016, in press), Sharir and

(continued)

**Table II.**  
Summary of scale items

SN	Factor	Relevant themes analysed from the literature review	Reference
		Often driven through empathy, spirituality or religion Sense of strong ethical or moral obligation Combines ideas, experiences and resources of people from different fields, which would otherwise not naturally come together	Lerner (2006), Christie and Hong (2006), Satar and John (2016, in press), Nga and Shamuganathan (2010), Kim <i>et al.</i> (2010), Sharir and Lerner (2006), Li <i>et al.</i> (2009), Moshe and Lerner (2007), Andres (2013), Weerawardena and Mort (2006), Sharir and Lerner (2006), Christie and Hong (2006), Thompson <i>et al.</i> (2000), Emerson and Twersky (1996), Barendsen and Gardner (2004), Mair and Marti (2006), Dees (1998a), Drayton (2002), Sullivan <i>et al.</i> (2003), Roberts and Woods (2005), Light (2009) and Bornstein (1998)
5	Change management	Initiating and stressing the change and taking the necessary steps to implement the change Willingness to push beyond traditional boundaries Ability to adapt to different contexts, situations and people quickly and appropriately	Dees (1998), Leadbeater (1997), Lewin (1947), Drayton (2002), Miller (2011), Sullivan <i>et al.</i> (2003) and Light (2009)
6	Leadership	Motivating and mobilizing others though authentic leadership style Ability to lead and develop others Ability of optimally utilizing the scarce resources Visionary with drive, ambition and determination to communicate vision Setting goals, following up these goals and giving integrative feedback	Andres (2013), Mason (2012), Di Domenico <i>et al.</i> (2010), Sharir and Lerner (2006), Leadbeater (1997), Terziovski <i>et al.</i> (1996), Bornstein (2007), Drayton (2002), Johnson (2000), Emerson and Twersky (1996), Catford (1998), Alvord <i>et al.</i> (2004), Austin <i>et al.</i> (2006), Weerawardena and Mort (2006), Satar and John (2016, in press), Miller (2011) and Light (2009)
7	Networking	Ability to create and maintain a network of contacts with agents who are or will be useful in achieving the goals Ability to negotiate through leading or controlling a discussion, creating an environment for collaboration Tendency to initiate and manage a broad set of mutual relationships with managers, staff, volunteers and board members and making lasting commitments to strengthen long term relationships	Terziovski <i>et al.</i> (1996), Emerson and Twersky (1996), Catford (1998), Alvord <i>et al.</i> (2004), Austin <i>et al.</i> (2006), Leadbeater (1997), Satar and John (2016, in press), Thompson <i>et al.</i> (2000), Nga and Shamuganathan (2010), Hu and Pang (2013), Miller (2011) and Light (2009)
8	Dynamic personality	Integrative thinkers Emotionally intelligent Self-efficacy Self-control: ability to regulate themselves and know their own	Miller (2011), Bornstein (2004), Leadbeater (1997), Miller (2011), Zhao <i>et al.</i> (2011), Mair and Marti (2006), Mair and Noboa (2006), Tiwari <i>et al.</i> (2017), Nga and Shamuganathan (2010),

(continued)

Table II.

Table II.

SN	Factor	Relevant themes analysed from the literature review	Reference
		limitations Willingness to self-correct with regard to complex and changing circumstances Extroversion Neuroticism Interpersonal communication skills: storytellers: persuasive communication Agreeableness Agreeableness (foster social consensus in interpersonal relationships) Conscientiousness (strong sense of responsibility and need for achievement), openness to experience	<a href="#">Bornstein (2004)</a> , <a href="#">Barendsen and Gardner (2004)</a> , <a href="#">Miller (2011)</a> , <a href="#">Zhao <i>et al.</i> (2011)</a> , <a href="#">Light (2009)</a> and <a href="#">Thompson <i>et al.</i> (2000)</a>

### 3.2 Item refinement – stage 2

The results of literature review provided a platform to identify key themes and components of EO in SnP's. Secondly, for the sake of identifying more appropriate measures for ISEO and to address our research query of “to what extent the existing research on EO can be suitable for developing IEO in S-ENT context”, the study subsequently adopted a qualitative analysis (Delphi study) with persons who are experts in the field of social business/S-ENT. A two-stage Delphi technique was used to collect qualitative data from a sample of social-business and S-ENT experts within India. In situations where no exact knowledge currently exists, Delphi technique offers a systematic consensus building qualitative process to establish a highly qualitative solution ([Okoli and Pawlowski, 2004](#)).

At the outset a questionnaire was compiled based on extensive literature reviews ([Hsu and Sandford, 2007](#)). The preliminary list of social entrepreneur competencies ([Table I](#)) was used to develop a template for data collection from experts. The English version of the preliminary questionnaire was given independently to 4 subject experts for their keen introspection of content, layout, wording, comprehensibility, content adequacy (linguistic validity), logical sequencing of the questions as well as their ease of understanding. Suggestions were incorporated and content of the scale was reviewed and prepared for the first round of the Delphi technique with 46 items.

Subsequently, the experts were identified from S-ENT practitioners operating in major socio-economic sectors within India. As recommended all participants had social business backgrounds and are actively engaged in diverse S-ENT missions with experience of 3-5 years in S-ENT field ([Okoli and Pawlowski, 2004](#)). The initial list of experts was comprised of 29 S-ENT practitioners. A prior communication and rapport was built before implementation of the Delphi study. A formal invitation letter along with a document summarizing the objective and process of Delphi study was e-mailed to all the participants. Out of 29 formally invited experts, 5 refused to participate and 3 did not respond. Nevertheless, as the panel consisted of experts with similar characteristics, an analysis with a panel of 10 to 15 individuals is found sufficient to garner consistent results ([Adler and Ziglio, 1996](#)). Keeping in consideration that in a Delphi study, the period between the first and the last rounds of data gathering should not be excessive, and to prevent other factors

(time limitation, personal interaction of experts and group dynamics etc.) from distorting the accuracy of the data, the study conducted two rounds of Delphi over a 2 month period (January - February, 2017).

The responses were elicited on a five-point Likert scale with the rating from (1-not important to 5- essential). Moreover in line with our research aim, some additional questions pertaining to how social entrepreneur would measure their IEO were also presented. While drafting the Delphi questions, the recommendation of “what could/should be?” rather than common style of “what is?” of questions was taken into consideration (Kelly *et al.*, 2010). The Delphi round-I consisted of the following main questions:

- What could be an ideal definition of “social entrepreneur”? Or which one do you currently use?
- In your understanding, what are the key competencies required for becoming a social entrepreneur?
- Do you think the existing knowledge on IEO (i.e. innovativeness; risk-taking; and pro-activeness are equally valid and comprehensive to measure social entrepreneur’s entrepreneurship orientation?
- Eventually what should be placed in an evaluative scale to measure entrepreneurship orientation of social entrepreneurs?

Accordingly, the experts were instructed to delete, correct or suggest new version of the items in the scale. In line with the etiquette of Delphi approach, answers given by the panels were kept anonymous. Following, the summary of results from round-I, mentioning answers from each participant as well as pointing out the number of experts supporting similar answers/statements was provided at the beginning of the second round to foster feedback and consensus.

After receiving comments of first round from all the panellists, the mean, frequency and percentage of agreement/disagreement on each version were calculated. The suggestions and comments were incorporated and as per the agreement rate a new version of the scale was constructed and disseminated to panel members. It is pertinent to mention that prior to 2nd round; the scale items were edited again by the same 4 subject experts as in round one. Moreover, with the refined 26 items the format of the questionnaire remained same as in first round. Again, they were requested to rate the scale until the last round in which we finalized the scale according to the established criteria.

The instructions to approve an item was derived from the panellist’s rate of agreement/ disagreement of answers as reflected in the range from 1-strongly agree to 5- strongly disagree through a neutral point of 3-neutral. Further, to decrease the risk of low level of agreement between experts in Delphi approach, the study adopted the frequently established rule of approving and rejecting an item with at least 70 per cent response rate of “strongly agree” and 70 per cent response rate of “strongly disagree” respectively (Marques *et al.*, 2011). For the cases which fall mid-way between these two criteria’s, the item is labelled as not-approved and is thus included in the next round of the Delphi process. The process continues until a consensus on approval or denial of an item was reached.

### 3.3 Results of Delphi round-I

The first round of Delphi revealed interesting outcomes with regard to the measurement of ISEO. First of all, the notions concerning “social entrepreneur” which emerged from the Delphi study were diverse. This is in accord with the diversity manifested in S-ENT literature where SnP’s as inventors of the recent S-ENT movement have emerged in diverse

sectors with varied organizational structures (Dees, 2001). Nevertheless, the majority of the experts agreed that SnP's basically strive to solve a pressing social issue without any regard to size or type of the problem. Further, they had higher consensus over SnP's as typically exhibiting entrepreneurial behaviour including opportunity recognition for social value creation, summing up resources for establishing social organizations, steering such organizations through continuously exercising characteristic competencies such as innovativeness, pro-activeness and risk-taking in conjugation with leadership qualities. This is in line with Yujuico (2008) and Zamagni (2006), who contended SnP's as possessing entrepreneurial virtues and follow market rules while aiming to achieve collective interests. For instance, ten participants mentioned S-ENT as typically a social problem solving arena and SnP's as "persons with extraordinary social passion". Most of the experts pointed out that "the primary value which the SnP's strive for is the 'social value creation' without regard to the kind of the process used therein". For example, 13 experts explicitly mentioned "SnP's are basically moved by some social problem and, they want to do anything it takes to solve that problem to bring some positive change by innovating new things or renovate the way people are being served [sic]". The overall outcome corresponds with the literature where social entrepreneur is mentioned explicitly as creating new ways of tackling some of the pressing social problems (Light, 2009), while finding new and better ways of doing things (Dees, 1998).

Secondly, the primary dimensions of IEO as identified by the participants included: innovativeness (19 mentions out of 21), risk-taking (16) and pro-activeness (13), followed by competitive aggressiveness and autonomy (five each). A quick glance in the existing literature revealed the experts mainly reflected the competencies expressed in the scales of Bolton and Lane (2012), Kraus *et al.*, (2017), Covin and Slevin (1989) and Lumpkin and Dess (1996). This is unsurprising as these represent the dimensions which have been most frequently used in EO scales (Wiklund, 1999). Nevertheless, one of the striking judgments emerged was the highly emphasized domain of "social passion". A majority of panellists (20) anonymously agreed on ISEO as mainly driven by social passion. Indeed, passion for solving social problem has been declared as "must-have" S-ENT competency. For informing on a measurement scale, the experts (20) mentioned deliberating on passion related variables such as strong S-ENT vision, non-profit motivation, goals and self-efficacy. Owing to the absence of adequate standardized measures of passion, the experts stressed the need for it. Therefore, a major number of experts argued SnP's as driven by their social passions and hence furnished the need to include it as indispensable component of ISEO. This corresponds to the literature that SnP's must be having a total dedication to the venture success (Sharir and Lerner, 2006; Christie and Hong, 2006) and besides having an entrepreneurial bent of DNA, must have passion for solving social issues (Thompson *et al.*, 2000; Emerson and Twersky, 1996). Moreover, a strong dedication to social mission is argued to act as prevention remedy for "mission drift" in SnP's (Satar and John, 2016).

With regard to the measurement of ISEO, majority of the participants recommended drawing from the existing scales (18). In line with the three dimensions of innovativeness, risk-taking and pro-activeness, 14 participants referred to the scales as developed by Bolton and Lane (2012), and two experts pointed out the work of Covin and Slevin (1989). Among 21 experts, a few (2) recommended that a combination of existing scales shall be used, while as another two participants stated that the scales shall be adopted to situational context. While majority of experts argued about the importance of "networking" and "dynamic personality" dimensions for IEO scale, however there was least consensus achieved with regard to their inculcation in measurement scale. The experts majorly mentioned that the various elements of a dynamic personality are bountiful value-additions in social

entrepreneur's competency. The experts continued stating that such personality related elements, along with the networking support usually develop along with the propagation of social entrepreneur's social problem solving idea.

Comparatively a smaller percentage of participants offered variations of the IEO scale as suggested by Bolton and Lane (2012), which was known to all participants. In summary, all of the participants proposed making use of an existing IEO scale and subsequently adapting it to social entrepreneur context. In this regard, several pertinent suggestions were rolled out on how to modify existing scale(s) to suit S-ENT context. Eventually, the majority of the experts were in favour of development of the ISEO scale using variables and their definitions as provided by recent Bolton and Lane (2012) scale. With regard to modification approach, measures for commercial IEO in Bolton and Lane (2012) scale were recommended to be reworked to ask about variables of interest in the S-ENT context that the individual social entrepreneur would encounter. Preliminarily the validated measures of innovativeness, risk-taking and pro-activeness were recommended to be changed from "commercial" to S-ENT context. However, after deliberations, it was felt by experts that the above three validated measures "must" not be changed as these dimensions in their original form hold equally valid for SnP's as well. The experts largely consented that a "hard-core business" orientation is a must successor as SnP's rely upon various business strategies to leverage their operations and thus require having strong business values and behaviours within their organizations. Therefore as agreed upon, the three dimensions of commercial EO (innovativeness, risk-taking and pro-activeness) are appropriate for SnP's in recognizing, assessing and exploiting opportunities aiming at social value creation by means of commercial market-based activities.

Nevertheless, what was perceived as a vital precursor for informing on ISEO assessment was the "social passion" manifested through explicit determination for social value creation. Consequently, the panellists proposed the inclusion of an additional yet primary dimension of "social passion" having the social value creation orientation as the degree of "socialness". Subsequently for this dimension, the ensuing indicators proposed included:

- the degree to which an individual has explicit focus on creating social value (can be called as "individual social value creation orientation");
- the extent to which "social value creation" guides an individual's decision-making; the degree to which the entrepreneurship decisions with perceived benefits to others precedes the decisions with personal benefits (can be referred to as non-financial motivation);
- the degree to which the individual sets ambitious yet realistic goals with regard to sustained empowerment of the target people (can be referred to as "social-embeddedness" of SnP's); and
- the degree to which individuals prefer community of people and interactions over processes and systems (the systems should not come in the way of solving a social problem).

These indicators can be regarded as an appropriate approach for assessing the socialness of an individual. Subsequently, all the suggestions from Delphi round – I was reviewed by panellists within the Delphi round-II to inform on more robust ISEO scale.

#### *3.4 Results of Delphi round-II*

In a broader sense, the second round largely established the I-round answers with better agreement among panellists. Although the innovativeness, risk-taking and pro-activeness

stand as most frequently used dimensions of IEO (Bolton and Lane, 2012; Wales *et al.*, 2013; Wiklund, 1999; Zhao *et al.*, 2011), the extra dimensions of “social passion”, “networking” and “dynamic personality” were included in round-I for possible consideration. Accordingly, the question of whether the existing IEO dimensions of innovativeness; risk-taking and pro-activeness are valid to measure ISEO was asked in round-I. While all of the participants agreed on the importance and suitability of all the aforementioned dimensions, none was in favour of using them exclusively in S-ENT context. The “factors of networking” and “dynamic personality” were eventually excluded from the list with the confirmation of same reasons as were mentioned by experts in round-I. With regard to the measurement of ISEO, a major number of experts (18) expressed making use of (adapting) the existing scales (with major vote for Bolton and Lane, 2012). Thereafter a greater consensus was achieved in “not” making changes to the definitions of existing items and dimensions in Bolton and Lane, (2012). This was largely felt on account of the fact that commercial side of S-ENT venturing must not be neglected. There is a high probability that an exclusive individual orientation over “socialness” may distort the ISEO measurement for it may obscure the social entrepreneur from the importance of driving financial sustainability. SnP’s essentially resemble commercial entrepreneurs and therefore they must be capable of managing and using the commercial entrepreneurship strategies at first hand. This is in line with the broader aspects of “business value creation” by S-ENT individuals. As social entrepreneurs have been largely found as applying the business strategies from the private sector (Reis and Clohesy, 1999), it mandates the S-ENT individuals to possess business planning virtues (of innovativeness, risk-taking and pro-activeness) for identifying, evaluating and exploiting opportunities aiming at social value creation by means of commercial, market-based activities (Bacq and Janssen, 2011; Certo and Miller, 2008; Dees, 2001; Defourny and Nyssens, 2017; Reis and Clohesy, 1999; Satar and John, 2016).

Nevertheless, it was strongly consented that the essence of S-ENT competencies lies in the ability of the individuals in terms of their social value creation orientation. Thus while the conventional entrepreneurship competencies are equally valuable in assessing the IEO in S-ENT context, a higher consensus in two round of Delphi was achieved on the primacy of social mission and its associated elements as vital constituents of S-ENT competencies. Therefore, it was proposed with greater emphasis that measurement of innovativeness, risk-taking and pro-activeness must be preceded by the assessment of additional dimension of “social passion” for informing on ISEO scale development. Eventually, the Delphi study suggested the ISEO scale, consisting of the “social passion” as a unique dimension with three prominent dimensions of innovativeness, risk taking and pro-activeness.

#### 4. Item purification and validation: stage-III

##### *Step one: ISEO subscale development: survey instrument development and administration*

After two Delphi rounds, the required consensus was achieved for the selection of 14 number of indicators as shown in Table III. These indicators were subsequently systematised in a survey questionnaire for data collection purpose. Development of the survey instrument involved using IEO variables and their definitions provided by Bolton and Lane (2012) in conjugation with the measures for “social passion”. A five point Likert scale (1-strongly agree to 5- strongly disagree) was used for measurement of items. The questionnaire so designed consisted of two parts. The first part sought out the general information of respondents (social-economic sector, experience in social business, etc.),

**Table III.**  
Sample description  
(*n* = 71)

Variable	Description	Frequency	(%)
Gender	Male	58	82
	Female	13	18
Socio-economic sector of social enterprise	Health	11	15.00
	Education	7	10.00
	Energy	15	21.00
	Agriculture	6	8.45
	Environment	8	11.26
	Financial inclusion	6	8.45
	Livelihood promotion	10	14.00
	Water and sanitation	8	11.26
	Other	0	0
	Respondent's experience in social entrepreneurship	No experience	0
<1 year		0	0.00
Between 1 and 3 years		18	25.36
Between 3 and 5 years		32	45.00
>5 years		21	29.58

which thereof enabled us to enhance the internal validity of the questionnaire. Summary of selected indicators:

- (1) Social passion
  - I have an explicit focus on creating social value.
  - I prefer to take decisions with perceived benefits to others over the decisions with only personal benefits.
  - I usually set ambitious yet realistic goals with regard to empowerment of people.
  - I prefer individual and interactions over processes and systems.
- (2) Innovativeness
  - I often like to try new and unusual activities that are not typical but not necessarily risky.
  - In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before.
  - I prefer to try my own unique way when learning new things rather than doing it like everyone else does.
  - I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems.
- (3) Pro-activeness
  - I usually act in anticipation of future problems, needs or changes.
  - I tend to plan ahead on projects.
  - I prefer to “step-up” and get things going on projects rather than sit and wait for someone else to do it.
- (4) Risk-taking
  - I like to take bold actions by venturing into the unknown.

- I am willing to invest a lot of time and/or money in something that might yield a high return.
- I tend to act “boldly” in situations where risk is involved.

A few prominent groups of SEs were identified from each province of North, South, West and North-East regions of India. Once earmarked, the participants of this research project were purposively selected based on their expertise and involvement in S-ENT activities. The principle of maximum variation of purposive sampling (Teddlie and Yu, 2007) was observed in choosing as diverse group of respondents with the approximation that the sample would be typical of the wider population within India. Again, as S-ENT in India is a nascent phenomenon, the students are less aware about the S-ENT as a career option within India. The student sample might have led to distorted perceptions. Therefore, it was felt wise to approach entrepreneurs rather than students.

Nonetheless, the extensive range of enterprise groups surveyed helped to ensure as wide and diverse a sample as possible. Therefore, given the purpose of developing a measurement instrument drawn from experiences of a broad range of SnP's, the survey covered SnP's from SEs operating in 7 prominent socio-economic sectors with different legal structures across India. Eventually, the survey instrument was disseminated to the SnP's of 205 SEs. Google forms (an easy author electronic form) was used as a Web-based tool. After a long period of intensive follow up (social media sites, mail, telephone), a total of only 71SnP's completed the survey. This yielded a low response rate of 35 per cent. The profile of the respondents is as shown in Table III.

#### 4.1 Individual social entrepreneurship orientation scale assessment: stage- III

##### Step two: internal ISEO scale reliability

At the outset, the internal consistency of initial items was calculated through Cronbach's alpha ( $\alpha$ ) scores. The reliability assessment of the variables of 3 dimensions (innovativeness, risk-taking and pro-activeness) showed that for each dimension, a higher Cronbach alpha ( $> 0.6$ ) would be attained if items were removed. However, the low items-to-total correlation resulted in dropping the one item of “social passion” (Churchill, 1979). Subsequently, the consideration for removal of the item was confirmed by factor analysis as shown in Table IV. Eventually, the reliability analysis resulted in 3 items for social passion, 3 items for risk-taking, 4 items for innovativeness and 3 items for pro-activeness. All the four dimensions met the Nunnally and Bernstein's, (1994) Cronbach alpha standard of (0.7) for scale development.

##### Step three: internal validity-factor analysis of the ISEO scale

The factor analysis generated four factors (social passion, risk-taking, innovativeness and pro-activeness) which accounted for 70 per cent of the total variance. The factor loading indicated that except one item for the dimension of social passion, the remaining items loaded well on their hypothesized factors (the item removed was the same item that was suggested weak by reliability analysis earlier). A summary of factor analysis is presented in Table IV.

The scale purification complemented with the results of factor analysis, suggested a 13 item scale with four subscales as a content-valid and reliable measure of ISEO. It presents a summary of the 13 items. Thirteen items measuring individual social entrepreneurial orientation:

##### (1) Social Passion

- I have an explicit focus on creating social value.

**Table IV.**  
Summary of factor  
analysis for final four  
factors with final  
items

Item	Component 1	Component 2	Component 3	Component 4
SOCI1 ... explicit focus on creating social value	0.71	0.18	-0.66	0.31
SOCI2 ... take decisions with perceived benefits ... with only personal benefits	0.77	0.14	0.36	-0.10
SOCI3 ... set ambitious ... goals in regard to empowerment of people	0.81	0.03	-0.45	0.44
SOCI4 ... people community ... systems	0.02	-0.80	-0.76	0.22
INNOV1 ... try new and unusual activities ...	-0.34	0.81	0.06	0.33
INNOV2 ... unique, one-of-a-kind approaches ...	0.33	0.67	-0.01	-0.70
INNOV3 ... prefer to try my own unique way ...	-0.45	0.61	0.44	0.86
INNOV4 ... favour experimentation/original approaches	-0.76	0.52	-0.22	-0.22
PROACT1 ... act in anticipation of future problems ...	0.13	0.35	0.88	-0.17
PROACT2 ... plan ahead on projects	-0.12	-0.50	0.71	-0.76
PROACT3 ... prefer ... to get things going ...	0.44	0.84	0.69	0.18
RISK1 ... bold action by venturing into the unknown	-0.12	-0.02	-0.11	0.86
RISK2 [...] invest ... yield a high return	-0.88	-0.05	-0.45	0.93
RISK3 ... act "boldly" ... where risk is involved	-0.58	0.01	-0.76	0.57
Eigenvalues	2.22	1.11	1.66	1.08

**Note:** Extraction method: principal component analysis with Varimax rotated component matrix (convergent in four rotations)

- I prefer to take decisions with perceived benefits to others over the decisions with only personal benefits.
  - I usually set ambitious yet realistic goals in regard to empowerment of people.
- (2) Innovativeness
- I often like to try new and unusual activities that are not typical but not necessarily risky.
  - In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before.
  - I prefer to try my own unique way when learning new things rather than doing it like everyone else does.
  - I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems.
- (3) Pro-activeness
- I usually act in anticipation of future problems, needs or changes.
  - I tend to plan ahead on projects.
  - I prefer to "step-up" and get things going on projects rather than sit and wait for someone else to do it.
- (4) Risk-taking
- I like to take bold action by venturing into the unknown.

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- I am willing to invest a lot of time and/or money on something that might yield a high return.
  - I tend to act “boldly” in situations where risk is involved.

Measurement  
scale

## 5. Discussion and conclusions

The study was designed to develop an assessment tool for ISEO. A mixed methods research design employing 21 S-ENT experts in a two-stage Delphi process and a survey of 71 SnP's resulted in 13 item scale measuring four dimensions of ISEO. By developing a set of relevant ISEO indicators, the study answers the call for scale development of SEO in S-ENT individuals.

While as the study established the existing measures of innovativeness, risk-taking and pro-activeness as relevant and applicable to the S-ENT construct, the element of social passion has emerged as distinct factor that demonstrated reliability and validity. As the first three factors have been widely validated by other empirical work to date; it is not surprising that they had strong factor loadings. Further, only one out of four proposed items for social passion demonstrated weak reliability and factor-loadings.

As SnP's are largely found as adopting entrepreneurial approaches, it was accordingly agreed upon by the experts that the three dimensions of commercial IEO (innovativeness, risk-taking and pro-activeness) are appropriate for SnP's in recognizing, assessing and exploiting opportunities aiming at social value creation by means of commercial market-based activities. Considering the “social” in S-ENT, what was perceived as a vital precursor for informing on ISEO assessment was the “social passion” manifested through explicit determination for social value creation. The social passion as a proxy of “social embeddedness” possessed by individuals is accordingly added with core construct of ISEO by three additional items. From a practical perspective, the proposed constructs will aid to understand ISEO more deeply especially among practicing and future SnP's, S-ENT incubators and other S-ENT stakeholders. The additional variables as value proposition responds to the much raised issue of advancing the EO construct (Covin and Wales, 2012; Lyon *et al.*, 2000; Rauch *et al.*, 2009). An alternative way of saying this is that the study ultimately ascertains a 3-item social passion measure which alongside Bolton and Lane's (2012) scale can be applied to evaluate the ISEO in S-ENT context.

The literature shows diminutive empirical efforts to examine the element of entrepreneurship passion. The entrepreneurship passion has been found facilitating greater opportunity recognition, idea development *vis-à-vis* opportunity execution (Shane *et al.*, 2003). Further, passion mediates the venture growth through variables such as vision, goals, competency, motivation, self-efficacy and competitive strategy (Baum and Locke, 2004). However, social passion is not all that is required to elicit required S-ENT behaviour. As SnP's have to manage double or triple bottom lines, they are found possessing the blend of both commercial and S-ENT competencies. While as optimum business leadership skills will lead to effective business performance, the lack of mission-related characteristics will make the leader “drift” away from the social cause of business and thus will lead to “mission inconsistency” (Satar and John, 2016). The scenario therefore calls for an inseparability combination of social and business entrepreneurship traits. From a research perspective, the ISEO scale provides for a deeper examination of the link between social and commercial components of the scale and propensity of S-ENT venturing. Eventually, the understanding of the social passion as imperative dimension of ISEO will generate future research opportunity to further explore the inter-linkage between this dimension and other variables of interest.

The proposed scale will ideally prove helpful for investigating the S-ENT competencies of individuals as SEs are projected to be started by individuals with core ideology of attempting to capture social value/impact (Certo and Miller, 2008; Dees, 1998, 2001; 2002; Drayton, 2002; Hu and Pang, 2013; Sullivan *et al.*, 2003; Weerawardena and Mort, 2006). Accordingly, the scale could be tested and validated with different individuals from different demographics with ideologies of starting different types of SEs. Arguably, this will require the application of more tools and methodologies of evaluating how deeply the value propositions are linked to the actual intention to start a SE.

Form an individualistic standpoint, the knowledge, appreciation and management of scale dimensions would help individuals in better understanding their S-ENT behaviour. Consequently, an individual's ISEO score would serve as decision criteria in their career choices. Moreover, the ISEO instrument could be used to structure teaching methods and curriculum development in higher education. Furthermore, a regular assessment of individual's ISEO would contribute to the information on how to modify the curriculum for S-ENT programmes (Harris and Gibson, 2008). Similarly, the understanding of ISEO at the individual level will also be useful for practicing and future SnP's, S-ENT incubators and Government as well as to other S-ENT stakeholders who are considering supporting S-ENT proposals.

Notwithstanding the results regarding content and expert input, the scale development process has certain limitations. For example, the item refinement used Delphi study, where not all approached experts were willing to participate. This may indicate a self-selection bias among participating experts. Moreover, the data generated was analysed in a descriptive fashion despite small sample size. Therefore, this generates the need to validate findings using bigger sample sizes. The future research can more robustly evaluate the reliability and validity properties.

As the study covered practicing SnP's from India, there is a need to further validate this instrument among other stakeholder as well as within different cultural contexts and in samples with different demographic characteristics. Moreover attempts should be undertaken to further validate the instrument using student samples.

Further, to confirm the newly established subscales and their relationship with the ISEO construct, there is need of conducting a confirmatory factor analysis. A longitudinal study on ISEO could be conducted to measure the correlations with intentions to become a social entrepreneur and whether they become SnP's or not.

## References

- Adler, M. and Ziglio, E. (1996), *Gazing Into the Oracle: The Delphi Method and Its Application to Social Policy and Public Health*, Jessica Kingsley Publishers.
- Al Mamun, A. and Fazal, S.A. (2018), "Effect of entrepreneurial orientation on competency and micro-enterprise performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 3, pp. 379-398.
- Alvord, S.H., Brown, L.D. and Letts, C.W. (2004), "Social entrepreneurship and societal transformation: an exploratory study", *The Journal of Applied Behavioral Science*, Vol. 40 No. 3, pp. 260-282.
- Anderson, A.R. and Jack, S.L. (2002), "The articulation of social capital in entrepreneurial networks: a glue or a lubricant?", *Entrepreneurship and Regional Development*, Vol. 14 No. 3, pp. 193-210.
- Andres, J. (2013), "Critical success factors for nonprofit organisations starting social enterprises", doctoral dissertation, University of Calgary.

- 
- Austin, J., Stevenson, H. and Wei-Skillern, J. (2006), "Social and commercial entrepreneurship: same, different, or both?", *Entrepreneurship Theory and Practice*, Vol. 30 No. 1, pp. 1-22.
- Bacq, S. and Janssen, F. (2011), "The multiple faces of social entrepreneurship: a review of definitional issues based on geographical and thematic criteria", *Entrepreneurship and Regional Development*, Vol. 23 Nos 5/6, pp. 373-403.
- Barendsen, L. and Gardner, H. (2004), "Is the social entrepreneur a new type of leader?", *Leader to Leader*, Vol. 2004 No. 34, pp. 43-50.
- Barrett, H., Balloun, J.L. and Weinstein, A. (2005), "The impact of creativity on performance in non-profits", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 10 No. 4, pp. 213-223.
- Baum, J.R. and Locke, E.A. (2004), "The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth", *Journal of Applied Psychology*, Vol. 89 No. 4, p. 587.
- Bhuiyan, S.N., Richard, O.C. and Shamma, H.M. (2012), "Entrepreneurial orientation and organisational performance: the role of managerial traits", *Journal for International Business and Entrepreneurship Development*, Vol. 6 Nos 3/4, pp. 203-223.
- Bolton, D. and Lane, M. (2012), "Individual entrepreneurial orientation: development of a measurement instrument", *Education + Training*, Vol. 54 No. 2, pp. 219-233.
- Bolton, D.L. (2012), "Individual entrepreneurial orientation: further investigation of a measurement instrument", *Academy of Entrepreneurship Journal*, Vol. 18 No. 1, p. 91.
- Bornstein, D. (1998), "Changing the world on a shoestring", *Atlantic Monthly*, Vol. 281 No. 1, pp. 34-39.
- Bornstein, D. (2004), *How to Change the World*, Oxford University Press, New York, NY.
- Bornstein, D. (2007), *How to Change the World: Social Entrepreneurs and the Power of New Ideas*, Oxford University Press, Oxford.
- Catford, J. (1998), "Social entrepreneurs are vital for health promotion – but they need supportive environments too", *Health Promotion International*, Vol. 13 No. 2, pp. 95-97.
- Certo, S.T. and Miller, T. (2008), "Social entrepreneurship: key issues and concepts", *Business Horizons*, Vol. 51 No. 4, pp. 267-271.
- Chell, E. (2007), "Social enterprise and entrepreneurship towards a convergent theory of the entrepreneurial process", *International Small Business Journal*, Vol. 25 No. 1, pp. 5-26.
- Chen, H.L. and Hsu, C.H. (2013), "Entrepreneurial orientation and firm performance in non-profit service organizations: contingent effect of market orientation", *The Service Industries Journal*, Vol. 33 No. 5, pp. 445-466.
- Cho, Y.H. and Lee, J.H. (2018), "Entrepreneurial orientation, entrepreneurial education and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 2, pp. 124-134.
- Christie, M.J. and Honig, B. (2006), "Social entrepreneurship: new research findings", *Journal of World Business*, Vol. 41 No. 1, pp. 1-5.
- Churchill, G.A. Jr (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16 No. 1, pp. 64-73.
- Claes, R., Beheydt, C. and Lemmens, B. (2005), "Unidimensionality of abbreviated proactive personality scales across cultures", *Applied Psychology*, Vol. 54 No. 4, pp. 476-489.
- Coombes, S.M., Morris, M.H., Allen, J.A. and Webb, J.W. (2011), "Behavioural orientations of non-profit boards as a factor in entrepreneurial performance: does governance matter?", *Journal of Management Studies*, Vol. 48 No. 4, pp. 829-856.
- Covin, J.G. and Slevin, D.P. (1989), "Strategic management of small firms in hostile and benign environments", *Strategic Management Journal*, Vol. 10 No. 1, pp. 75-87.
- Covin, J.G. and Slevin, D.P. (1991), "A conceptual model of entrepreneurship as firm behavior", *Entrepreneurship Theory and Practice*, Vol. 16 No. 1, pp. 7-26.

- Covin, J.G. and Wales, W.J. (2012), "The measurement of entrepreneurial orientation", *Entrepreneurship Theory and Practice*, Vol. 36 No. 4, pp. 677-702.
- Datta, P.B. and Gailey, R. (2012), "Empowering women through social entrepreneurship: case study of a women's cooperative in India", *Entrepreneurship Theory and Practice*, Vol. 36 No. 3, pp. 569-587.
- Dees, G. (1998), "Enterprising non-profits harvard business review", p. 55.
- Dees, J.G. (2001), *The Meaning of Social Entrepreneurship*, Center for the Advancement of S-ENT, Duke University's Fuqua School of Business, North Carolina.
- Defourny, J. and Nyssens, M. (2017), "Fundamentals for an international typology of social enterprise models", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, Vol. 28 No. 6, pp. 2469-2497.
- Di-Domenico, M., Haugh, H. and Tracey, P. (2010), "Social bricolage: theorizing social value creation in social enterprises", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 681-703.
- Dingilian, G. (2015), *Exploring Group Differences in Individual Entrepreneurial Orientation between Farmers with Distinct Agricultural Conservation Practices*, Northcentral University, USA.
- Drayton, W. (2002), "The citizen sector: becoming as entrepreneurial and competitive as business", *California Management Review*, Vol. 44 No. 3, pp. 120-132.
- Emerson, J. and Twersky, F. (Eds) (1996), *New Social Entrepreneurs: The Success, Challenge and Lessons of Non-profit Enterprise Creation*, The Homeless Economic Fund, The Roberts Foundation.
- Ernst, K. (2018), "Heart over mind: an empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behaviour", doctoral dissertation, Universität Wuppertal, Fakultät für Wirtschaftswissenschaft/Schumpeter School of Business and Economics» Dissertationen.
- Gelderens, M., Brand, M., Praag, M., Bodewes, W., Poutsma, E. and Gils, A. (2008), "Explaining entrepreneurial intentions by means of the theory of planned behaviour", *Career Development International*, Vol. 13 No. 6, pp. 538-559.
- Granados, M.L., Hlupic, V., Coakes, E. and Mohamed, S. (2011), "Social enterprise and social entrepreneurship research and theory: a bibliometric analysis from 1991 to 2010", *Social Enterprise Journal*, Vol. 7 No. 3, pp. 198-218.
- Harris, M.L. and Gibson, S.G. (2008), "Examining the entrepreneurial attitudes of US business students", *Education+ Training*, Vol. 50 No. 7, pp. 568-581.
- Harris, M.L., Gibson, S.G. and Mick, T.D. (2009), "Examining the relationship between personality and entrepreneurial attitudes: evidence from US college students", *Small Business Institute Journal*, Vol. 3 No. 1.
- Harris, M.L., Gibson, S.G. and Taylor, S.R. (2007), "Examining the impact of small business institute participation on entrepreneurial attitudes", *Journal of Small Business Strategy*, Vol. 18 No. 2, pp. 57-76.
- Hsu, C.C. and Sandford, B.A. (2007), "The Delphi technique: making sense of consensus", *Practical Assessment, Research and Evaluation*, Vol. 12 No. 10, pp. 1-8.
- Hu, Y. and Pang, X. (2013), "Social entrepreneurial orientation and performance of nonprofit organizations: an empirical study in China", *Journal of Applied Sciences*, Vol. 13 No. 19, pp. 3989-3994.
- Jelenc, L., Pisapia, J. and Ivanušić, N. (2015), "Demographic variables influencing individual entrepreneurial orientation and strategic thinking capability", *Proceedings of 10th International Scientific Conference on Economic and Social Development*.
- Keh, H.T., Nguyen, T.T.M. and Ng, H.P. (2007), "The effects of entrepreneurial orientation and marketing information on the performance of SMEs", *Journal of Business Venturing*, Vol. 22 No. 4, pp. 592-611.

- Kelly, C.M., Jorm, A.F. and Kitchener, B.A. (2010), "Development of mental health first aid guidelines on how a member of the public can support a person affected by a traumatic event: a delphi study", *BMC Psychiatry*, Vol. 10 No. 1, p. 49.
- Kim, Y.T., Woo, J.L. and David, Y.C. (2010), "An empirical study of factors affecting the performance of social enterprises in South Korea", *One lmu drive, los angelesca 90045 (310) 338 2344; dchoi@lmu.edu*.
- Kirkley, W.W. (2017), "Cultivating entrepreneurial behaviour: entrepreneurship education in secondary schools", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 11 No. 1, pp. 17-37.
- Koe, W.L. (2016), "The relationship between Individual Entrepreneurial Orientation (IEO) and entrepreneurial intention", *Journal of Global Entrepreneurship Research*, Vol. 6 No. 1, pp. 13.
- Korosec, R.L. and Berman, E.M. (2006), "Municipal support for social entrepreneurship", *Public Administration Review*, Vol. 66 No. 3, pp. 448-462.
- Kraus, S., Niemand, T., Halberstadt, J., Shaw, E. and Syrjä, P. (2017), "Social entrepreneurship orientation: development of a measurement scale", *International Journal of Entrepreneurial Behavior and Research*, Vol. 23 No. 6, pp. 977-997.
- Kropp, F., Lindsay, N.J. and Shoham, A. (2008), "Entrepreneurial orientation and international entrepreneurial business venture startup", *International Journal of Entrepreneurial Behavior & Research*, Chicago, Vol. 14 No. 2, pp. 102-117.
- Krueger, N.F., Reilly, M.D. and Carsrud, A. (2000), "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, Vol. 15 Nos 5/6, pp. 411-32.
- Leadbeater, C. (1997), *The Rise of the Social Entrepreneur*, Demos.
- Levenburg, N.M. and Schwarz, T.V. (2008), "Entrepreneurial orientation among the youth of India: the impact of culture, education and environment", *The Journal of Entrepreneurship*, Vol. 17 No. 1, pp. 15-35.
- Lewin, K. (1947), "Frontiers in group dynamics: concept, method and reality in social science; social equilibria and social change", *Human Relations*, Vol. 1 No. 1, pp. 5-41.
- Li, Y.H., Huang, J.W. and Tsai, M.T. (2009), "Entrepreneurial orientation and firm performance: the role of knowledge creation process", *Industrial Marketing Management*, Vol. 38 No. 4, pp. 440-449.
- Light, P.C. (2009), "Social entrepreneurship revisited", *Stanford Social Innovation Review*, Vol. 7 No. 3, pp. 21-22.
- Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, Vol. 21 No. 1, pp. 135-172.
- Lumpkin, G.T. and Dess, G.G. (2001), "Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle", *Journal of Business Venturing*, Vol. 16 No. 5, pp. 429-451.
- Lumpkin, G.T., Cogliser, C.C. and Schneider, D.R. (2009), "Understanding and measuring autonomy: an entrepreneurial orientation perspective", *Entrepreneurship Theory and Practice*, Vol. 33 No. 1, pp. 47-69.
- Lumpkin, G.T., Moss, T.W., Gras, D.M., Kato, S. and Amezcua, A.S. (2013), "Entrepreneurial processes in social contexts: how are they different, if at all?", *Small Business Economics*, Vol. 40 No. 3, pp. 761-783.
- Lyon, D.W., Lumpkin, G.T. and Dess, G.G. (2000), "Enhancing entrepreneurial orientation research: operationalizing and measuring a key strategic decision making process", *Journal of Management*, Vol. 26 No. 5, pp. 1055-1085.
- Mair, J. and Marti, I. (2006), "Social entrepreneurship research: a source of explanation, prediction, and delight", *Journal of World Business*, Vol. 41 No. 1, pp. 36-44.
- Mair, J. and Noboa, E. (2006), "Social entrepreneurship: how intentions to create a social venture are formed", *Social Entrepreneurship*, Palgrave Macmillan, London, pp. 121-135.

- Marques, A.I., Santos, L., Soares, P., Santos, R., Oliveira-Tavares, A., Mota, J. and Carvalho, J. (2011), "A proposed adaptation of the european foundation for quality management excellence model to physical activity programmes for the elderly-development of a quality self-assessment tool using a modified delphi process", *International Journal of Behavioral Nutrition and Physical Activity*, Vol. 8 No. 1, p. 104.
- Martin, R.L. and Osberg, S. (2007), "Social entrepreneurship: the case for definition", *Stanford Social Innovation Review*, Vol. 5 No. 2, pp. 28-39.
- Miles, M.P., Verreynne, M.L., Luke, B., Eversole, R. and Barraket, J. (2013), "The relationship of entrepreneurial orientation, Vincentian values and economic and social performance in social enterprise", *Review of Business*, Vol. 33 No. 2, p. 91.
- Miller, D. (1983), "The correlates of entrepreneurship in three types of firms", *Management Science*, Vol. 29 No. 7, pp. 770-791.
- Miller, D. (2011), "Miller (1983) revisited: a reflection on EO research and some suggestions for the future", *Entrepreneurship Theory and Practice*, Vol. 35 No. 5, pp. 873-894.
- Morris, M.H., Webb, J.W. and Franklin, R.J. (2011), "Understanding the manifestation of entrepreneurial orientation in the nonprofit context", *Entrepreneurship Theory and Practice*, Vol. 35 No. 5, pp. 947-971.
- Moshe, S. and Lerner, M. (2006), "Gauging the success of social ventures initiated by individual social entrepreneurs", *Journal of World Business*, Vol. 41 No. 1, pp. 6-20.
- Nga, J.K.H. and Shamuganathan, G. (2010), "The influence of personality traits and demographic factors on S-ENT start up intentions", *Journal of Business Ethics*, Vol. 95 No. 2, pp. 259-282.
- Okhominina, D. (2010), "Does level of education influence psychological traits? Evidence from used car entrepreneurs", *Journal of Management and Marketing Research*, Vol. 3 No. 3, p. 1.
- Okhominina, D.A. (2007), "Does level of education influence psychological traits? Evidence from used car entrepreneurs", *Proceedings of Allied Academies International Conference: Academy of Entrepreneurship, Jordan Whitney Enterprises*, p. 43.
- Okoli, C. and Pawlowski, S.D. (2004), "The Delphi method as a research tool: an example, design considerations and applications", *Information and Management*, Vol. 42 No. 1, pp. 15-29.
- Othman, A.K., Hamzah, M.I., Zahari, A.S.M. and Amri, S. (2015), "The influence of entrepreneurship education and experience on students' entrepreneurship spirit: the moderating effects of internal locus of control", *Advances in Business Research International Journal*, Vol. 1 No. 1, pp. 11-29.
- Packham, G., Jones, P., Miller, C., Pickernell, D. and Thomas, B. (2010), "Attitudes towards entrepreneurship education: a comparative analysis", *Education and Training*, Vol. 52 Nos No. 8/9, pp. 568-586.
- Parnell, J.A., Shwiff, S., Yalin, L. and Langford, H. (2003), "American and chinese entrepreneurial and managerial orientations: a management education perspective", *International Journal of Management*, Vol. 20 No. 2, p. 125.
- Pearce, I.L., J. A., Fritz, D.A. and Davis, P.S. (2010), "Entrepreneurial orientation and the performance of religious congregations as predicted by rational choice theory", *Entrepreneurship Theory and Practice*, Vol. 34 No. 1, pp. 219-248.
- Peattie, K. and Morley, A.S. (2008), "Social enterprises: diversity and dynamics, contexts and contributions", Discussion Paper, BRASS/ESRC/Social Enterprise Coalition, Cardiff.
- Planning Commission of India (2013), "GOI", available at: <http://planningcommission.gov.in> (accessed 12 August 2016).
- Rauch, A., Wiklund, J., Lumpkin, G.T. and Frese, M. (2009), "Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future", *Entrepreneurship Theory and Practice*, Vol. 33 No. 3, pp. 761-787.
- Reis, T.K. and Clohesy, S.J. (1999), *Unleashing New Resources and Entrepreneurship for the Common Good: A Scan, Synthesis, and Scenario for Action*, WK Kellogg Foundations, USA.

- 
- Robinson, P.B., Huefner, J.C. and Hunt, H.K. (1991), "Entrepreneurial research on student subjects does not generalize to real world entrepreneurs", *Journal of Small Business Management*, Vol. 29 No. 2, p. 42.
- Roberts, D. and Woods, C. (2005), "Changing the world on a shoestring: the concept of social entrepreneurship", *University of Auckland Business Review*, Vol. 7 No. 1, pp. 45-51.
- Satar, M.S. (2018), "Managing people in social entrepreneurship ventures-top two takeout's from a doctoral survey", *Global Journal of Commerce and Management Perspective*, Vol. 7 No. 1, pp. 23-25.
- Satar, M.S. and John, S. (2016), "A conceptual model of critical success factors for Indian social enterprises", *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 12 No. 2, pp. 113-138.
- Satar, M.S. and John, S. (2019), "The critical success factors of social entrepreneurship in India: an empirical study", *International Journal of Entrepreneurship and Small Business*.
- Satar, M.S., John, S. and Siraj, S. (2016), "Use of marketing in social enterprises", *International Journal of Social Entrepreneurship and Innovation*, Vol. 4 No. 1, pp. 16-24.
- Seelos, C. and Mair, J. (2005), "Entrepreneurs in service of the poor: models for business contributions to sustainable development", *Business Horizons*, Vol. 48 No. 3, pp. 241-246.
- Shane, S., Locke, E.A. and Collins, C.J. (2003), "Entrepreneurial motivation", *Human Resource Management Review*, Vol. 13 No. 2, pp. 257-279.
- Sharir, M. and Lerner, M. (2006), "Gauging the success of social ventures initiated by individual social entrepreneurs", *Journal of World Business*, Vol. 41 No. 1, pp. 6-20.
- Sullivan, M.G. and Weerawardena, J. (2006), "Networking capability and international entrepreneurship: how networks function in Australian born global firms", *International Marketing Review*, Vol. 23 No. 5, pp. 549-572.
- Sullivan, M.G., Weerawardena, J. and Carnegie, K. (2003), "Social entrepreneurship: towards conceptualisation", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 8 No. 1, pp. 76-88.
- Teddle, C. and Yu, F. (2007), "Mixed methods sampling: a typology with examples", *Journal of Mixed Methods Research*, Vol. 1 No. 1, pp. 77-100.
- Thompson, J., Alvy, G. and Lees, A. (2000), "Social entrepreneurship – a new look at the people and the potential", *Management Decision*, Vol. 38 No. 5, pp. 328-338.
- Tiwari, P., Bhat, A.K. and Tikoria, J. (2017), "An empirical analysis of the factors affecting social entrepreneurial intentions", *Journal of Global Entrepreneurship Research*, Vol. 7 No. 1, pp. 9.
- Tran, A.T. and Von Korflesch, H. (2016), "A conceptual model of social entrepreneurial intention based on the social cognitive career theory", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 10 No. 1, pp. 17-38.
- Wales, W.J., Parida, V. and Patel, P.C. (2013), "Too much of a good thing? Absorptive capacity, firm performance, and the moderating role of entrepreneurial orientation", *Strategic Management Journal*, Vol. 34 No. 5, pp. 622-633.
- Weerawardena, J. and Mort, G.S. (2006), "Investigating social entrepreneurship: a multidimensional model", *Journal of World Business*, Vol. 41 No. 1, pp. 21-35.
- Weerawardena, J. and Suvillan, M.G. (2006), "Investigating social entrepreneurship: a multidimensional model", *Journal of World Business*, Vol. 41 No. 1, pp. 21-35.
- Wiklund, J. (1999), "The sustainability of the entrepreneurial orientation – performance relationship", *Entrepreneurship Theory and Practice*, Vol. 24 No. 1, pp. 37-48.

- Wiklund, J. and Shepherd, D. (2003), "Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses", *Strategic Management Journal*, Vol. 24 No. 13, pp. 1307-1314.
- Yujuico, E. (2008), "Connecting the dots in social entrepreneurship through the capabilities approach", *Socio-Economic Review*, Vol. 6 No. 3, pp. 493-513.
- Yurtkoru, E.S., Acar, P. and Teraman, B.S. (2014), "Willingness to take risk and entrepreneurial intention of university students: an empirical study comparing private and state universities", *Procedia – Social and Behavioral Sciences*, Vol. 150, pp. 834-840.
- Zahra, S.A., Rawhouser, H.N., Bhawe, N., Neubaum, D.O. and Hayton, J.C. (2008), "Globalization of S-ENT opportunities", *Strategic Entrepreneurship Journal*, Vol. 2 No. 2, pp. 117-131.
- Zamagni, S. (2006), "Dalla filantropia all'impresa all'imprenditorialità sociale", *East*, p. 6.
- Zampetakis, L.A., Kafetsios, K., Bouranta, N., Dewett, T. and Moustakis, V.S. (2009), "On the relationship between emotional intelligence and entrepreneurial attitudes and intentions", *International Journal of Entrepreneurial Behavior and Research*, Vol. 15 No. 6, pp. 595-618.
- Zhao, H. and Seibert, S.E. (2006), "The big five personality dimensions and entrepreneurial status: a meta-analytical review", *Journal of Applied Psychology*, Vol. 91 No. 2, p. 259.
- Zhao, Y., Li, Y., Lee, S.H. and Chen, L.B. (2011), "Entrepreneurial orientation, organizational learning, and performance: evidence from China", *Entrepreneurship Theory and Practice*, Vol. 35 No. 2, pp. 293-317.

### Further reading

- Boyer, D., Creech, H. and Paas, L. (2008), "Critical success factors and performance measures for start-up social and environmental enterprises," *International Institute for Sustainable Development, SEED Initiative Research Program*.
- Sullivan, G.M. and Artino, A.R. Jr (2013), "Analyzing and interpreting data from likert-type scales", *Journal of Graduate Medical Education*, Vol. 5 No. 4, pp. 541-542.
- Zehir, C., Can, E. and Karaboga, T. (2015), "Linking entrepreneurial orientation to firm performance: the role of differentiation strategy and innovation performance", *Procedia-Social and Behavioral Sciences*, Vol. 210, pp. 358-367.
- Ziegler, R. (2009), "An introduction to social entrepreneurship: voices, preconditions, contexts", in Ziegler, R. (Ed.), *An Introduction to Social Entrepreneurship – Voices, Preconditions, Contexts*, Edward Elgar Publishing, Cheltenham, Northampton, pp. 1-18.

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