Sustainable entrepreneurship training: A study of motivational factors

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ABSTRACT

We argue that sustainable entrepreneurship training typically aims to achieve one of the three objectives – initiate, ensure and integrate. Based on this assertion, we conducted a field study in India to answer the following research question - What motivates business schools to undertake sustainable entrepreneurship training? We interviewed 37 sustainable entrepreneurship programme educators. Our results indicate that business schools engage in sustainable entrepreneurship training to encourage students address growing social problems by initiating sustainable enterprises. These findings highlight that the business schools focus on 'initiate' based training, which may help create ventures, but not to help grow the sustainable entrepreneurship industry. This study makes three contributions in the sustainable entrepreneurship field.

1. Introduction

Sustainable entrepreneurship educators train individuals to use existing resources effectively to achieve sustainable development, while not jeopardizing the potential of future generations to access resources (Hermes & Rimanoczy, 2018). Sustainable entrepreneurship defined as - "preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society" (Shepherd and Patzelt (2011, p. 632). This definition emphasizes that sustainable entrepreneurship is not only about initiating sustainable enterprises but also about transforming and managing existing firms to become sustainable. Accordingly, sustainable entrepreneurship can take place equally in start-ups, Small and Medium Enterprises (SMEs) and large firms to a different degree (Gast et al., 2017). Given its importance, Hall et al. (2010) summarize that the motive behind the practice of sustainable entrepreneurship is to create a sustainable and fair society.

In order to play a major role in building sustainable societies, several universities around the world developed research and training programmes on sustainable entrepreneurship (Decamps et al., 2017; Olalla & Merino, 2019). Most often, educators integrate sustainability related subjects with entrepreneurship education to deliver sustainable entrepreneurship education modules (Gast et al., 2017). In general, sustainable entrepreneurship training apart from enhancing skill of the graduates, help build new connections that will eventually help them in their career roles (Chandra, 2016). For instance, by associating with academic institutions, students are able to connect with various networks and potentially benefit from them. This is the reason there is a growing interest among young population to attend sustainable entrepreneurship training programmes (Hesselbarth & Schaltegger, 2014). For instance, Chandra (2016) highlights that in Hong Kong there is an increasing interest in sustainable entrepreneurship courses, extracurricular activities and sustainable entrepreneurship competitions.

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initiate driven training aims to develop skills among individuals to initiate enterprises that create blended value - defined as creation of simultaneous social or ecological and commercial value -, ensure type of training aims to offer necessary skills and competence to *ensure* blended value creation in existing organizations,[1] whereas the integrate type of training aims to integrate the long term un-employed in the job market. The difference between the *initiate* and *ensure* based training is that while the former aims to help initiate new ventures, the latter strives to create blended value in existing organizations by typically incorporating commercial aim in the third sector organizations and social or ecological aims in commercial organizations.

Academic training plays a crucial role in all the three contexts as all of them are equally potential to contribute for achieving sustainable development. Especially, academic institutions take a lead role to teach sustainable entrepreneurship[2] (Dentchev et al., 2018). For instance, Brock & Steiner, (2009) highlight that 75 percent of the sustainable entrepreneurship courses they reviewed were part of the academic curriculum. Prior sustainable entrepreneurship training-based studies highlight that sustainable entrepreneurship training helps enhance self-efficacy of the nascent entrepreneurs (Hockerts, 2015; Smith & Woodworth, 2012), and aids initiating enterprises with social purpose (Kummitha & Majumdar, 2015).

There has been a growing scholarly attention to understand intentions of the students to engage in sustainable entrepreneurship (Kirby & Ibrahim, 2011; Vuorio et al., 2018), prosocial motives that influence their interest in sustainable entrepreneurship (Bacq et al., 2017; Miller et al., 2012) and the role of academic training in promoting sustainable entrepreneurship practice (Brock & Steiner, 2009; Miller et al., 2012). However, there is hardly any research that studied the motives of the academic institutions to engage in sustainable entrepreneurship teaching (Fichter & Tiemann, 2018). Neck and Corbett (2018) articulate that "research from educators perspective has been relatively silent" (p. 9). Studying this aspect is important because literature articulates that sustainable entrepreneurship training must help both the venture creation and its growth by offering necessary competence not only useful for sustainable entrepreneurs but also for their employees (Strakey and Tempest 2009). However, there is no evidence to articulate such a motive. Thus, we ask, the following research question: *What motivates business schools to undertake sustainable entrepreneurship training?*

Answering this question is important because despite mushrooming growth of the academic training in sustainable entrepreneurship, sustainable enterprises continue to experience difficulty in recruiting talented staff members (Gast et al., 2017; Intellecap, 2012; Lans et al., 2014). To answer our research question, we have conducted a qualitative study in India, by studying sustainable entrepreneurship academic training programmes. Our results indicate that, academic institutions which are driven by the prosocial motivations engage in sustainable entrepreneurship training due to two specific reasons – (i) to encourage students address growing social problems, and (ii) to help create sustainable business models. Further, we highlight that sustainable entrepreneurship training programmes have hardly shown interest to train individuals to take up employment in the sustainable entrepreneurship sector. The remainder of the paper is divided into five sections. The second section below discusses literature review, the third section highlights the methods adopted. Whereas the fourth section narrates the findings and the last section articulates the contribution of this study.

2. Literature review

Education and training are two important aspects for the practice of sustainable entrepreneurship. Becker (1994) articulates that these two are "most important investments in human capital" (p. 17). Human capital plays a predominant role in moderating the intentions of individuals to create enterprises (Estrin et al., 2016) and firm's potential to engage in blended value creation (Battilana & Dorado, 2010). Although most often the difference between training and education is taken for granted, and used interchangeably, these two are effective in different ways. While the former refers to generic education attainment from schooling or university, the latter refers to any training that facilitates skill accumulation (Becker, 1994). We can say that attending a college is related to the education mode of human capital, whereas any specific training with an aim of initiating or developing sustainable enterprises is related to the training mode of the human capital. For us, any sustainable entrepreneurship specific learning is related to the training aspect. Training particularly helps address three specific goals of the sustainable enterprises– (i) initiate, and (ii) ensure, and (iii) integrate. We discuss in detail about these three specific types of training below.

2.1. Initiate

Training in sustainable entrepreneurship helps enthusiasts gain necessary competence and skills to initiate sustainable enterprises (Klapper & Faber, 2016; Ortiz & Huber-Heim, 2017; Warwick et al., 2017). For example, Kuckertz and Wagner (2010) articulate that once individuals are trained in sustainability, then they tend to show intentions to initiate enterprises. Whereas Hansemark (1998) earlier highlighted that entrepreneurship training programmes train individuals to gain confidence in order to enhance their motives to initiate enterprises. A recent study by Vuorio et al. (2018) affirm this belief that individuals attitude toward sustainability and their perceived entrepreneurial desirability result in sustainability oriented entrepreneurial intentions. In fact, Germak and Robinson (2014) highlight that participation in a sustainable entrepreneurship training programme itself be seen as an initial engagement in the practice of sustainable entrepreneurship.

However, there exist contested views in understanding the intentions of sustainable entrepreneurship training – between those

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[1] Literature often equates sustainable entrepreneurship to hybrid organizing or social entrepreneurship.

[2] With this assertion, we are not taking a stand to articulate that only academic institutions alone initiate social entrepreneurship training. Because apart from academic institutions, there are a number of places where sustainable entrepreneurship training is being initiated including but not limited to incubators and foundations. Thus, we specifically focus the present study on academic institutions.

claim that it enhances awareness and creates a learned society and those who claim that it aims at developing business ideas (Martin et al., 2013; QAA, 2018). Scholars such as Fayolle et al. (2006) exemplify that entrepreneurship training should not alone be measured by the extent to which it enhances the student propensity to start a venture. In other words, it should not be equated with the venture creation outcomes only. For example, a report published by the European Union (2016) highlights that entrepreneurship be seen as a transversal competence which is helpful in every sphere of human life. Kirby (2011) also resonates with such an idea and claims that entrepreneurship education should focus on encouraging individuals to enhance their creative potential and engage in *change* in the larger context. For example, a study undertaken by Pittaway and Edwards (2012) found that more than half of the total 117 courses studied as part of their research in the USA and the UK have focused on creating awareness among the students, which means, they are based on the didactic pedagogies that heavily revolve around offering theoretical knowledge. They typically sought learning outcomes which are concerned about enhancing knowledge base. The authors indicate that entrepreneurship training is not just about creation of enterprises, rather in a larger context, it is about creation of awareness about entrepreneurship, which may not result in immediate venture creation.

Porter accordingly argued that students trained in sustainable entrepreneurship should become catalysts for social transformation and work with practitioners in the capacity of consultants, advisors, and mentors etc. (Driver, 2012). It is also argued that some of those with sustainable entrepreneurship training background will end up joining the mainstream enterprises and start influencing the strategic decision making of the larger firms which will have significant level of social implications (Driver, 2012). Further, Reynolds et al. (2018) emphasize that prior work experience may also be handy for students, once they chose to start their own enterprises. Thus, the outcome of the sustainable entrepreneurship training should not be limited to firm creation alone as the social value creation may take many approaches, methods and have different types of outcomes. In line, Graevenitz et al. (2010) opine that entrepreneurship graduates who fail to start an enterprise may shift to embrace a managerial role.

2.2. Ensure

This type of training helps firms to ensure their propensity in achieving sustainability in their operations. As part of this approach often existing organizations adopt multiple missions in their existing operations (Denchev et al., 2018). A survey conducted by Accenture (2010) highlights that about 93 percent of the world CEOs indicated that their future success would depend upon their interest in sustainable development. This is the reason Hesselbarth and Schaltegger (2014) argue that a growing number of employers are seeking sustainability-related training for their employees. For instance, Grekova et al. (2016) emphasize that manufacturing firms show their interest for adopting practices that would advance their commitment for sustainable growth. Similarly, third sector organizations look for avenues to enhance their commercial base by adopting a commercial mission. In the process they may adopt a business model and launch a product or service. In order to successfully navigate this new terrain, they need to either recruit new employees with the necessary skills or train their own employees with the new skills.

Accordingly, organizations believe that training in business schools can enable such a transition in the operation models (Kolb et al., 2017). Radhari et al. (2016) highlight that intrapreneurs who have been trained in sustainable entrepreneurship help *ensure* sustainable value creation by altering existing business models. Nave and Franco (2019) highlight that firms as part of their commitment to sustainability behave ethically and contribute to environmental and social wellbeing of the society.

Ensure – based sustainability training is important because attracting talent, especially recruiting and retaining competent employees and managers remains one of the major problems for the sustainable enterprises as well. A study conducted by Intellecap (2012) shows that enterprises with social mission find it hard to recruit managers in their enterprises. They often compromise and recruit far less skilled managers. As a result, organizations with sustainable mission often compromise on the quality of candidates (O'Reilly et al., 1991). The scenario is persistent despite the growing number of academic programmes in sustainable entrepreneurship and a significant number of students graduating from the programmes (Gast et al., 2017).

2.3. Integrate

The third type of training which is popular in the sustainable entrepreneurship is associated with work integration, often to train individuals from deprived backgrounds and help them find employment in the market. Such interventions aim to create work integration opportunities for masses (Kummitha, 2016). Especially in developing countries, entrepreneurship training is said to play a key role in promoting their employment opportunities (Adjei et al., 2009). For example, women workers are trained to engage in self-employment in the form of microfinance (Shetty, 2008). Grameen Bank organizes basic training programme in new geographical locations where its model is being adopted.

Similarly, Drishtee, which offers information technology goods and services in rural India through the village kiosks that are run and managed by villagers also offers training to villagers (Desa & Koch, 2014). Further, sustainable entrepreneurship training based on reflective practices has also gained momentum. For instance, Lough and McBride (2013) articulate that civic and nonprofit organizations often conduct such a training for masses. As part of the training, participants meet a group of local entrepreneurs and train enthusiasts to explore how to address local problems in that geographical location.

3. Methods

We adopted a qualitative research approach to answer our research question and conducted field research in India. Training in Sustainable entrepreneurship in Indian context is highly relevant to study due to the stubborn social problems prevalent in the country
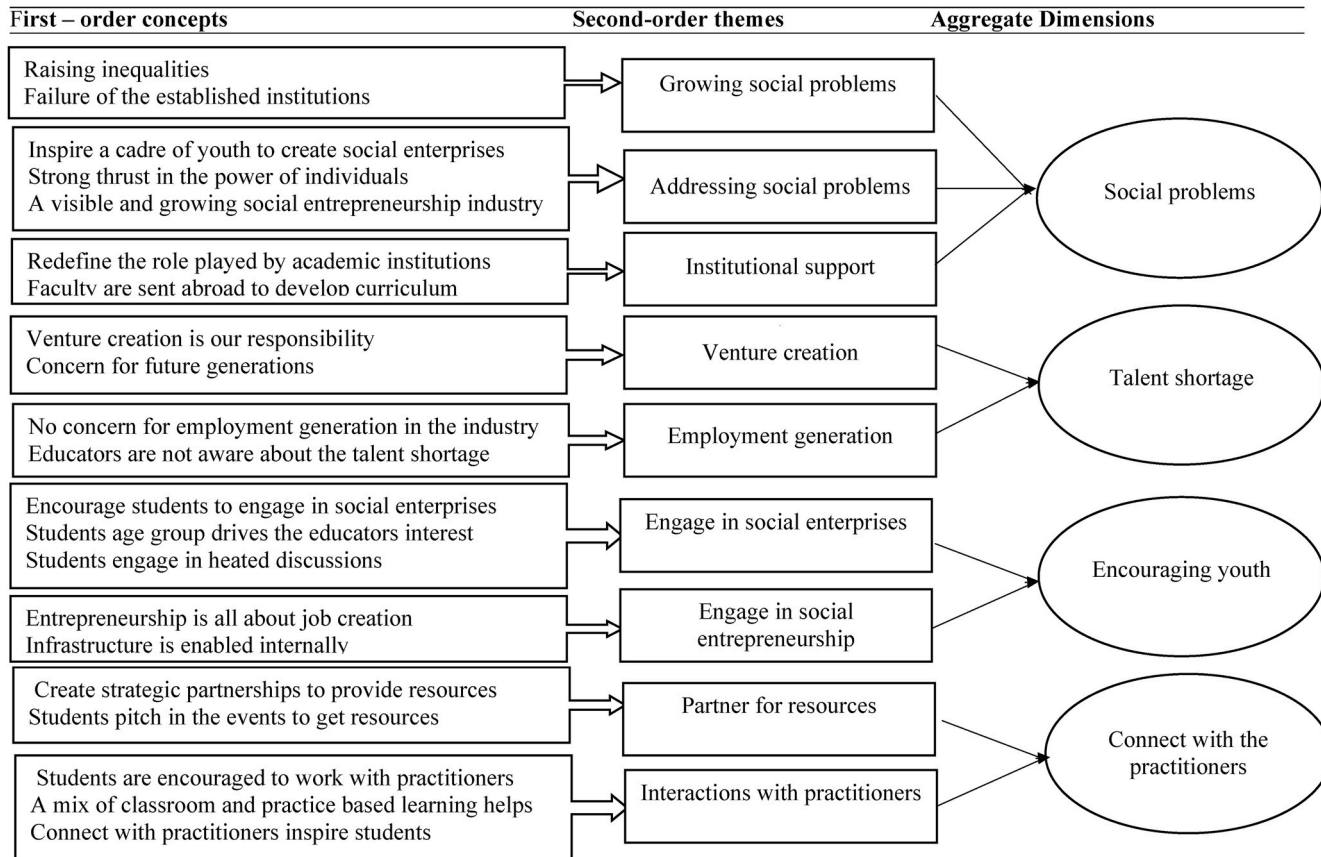
First – order concepts	Second-order themes	Aggregate Dimensions
Raising inequalities Failure of the established institutions	Growing social problems	
Inspire a cadre of youth to create social enterprises Strong thrust in the power of individuals A visible and growing social entrepreneurship industry	Addressing social problems	Social problems
Redefine the role played by academic institutions Faculty are sent abroad to develop curriculum	Institutional support	
Venture creation is our responsibility Concern for future generations	Venture creation	
No concern for employment generation in the industry Educators are not aware about the talent shortage	Employment generation	Talent shortage
Encourage students to engage in social enterprises Students age group drives the educators interest Students engage in heated discussions	Engage in social enterprises	
Entrepreneurship is all about job creation Infrastructure is enabled internally	Engage in social entrepreneurship	Encouraging youth
Create strategic partnerships to provide resources Students pitch in the events to get resources	Partner for resources	
Students are encouraged to work with practitioners A mix of classroom and practice based learning helps Connect with practitioners inspire students	Interactions with practitioners	Connect with the practitioners

Fig. 1. Data analysis.

and the growing interest from academia and civil society to address these problems by training individuals who can play a key role in the sustainable enterprise industry. We selected India as our field setting because of three reasons. First, India has the highest number of entrepreneurs with social purpose as described by Ashoka. Second, there has been a significant interest in the sustainable entrepreneurship among educators and students (Kummitha & Majumdar, 2015). Finally, there is a growing talent shortage in sustainable entrepreneurship industry in India (Intellecap, 2012). We initially searched for sustainable entrepreneurship academic training programmes in India and found that there is a total of 22 such programmes which offer training. We were able to collect data from 17 academic institutions in the end as we have not received any response to our emails from five academic programmes. We approached each of this institute and conducted interviews with either the founder of the academic programme in case if it is a full-time master's programme, or the concerned teacher in case if only one module is offered. In the end, we had a total of 37 interviews from the 17 academic institutions.

The interviews were conducted in two rounds. First set of interviews were conducted during January to June 2015 (29 interviews) and the second round of interviews were conducted in November 2019 (8 interviews). The shortest interview lasted for 33 min and the longest being 60 min. While 22 interviews were conducted in skype, 15 interviews were conducted in person. We analyzed a total of 163 pages of data.

Our interviews were semi structured in nature. Mostly we asked educators to emphasize about the motivation for initiating sustainable entrepreneurship training programmes in case of coordinators of a two year masters programme. Whereas we asked about the personal motives in the case of educators who teach a single module in a typical MBA programme. Then we further asked them to emphasize on the programme specific aims and the various activities that they undertake in order to reach their aim. Our other questions aimed to understand the role academic programmes play in addressing the human capital shortage in the sustainable entrepreneurship industry.

3.1. Analysis

We followed Gioia et al. (2013) for the data analysis and conducted our analysis in four stages. In the first stage we have transcribed each interview in the 48 h from its completion. We used the narratives from the interviews to gain sense of the 'whole' and understand the larger phenomenon about the motivations of the social entrepreneurship training programmes (Tesch, 1990).

We then moved to the second stage, where we developed first order concepts by coding the entire text. We were able to draw 28 first order concepts, however, we then were able to merge some of the first order concepts and reduce the total tally to 21 (Morse & Field, 1995). We further used constant comparison of all the interviews to draw imperatives. We then moved to the third stage of our analysis, where we developed second order themes. During this stage our aim was to draw connection between our first order concepts and develop second order themes (Patton, 2002). We have had a total of 9 s order themes towards end of our analysis, which were used to develop aggregative dimensions in the fourth stage. We have a total of four aggregative dimensions - social problems, encouraging youth to engage in direct action, connect with the practitioners, and talent shortage in the industry. During the analysis, we went back to the literature a number of times to connect our emergent themes with the literature. Fig. 1 below highlights our analytical model.

4. Findings

All the sustainable entrepreneurship training programmes we studied are positioned in management schools in India. Our respondents emphasized that prevailing social problems significantly influenced their choices to initiate sustainable entrepreneurship training programmes. We show our findings below.

4.1. Social problems

The prevailing inequalities and social problems in India motivate educators to initiate sustainable entrepreneurship training as it allows them to encourage trainees to create ventures and address social problems directly. One of the coordinators of a well-known training programme stated:

> There are growing social problems and widening social inequalities in society. We believe that, by encouraging and inspiring our students, we are able to build a cadre of energetic youth who can create inclusive societies by addressing these problems. (Respondent 7)

The failure of established institutions to address social problems has also resulted in increased interest among the educators to take this path and encourage students to initiate sustainable enterprises. A respondent highlights that:

> We have a lost hope in the existing institutional set-up, and there has been a growing belief in the power of individuals. We strongly believe that young people, with enormous energy and compassion towards society and social problems, will be able to transform our social context. (Respondent 3).

Given the prevalent social problems in the country, academic institutions have taken the responsibility to create an enabling environment for teaching sustainable entrepreneurship. One of the coordinators of a programme explained the support she received from her university. She narrates that,

> I would say educational institutions have taken a strong stand in support of the growing interest among the communities to initiate social interventions. For example, my institute has offered all what I have asked to run the course. I have travelled to

well-known universities in the USA and UK where sustainable entrepreneurship was taught to develop curriculum for our proposed masters' programme by interacting with the renowned faculty in the field. (Respondent 11).

Further, educators consider that sustainable entrepreneurship offers them an opportunity to teach curriculum that aligns with the university's larger interest. A respondent highlighted that,

> We want to be a socially inclusive university where we not only teach entrepreneurship, but also guide students on sustainability. Because while entrepreneurship training has been our major strength, at times, we see that our role has to be bigger and greater. That is how we see sustainable entrepreneurship as a discipline offers an opportunity to be more inclusive. (Respondent 16).

4.2. Encouraging youth to engage in sustainability

Educators encourage students to initiate sustainable enterprises right from the beginning of their course work. Such an orientation so early in the training allow students to strictly focus on venture creation. An educator highlights that,

> We encourage our students throughout the learning curve to initiate sustainable enterprises by exposing them to social realities and the problems exist in society. Several students actually join us with a set of ideas and with an aim to address them. This makes our task easy. (Respondent 8)

A similar narrative was offered by a professor who runs a six-month training programme:

> The age of our average trainee is about 20–23 years. We believe that, at their age, they can significantly address social problems and contribute to build inclusive societies. We especially see that they are highly passionate and empathetic, and they respond to various social problem. (Respondent, 23)

The coordinator of a different programme reported how her programme moderates the interests of the trainees. She claimed:

> We expose our students to most needy social trends that require immediate attention. It takes some time for them to come in terms with the realities. They engage in deep and extended discussions … You know, most of the time, the arguments go on until late in the evenings in the classroom. We see that these interactions and field exposure influence them to be sensitive and address the problems. (Respondent, 19)

A further insight is offered by another respondent, who said:

> In fact, we strongly build upon one basic premise that entrepreneurship is all about job creation. Where we expect our graduates offer jobs to others in need instead of seeking jobs for themselves in the markets. The other major aspects we believe are related to problem solving, and inventing in new approaches, methods, and processes. (Respondent, 29)

With such an understanding, training institutions have in fact at times closed down their placement cells, not allowing students to seek employment. One of the respondents while emphasizing the importance of the programme she coordinates, claimed that:

> We do not see any strong reason why our graduates need to join existing enterprises as employees before initiating their own ventures. We provide all the necessary learning and field exposure to start ventures. (Respondent, 14)

4.3. Connect with the practitioners

As educators develop their own in-house ecosystems to promote student driven entrepreneurship, the interest of students toward venture creation has been enriched. Further, we found that the educators do not have a system in place in order to encourage their students to take up internships in sustainable enterprises. Instead, students are asked to conduct pilot projects of their own with a view to gain practical knowledge that will be useful once they initiate ventures. One of the educators stated:

> While we connect with practicing entrepreneurs on several occasions and request them to visit our institution in order to address and inspire our students, we do not have any formal association with them where they can guide our students or recruit them in their teams. (Respondent, 6).

Another respondent highlights how the curriculum they created is driven by a mix of both practice and theory, which helps graduates to engage in venture creation upon completion of the course.

> We have a mix of classroom and field-based learning that helps students gather necessary information to initiate their own ventures. (Respondent, 35).

Students are often asked to visit rural areas with an open mind and to carve out new ideas. One of the respondents said:

> We have a very good relationship with the industry especially in rural settings. We in fact send our students into the field to understand and learn from the social transformation resulted by the successful enterprises. (Respondent, 17).

Nevertheless, educators preferred graduates to start ventures upon their graduation. Further, the external environment has also played a crucial role in promoting the student led ventures. As a result, the educators are able to capitalize upon the interest from both the external environment and student interest to promote student led sustainable entrepreneurship. A respondent claims that:

> There is a significant need for citizen driven interventions. The external environment plays a crucial role. We have an informal network where our students pitch in and get support from various investors. (Respondent, 11).

In order to offer resources to students to engage in sustainable entrepreneurship, educators draw partnerships with other

institutions. An educator highlights about one such partnership being created with a commercial bank,

> We have a strategic partnership with a well-known commercial bank. They support our student ventures, and we take a firm stand to encourage our students to initiate ventures. (Respondent, 27).

The findings articulate that educators who are inspired by the social problem initiate sustainable entrepreneurship training with an aim to encourage youth create sustainable enterprises. Then we asked them about talent shortage in the industry and whether they contribute to address the problem at any level.

4.4. Talent shortage in the industry

The stand educators opted to motivate students to start their own enterprises is based on their perception about what contributes to create social value. One of the respondents claimed,

> We mostly focus on promoting venture creation, as we see that it is our responsibility as an educational institute to promote graduates to address the problems themselves. (Respondent, 34)

When asked about the lack of talent in the sustainable entrepreneurship industry, in response one of the respondents highlighted:

> Our motive is to create ventures, not to produce employees to assist the industry. If we talk about employment, there are other programmes, such as social work and management courses, that train students to become employees. (Respondent, 2).

In fact, several respondents highlighted that they are unaware about the talent shortage issue. But they claimed that it has nothing to do with the sustainable entrepreneurship academic sector. A respondent highlighted:

> Well, frankly I had no idea about the talent shortage. I don't think it concerns us at any level. (Respondent, 26)

Another respondent goes in defense to support his stand about student venturing.

> If we do not encourage youth to address the growing social problems, future generations will not forgive us for all the mess we are creating in society. (Respondent, 9).

Educators also believe that the faculty expertise in his institution offers a solid ground for students to initiate sustainable enterprises. A respondent claimed:

> Our students are taught by well-known teachers in the country on social work, venture creation, business planning, accounting, and organizational development. Further, our students are able to enhance their compassion based on their field exposure. We further provide venture support. I believe this is a solid combination to help create successful ventures. (Respondent, 14).

Further student interest has also helped educators to engage in sustainable entrepreneurship practice. A respondent shares:

> Students are showing enormous interest in venture creation. When I first introduced the course three years back, there were 23 students, then the numbers grew in the subsequent years to 48, 62, and now 85 students are there. We would like to capitalize on this interest. (Respondent, 29).

5. Discussion

This research aimed to understand the motives that drove the interest of business schools to undertake sustainable entrepreneurship training. As highlighted in much of the literature, addressing social or ecological problems remains the core aim that motivates academic institutions to engage in teaching sustainable entrepreneurship (Decamps et al., 2017; Olalla & Merino, 2019). This finding is in line with the sustainable entrepreneurship literature, which argues that the major reason that drives sustainable entrepreneurship practice is to address social or environmental problems (Kummitha, 2017). Educators partner with practitioners and facilitate student led venture creation. Such partnerships offer resource flow into student led sustainable ventures. In the process, students are exposed to extreme social problems which helped enhance their compassion (Miller et al., 2012), altruism (Vuorio et al., 2018) and empathy (Cincera et al., 2018) that help initiate sustainable enterprises (Long et al., 2019). In addition, academic programmes made effort to build in-house infrastructure to promote student interest in the practice of sustainable entrepreneurship (Chandra, 2016).

While research assessing the impact of sustainable entrepreneurship training on graduates has offered so far, a mixed results about the motive (Driver, 2012; Pittaway & Edwards, 2012), we show that the aim of the academic programmes is precisely about encouraging graduates to initiate ventures (Germak & Robinson, 2014). Thus, the varying results in the student interest as described by extant literature could be attributed to the difference in the graduate learning propensity (Smith & Woodworth, 2012). Although literature emphasized that graduates should join and work with other practitioners in various capacities in order to help commercial and third sector organizations to adopt social and commercial missions respectively (Driver, 2012), academic institutions have not showed interest in encouraging the graduates to join the practitioners.

When it comes to ensure-driven training, academic programmes have hardly showed any interest to train individuals to become employees in sustainable enterprises, or encourage those they train to take up manager or employee roles. Although Radhari et al. (2016) articulate that intrapreneurs play a crucial role in sustainable enterprises, the current research highlights that the academic programmes show least importance to train graduates to become intrapreneurs.

5.1. Contribution

Our research contributes to the growing literature in sustainable entrepreneurship education (Thompson et al., 2015). We make three specific contributions. First, we show why academic institutions engage in sustainable entrepreneurship training.

Our research highlights that in line with motivation-based theories in sustainable entrepreneurship (Mair & Noboa, 2006), academic institutions respond equally to the heightened social problems. Earlier Wyness et al. (2015) emphasized that entrepreneurship educators in the UK consider 'sustainability' as another business problem that entrepreneurs need to overcome. Thus, if employed strategically, sustainability can become an advantage for businesses. However, our study which is conducted in a developing country context claims that entrepreneurship educators are genuinely concerned about addressing social problems. As a result, their own prosocial intentions encourage them to initiate sustainable entrepreneurship training programmes. Accordingly, early research highlights that it is the individuals with prosocial intentions that engage in sustainable entrepreneurship and in the process academic institutions help advance their prosocial intentions (Bacq & Alt, 2018). Our research extends the prosocial motives-based literature and shows that the motivation to initiate sustainable entrepreneurship training programmes is also driven by the prosocial motives of the educators and the institutions where the training programmes are being initiated.

Second, while human capital theory argues that it is not only the human capital of the sustainable entrepreneurs which is important (Becker, 1994), but also of the entire team members that aid create sustainable organizations, our research indicates that academic programmes hardly make any effort to contribute to the growth of such ventures. This has major implications for the growth of the ventures.

Third, our findings seek greater responsibility from the academic institutions to not only train individuals to create sustainable enterprises but also encourage them to work for established ventures in order to ensure that the established ventures are not deprived of the crucial human resources necessary for their growth. While the concern of the educators to address social and ecological problems with the help of venture creation is a noteworthy insight, it is also necessary that they focus on preparing those graduates who are not willing to take up immediate venture creation to fill key employee roles in the startups and existing organizations.

5.2. Limitations

We have two specific limitations that we believe future research could address. First, we have not studied the actual behavior or the intentions of the students to engage in sustainable entrepreneurship upon completion of their training. Thus, we encourage further research to understand interest among students once they graduate from the sustainable entrepreneurship academic programmes. Second, while Indian case is interesting, academic institutions in the developed countries may have different motivations to initiate sustainable entrepreneurship-based training. Because the social context is in developed countries is relatively advanced and so the resource available to support student led sustainable enterprises. Thus, it would be ideal to take up further research in developed countries with a similar research aim.

CRediT authorship contribution statement

Harshavardhan Reddy Kummitha: Methodology, Formal analysis, and, Writing - original draft. **Rama Krishna Reddy Kummitha:** Conceptualization, Writing - original draft.

References

Accenture. (2010). A new era of sustainability: UN global compact-accenture CEO study. Retrieved from www.unglobalcompact.org.

Adjei, J., Arun, T., & Hossain, F. (2009). Asset building and poverty reduction in Ghana: The case of microfinance. *Savings and Development, 33*(3), Article 265291.

Bacq, S., Janssen, F., & Noel, C. (2017). What happens next? A qualitative study of founder succession in social enterprises. *Journal of Small Business Management, 57*(3), 820–844. https://doi.org/10.1111/jsbm.12326

Bacq, S., & Alt, E. (2018). Feeling capable and valued: a prosocial perspective on the link between empathy and social entrepreneurial intentions. *Journal of Business Venturing, 33*(3), 333–350. https://doi.org/10.1016/j.jbusvent.2018.01.004.

Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal, 53*, 1419–1440.

Becker, G. (1994). *Human capital: A theoretical and empirical analysis with special reference to education.* The University of Chicago Press.

Brock, D. D., & Steiner. (2009). Susan, social entrepreneurship education: Is it achieving the desired aims?. March 18, 2018. Available at SSRN: https://ssrn.com/abstract=1344419.

Chandra, Y. (2016). Social entrepreneurship as institutional change work: A corpus linguistics analysis. *Journal of Social Entrepreneurship.* https://doi.org/10.1080/19420676.2016.1233133

Cincera, J., Biberhofer, P., Binka, B., Boman, J., Mindt, L., & Rieckmann, M. (2018). Designing a sustainability- driven entrepreneurship curriculum as a social learning process: A case study from an international knowledge alliance project. *Journal of Cleaner Production, 172*, 4357–4366.

Decamps, A., Barbat, G., Carteron, J., Hands, V., & Parkes, C. (2017). Sulitest: A collaborative initiative to support and assess sustainability literacy in higher education. *International Journal of Management in Education, 15*(2), 138–152.

Dentchev, N., Rauter, R., Johansdottir, L., Sniur, Y., Rosano, M., Baumgartner, R., Nyberg, T., Tang, X., Hoof, B., & Jonker, J. (2018). Embracing the variety of sustainable business models: A prolific field of research and a future research agenda. *Journal of Cleaner Production, 194*, 695–703.

Desa, G., & Koch, J. L. (2014). Scaling social impact: Building sustainable social ventures at the base-of-the-pyramid. *Journal of Social Entrepreneurship, 5*(2), 146–174. https://doi.org/10.1080/19420676.2013.871325

Driver, M. (2012). An interview with Michael Porter: Social entrepreneurship and the transformation of capitalism. *The Academy of Management Learning and Education, 11*(3), 421–431.

Estrin, S., Mickiewicz, T., & Stephan, U. (2016). Human capital in social and commercial entrepreneurship. *Journal of Business Venturing, 31*(4), 449–467.

European Union. (2016). *EntreComp: The entrepreneurship competence framework.* Luxemburg: publication office of the European Union.

Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programs: A new methodology. *Journal of European Industrial Training, 30*(9), 701–720.

Fichter, K., & Tiemann, I. (2018). Factors influencing university support for sustainable entrepreneurship: Insights from explorative case studies. *Journal of Cleaner Production, 175*, 512–524.

Gast, J., Gundolf, K., & Cesinger, B. (2017). Doing business in a green way: A systemic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of Cleaner Production, 147*, 44–56.

Germak, A. J., & Robinson, J. A. (2014). Exploring the motivation of nascent social entrepreneurs. *Journal of Social Entrepreneurship, 5*(1), 5–21.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the gioa methodology. *Organisational Research Methods, 16*, 15–31.

Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organization, 76*(1), 90–112.

Grekova, K., Calantone, R. J., Bremmers, H. J., Treinekens, J. H., & Omta, S. W. F. (2016). How environmental collaboration with suppliers and customers influences firm performance: Evidence from Dutch food and beverage processor. *Journal of Cleaner Production, 112*, 1861–1871.

Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing, 25*, 439–448.

Hansemark, O. C. (1998). The effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behaviour & Research, 4*(1), 28–50.

Hermes, J., & Rimanoczy, I. (2018). Deep learning for a sustainability future. *International Journal of Management in Education, 16*(3), 460–467.

Hesselbarth, C., & Schaltegger, S. (2014). Educating change agents for sustainability – learning from the first sustainability management master of business administration. *Journal of Cleaner Production, 62*, 24–36.

Hockerts, K. (2015). The social entrepreneurial antecedents scale (seas): A validation study. *Social Enterprise Journal, 11*(3), 260–280.

Intellecap. (2012). *On the path to sustainability and scalability: A study of India's social enterprise landscape.* Mumbai: Intellecap.

Kirby, D. A., & Ibrahim, N. (2011). The case for (social) entrepreneurship education in Egyptian universities. *Education + Training, 53*(5), 403–415.

Klapper, R., & Faber, V. A. (2016). Alain gibb's footsteps: Evaluating alternative approaches to sustainable enterprise education (SEE). *International Journal of Management in Education, 14*(3), 422–439.

Kolb, M., Frohlich, L., & Schmidpeter, R. (2017). Implementer sustainability as the new normal: Responsibility management education - from a private business school's perspective. *International Journal of Management in Education, 15*(2), 280–292.

Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions – investigating the role of business experience. *Journal of Business Venturing, 25*, 524–539.

Kummitha, R. K. R. (2016). *Social entrepreneurship: Working towards greater inclusiveness.* London: Sage.

Kummitha, R. K. R. (2017). *Social entrepreneurship and social inclusion: Practices, processes and perspectives.* London: Palgrave.

Kummitha, R. K. R., & Majumdar, S. (2015). Dynamic curriculum development on social entrepreneurship – a case study of TISS. *International Journal of Management in Education, 13*(3), 260–267.

Lans, T., Blok, V., & Wesselink, R. (2014). Learning apart and together: Towards and integrated competence framework for sustainable entrepreneurship in higher education. *Journal of Cleaner Production, 62*, 37–47.

Long, T. B., Blok, V., & Coninx, I. (2019). The diffusion of climate-smart agricultural innovations: Systems level factors that inhibit sustainable entrepreneurial action. *Journal of Cleaner Production, 232*, 993–1004.

Lough, B. J., & McBride, A. M. (2013). The influence of solution focused reflection on international social entrepreneurship identification. *Journal of Social Entrepreneurship, 4*(2), 220–236. https://doi.org/10.1080/19420676.2013.777361

Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Mair, J. Robinson, & K. Hockerts (Eds.), *Social entrepreneurship.* London: Palgrave Macmillan.

Martin, B., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing, 28*, 211–224.

Miller, T. L., Wesley, C. L., & Williams, D. E. (2012). Educating the minds of caring hearts: Comparing the views of practitioners and educators on the imp of social entrepreneurship competencies. *The Academy of Management Learning and Education, 11*, 349–370.

Morse, J. M., & Field, P. A. (1995). In *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, CA: Sage.

Nave, A., & Franco, M. (2019). University-firm cooperation as a way to promote sustainability practices: A sustainable entrepreneurship perspective. *Journal of Cleaner Production, 230*, 1188–1196.

Neck, H. M., & Corbett, A. C. (2018). The scholarship of teaching and learning entrepreneurship. *Entrepreneurship Education and Pedagogy, 1*(1), 8–41.

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*, 487–516.

Olalla, C. B., & Merino, A. (2019). Competences for sustainability in undergraduate business studies: A content analysis of value-based course syllabi in Spanish universities. *International Journal of Management in Education, 17*(2), 239–253.

Ortiz, D., & Huber-Heim, K. (2017). From information to empowerment: Teaching sustainable business development by enabling an experiential and participatory problem-solving process in the classroom. *International Journal of Management in Education, 15*(2), 318–331.

Patton, M. Q. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage.

Pittaway, L., & Edwards, C. (2012). Assessment: Examining the practice in entrepreneurship education. *Education + Training, 54*(8–9), 778–780.

QAA. (2018). *Enterprise and entrepreneurship education: Guidance for UK higher education providers.* retrieved from www.qaa.ac.uk)qaas)enterprise-and-entrpreneurship-education-2018.

Radhari, A., Sepasi, S., & Morabi, M. (2016). Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises. *Journal of Cleaner Production, 137*, 347–360.

Reynolds, O., Sheehan, M., & Hilliard, R. (2018). Exploring strategic agency in sustainability-oriented entrepreneur legitimation. *International Journal of Entrepreneurial Behaviour & Research, 24*(2), 429–450.

Shepherd, D., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking "what is to be sustained" with "what is to be developed". *Entrepreneurship: Theory and Practice, 35*(1), 137–163.

Shetty, N. K. (2008). Microfinance for micro enterprise development: An inquiry for a new paradigm. *The ICFAI Journal of Financial Economics, 6*(1), 8898.

Smith, I. H., & Woodworth, W. P. (2012). Developing social entrepreneurs and social innovators: A social identity and self-efficacy approach. *The Academy of Management Learning and Education, 11*(3), 390–407.

Starkey, K., Hatchuel, A., & Tempest, S. (2009). Management research and the new logics of discovery and engagement. *Journal of Management Studies, 46*(3), 547–558.

Tesch, R. (1990). *Qualitative research: Analysis types and software tools.* Bristol, PA: Falmer.

Thompson, N. A., Herrman, A. M., & Hekkert, M. P. (2015). How sustainable entrepreneurs engage in institutional change: Insights from biomass torre faction in The Netherlands. *Journal of Cleaner Production, 106*, 608–618.

Vuorio, A. M., Puumalainen, K., & Fellnhofer, K. (2018). Drivers of entrepreneurial intentions in sustainable entrepreneurship. *International Journal of Entrepreneurial Behaviour & Research, 24*(2), 359–381.

Warwick, P., Wyness, L., & Conway, H. (2017). Think of the future: Managing educational change from students' perspective of an undergraduate sustainable business programme. *International Journal of Management in Education, 15*(2), 192–204.

Wyness, L., Jones, P., & Klapper, R. (2015). Sustainability: What the entrepreneurship educators think. *Education + Training, 57*(8/9), 834–852.