THE RELATIONSHIP BETWEEN MINDFULNESS AND SOCIAL ENTREPRENEURIAL INTENTION WITH PERCEIVED BEHAVIOURAL CONTROL AS MEDIATOR

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Published online: 30 June 2023


To link to this article: https://doi.org/10.21315/aamj2023.28.1.2

ABSTRACT

There is in an ongoing conflict between economic development and social needs, especially in developing countries. Social enterprises have been seen as a key to solving this problem. Universities however, has not focused much social entrepreneurship as an academic course, unlike corporate social responsibility. The aim of this study therefore, was to examine the relationship between mindfulness and social entrepreneurial intention (SEI) and the intermediary role of perceived controllability and self-efficacy to generate ideas for academics to develop new generations of social entrepreneurs. The study used structural equation modelling (SEM) to test the research hypotheses. A total of 294 students at all academic levels (bachelor, master, and PhD) at selected universities in southern Vietnam participated in this study. The data was collected between August 2019 and October 2019 by using questionnaires. The results showed a positive relationship between mindfulness and SEI. Additionally, the study noted students’ perceived controllability and especially self-efficacy can enhance this relationship.

Keywords: mindfulness, social entrepreneurship, intention, perceived controllability, self-efficacy
INTRODUCTION

Social entrepreneurship has received global attention in recent decades (Rey-Martí et al., 2016). Social enterprises have been documented to solving economic, environmental, and community improvement issues. These businesses have helped to improve standard of living, strive for a fairer world via efforts to solve social problems primarily because they have not been comprehensively addressed by governments, local authorities, and commercial enterprises (Del Giudice et al., 2019). Therefore, many countries in the world have been supporting development of social enterprises (Shier & Van-Du, 2018). However, to have effective solutions to help these businesses, it is necessary to understand the intentions and needs of future social entrepreneurs, which is also a fundamental question in research related to social business start-ups.

What is social entrepreneurship? It is a method adopted by individuals, groups, start-up companies or entrepreneurs to develop, fund, and offer solutions to social, cultural, or environmental issues and the businesses vary in size, aims, and beliefs [(Dees, (1998). Profit-based businesses measure their performance employing business metrics, such as profit, revenues, and stock prices. Social entrepreneurs, on the other hand can be fully non-profitable, or they blend profiteering goals with producing benefits for society. These enterprises further social, cultural, and environmental aims in areas such as poverty alleviation, health care, and community development.

Social entrepreneurs play an important role in building a sustainable and equitable economy and society for nations (Alvord et al., 2004; Anderson et al., 2006; Borzaga & Defourny, 2001; Dees, 2007; Seelos & Mair, 2005). Muñoz and Kimmitt (2019) argued that social entrepreneurs pursue social missions to create socially added value, not just personal wealth and efficiency. Therefore, they apply innovative business models to solve complex social problems and to satisfy the needs of the community (Zahra et al., 2009; Miller et al., 2012). However, universities which train potential social entrepreneurs, only focus on corporate social responsibility (García-Morales et al., 2020), while research on social entrepreneurship is lacking.

Tiwari et al. (2017) suggested that it is important to understand the basic factors that shape an individual’s thinking process before finding ways to motivate and support social entrepreneurs. Krueger (1993) argued that the number of business start-ups can only increase if the quality of the start-up and incubator mindset is influenced. Thus, investigating the determinants of the start-up’s intention is an important step in identifying ways to develop social entrepreneurs.
The dual mission of social entrepreneurship is to create social and economic value and become agents of change (Dees, 1998). Given the different goals of social entrepreneurs, the linkage between goals and incentives is significantly more complex and shows greater challenges for society than commercial entrepreneurs (Austin et al., 2006). Smith et al. (2012) proposed a paradoxical leadership model for social entrepreneurs, and they argued that social entrepreneurs need to learn to pay attention to mindfulness in order to distinguish between commercial and social goals.

The goal of this study was to understand the relationship between mindfulness and social entrepreneurial intention (SEI) and the intermediary role of perceived behavioural control (PBC) in this relationship. The study findings provide suggestions and recommendations for universities to come up with appropriate policies for the development of new generations of social entrepreneurs. They also complement the findings of previous research on the characteristics of social entrepreneurs. This is also an exploratory study to uncover the essentials for social entrepreneurship start-up in a balanced way.

LITERATURE REVIEW

Social Entrepreneurship

Shaw and Carter (2007) suggest that social entrepreneurship is a process that can create value by using resources in creative ways. Bosch (2015) argued social entrepreneurship, related to starting a business with the determination to achieve positive social change, has increased in recent decades due to its ability to solve social problems. Jiao (2011) also argued that social entrepreneurship emerges as a response to complex social needs that cannot be served by the government or the private sector. It can take many forms, such as starting a business, expanding an organisation and partnering with another company (Short et al., 2009). Social enterprises explore and exploit opportunities that can create social value by facilitating social change or meeting social needs (Prieto, 2014).

Hence, social entrepreneurship is a process of creating social value based on the use of business principles. Not only that, social entrepreneurship uses these values to enable creative ways for solving persistent social problems (Ratten, 2018). In order to initiate this process, social entrepreneurs need to have intentions toward social entrepreneurship. According to Ajzen (1991), the intention controls and regulates the behaviour of entrepreneurs. Therefore, the research on SEI is important.
SOCIAL ENTREPRENEURIAL INTENTION

When the role of social entrepreneurs is becoming important, their SEI should be considered (Krueger et al., 2000). Behavioural intention can indirectly help understand the reasons for social entrepreneurs to start a business or enterprise (Wang et al., 2016). Researchers have described intention in different ways. Bird (1988) defined intention as a state of mind that motivates a person towards a certain goal or path. Intention can be considered a prerequisite for controlling planned behaviour (Souitaris et al., 2007). According to Krueger and Brazeal (1994), entrepreneurial intention can be defined as a person's commitment to future behaviours such as starting a business.

Behavioural intention, in the context of social entrepreneurship, is defined as a tendency to engage in social entrepreneurship activities (Forster & Grichnik, 2013) and related to any type of activity, organisation, or initiative with specific social, environmental, or community goals (Bosma et al., 2016). They may include providing services or training to the disabled, or activities to reduce pollution or food waste, organising community groups and members of society. Therefore, individuals who start or currently lead social entrepreneurship activities anywhere in the world can be considered social entrepreneurs (Bosma et al., 2016) and can be recognised as change agents.

Many studies have emphasised the role of intention as one of the most important constructs in predicting planned behaviour (Krueger & Brazeal, 1994). Therefore, intention is used as an intermediate variable between influencing factors and behaviour (Krueger, 2007). In the social entrepreneurship context, these influencing factors are perceived social support, empathy, moral obligation (Hockerts, 2017; Igwe et al., 2020; Rambe & Ndofirepi, 2019; de Sousa-Filho et al., 2020), self-efficacy (Bacq & Alt, 2018; Hockerts, 2017; de Sousa-Filho et al., 2020), social worth (Bacq & Alt, 2018), attitude, subjective norms, PBC (Kruse et al., 2019; Luc, 2020), feasibility, and desirability (Urban & Kujinga, 2017). The behavioural factors are: cognition, motivation/non-motivation, or situation (Shane et al., 2000; Liñán & Chen, 2009).

Based on the above arguments, the intention of social entrepreneurship is indispensable trend for the establishment of a social enterprise; it is also an emerging research field that has attracted a large number of researchers. Kruse et al. (2020) reported that the prerequisites that help motivate people to operate as social entrepreneurs have not been fully explored, especially in developing countries, where there is a need to balance economic development and improving social quality.
Mindfulness and social entrepreneurial intention

Theory of Planned Behaviour (TPB)

In the field of entrepreneurial intention research, various intention models have been proposed, two are widely used for business start-up research, namely uTPB (Ajzen, 1991) and entrepreneurial event model (EEM) (Shapero & Sokol, 1982). Schlaegel and Koenig (2014) have shown that TPB is more effective in evaluating entrepreneurial intention than EEM. Studies comparing TPB and EEM by Alferaih (2017) and Sharahiley (2020) have also suggested that TPB components explain entrepreneurial intention more than EEM ones. Therefore, this study has adopted TPB to study SEI.

The TPB model has been widely used in the field of social entrepreneurship research because it is built on the idea that the intention to engage in certain behaviours is shaped by the individual’s needs as well as having the confidence in their ability to do it. In the Ajzen (1991) model, there are three cognitive variables as prerequisites that can influence the intention of behaviour, namely subjective norm, PBC, and attitude. Many studies have also explained that the TPB model is the theoretical foundation for the formation of SEI (Hockerts, 2017; Luc, 2020; Tiwari et al., 2017). On the other hand, the original concepts of TPB can be modified to suit specific areas of study and increase accuracy. This has attracted scientists when studying SEI. Existing factors can be modified according to the scope and nature of the study, additional factors can be added and causal links can be adjusted (Iakovleva & Kolvereid, 2009). Modifications in the standard TPB model are essential prerequisites because the nature and scope of each study are different (Kolvereid, 1996).

Ajzen (1991) introduced the concept of PBC to explain all aspects of the target behaviour that are not under the control of the will of the subject. However, the diverse mix of related concepts and the lack of a specific definition of PBC has led researchers to examine in detail the aspects of this concept (Armitage & Conner, 1999a, 2001; Conner & Armitage, 1998; Terry & O’Leary, 1995; Trafimow et al., 2002). The research results suggested two components to the concept of PBC: the extent to which an individual has access to the means to control target behaviour called perceived controllability (Ajzen, 2002); and an individual who is confident about his or her specific situation to engage in certain behaviours, namely self-efficacy (Armitage & Conner, 1999a; Manstead & Van Eekelen, 1998; Terry & O’Leary, 1995).

Differences in the conceptualisation of control beliefs in different studies make it difficult to compare findings. The reason is that PBC can reflect perceived controllability or self-efficacy in various studies (Pertl et al., 2010). In addition,
these studies do not provide insight into the role of different types of control beliefs that can occur with different types of behaviours, since each study usually includes only one aspect of behaviour or an auxiliary component of PBC. However, although these two basic components contribute differently to cognitive-behavioural control, they are often considered to represent a general research concept of PBC.

The importance of self-efficacy and perceived controllability is determined by researchers in the field of social entrepreneurship research. Mair and Noboa (2006) showed that a person’s high level of self-efficacy allows one to be aware of the feasibility of creating a social enterprise. This positively influences the formation of corresponding behavioural intention. Entrepreneurial self-efficacy and perceived controllability have the most significant and positive impact on the intention to become an entrepreneur and act as a predictor of social entrepreneurship (Fitzsimmons & Douglas, 2011; Forster & Grichnik, 2013; McGee et al., 2009; Tyszka et al., 2011). Therefore, self-efficacy and perceived controllability are not only important elements of intent formation in entrepreneurial intention studies but also in social entrepreneurship studies.

Self-efficacy can be explained as the degree to which an individual believes he or she can build a new business (Martínez-López et al., 2010). It expresses an individual’s belief that they can bring some creative solutions to social problems in society (Hockerts, 2017). Self-efficacy reinforces an individual’s ability to engage in starting and completing new tasks (Kim, 2019). Previous studies have demonstrated that self-efficacy is an important predictor of prosocial behaviours (Patrick et al., 2018). Mair and Noboa (2006) stated that a high degree of self-efficacy allows people to feel that it is feasible to create a social venture, which positively influences the formation of future behavioural intentions. Similarly, McGee et al. (2009) or Sieger and Monsen (2015) have suggested that if an individual feels that they can control the business situation to a certain extent, they will tend to form business intentions. Hence, the following hypotheses have been proposed:

H1: There is a positive relationship between self-efficacy and SEI.

H2: There is a positive relationship between perceived controllability and SEI.
Mindfulness

In the field of social entrepreneurship, social traits (such as perceived social support, empathy, moral obligation, self-efficacy, etc.) have been shown to motivate individuals to start-up social businesses (Bacq & Alt, 2018; Bargsted et al., 2013; McMullen & Bergman, 2017; Miller et al., 2012; Nga & Shamuuganathan, 2010; Waddock & Steckler, 2016). However, Mair and Noboa (2006) argued that not everyone with empathy and moral obligation becomes a social entrepreneur. This is likely due to the fact that social entrepreneurs pursue dual missions: business and social value creation (Dees, 1998; Moss et al., 2011). Mindfulness has been shown to have an impact on increasing the awareness of business opportunities and on caring for the community (Kelly & Dorian, 2017). This is the premise that creates the motivation for a person to become a social entrepreneur.

Mindfulness is a concept that has been widely used in consciousness studies but has recently been applied to understand behaviours in other areas, including clinical psychology, meditation, physical activity, education, business, and social behaviour. Mindfulness as defined by Brown and Ryan (2003), increases attention and awareness of current experiences and therefore, they are central characteristics of mindfulness. Awareness refers to internal monitoring (e.g., emotions) and the external environment (e.g., business start-up environment), regarding the ability to perceive any changes in the internal and external environment at any time. Attention, on the other hand, can be described as the process of focusing on conscious awareness and becoming sensitive to the current situation (Brown & Ryan, 2003).

Previous studies have shown that mindfulness is effective in reducing stress, resilience, engaging in work, reducing intention to switch jobs, strengthening relationships and communication in the workplace, and performing tasks (Good et al., 2016; Hyland et al., 2015; Sutcliffe et al., 2016). However, research on the role of mindfulness in social entrepreneurship remains scarce.

According to Weick and Sutcliffe (2006), organisational mindfulness involves an awareness of personal complexity and the capabilities in decision-making, assessment of situations, and consideration of alternatives, since it also shows that mindfulness can bring awareness about the intention of accomplishing the dual goal of creating social and economic values and becoming an agent of change. Business actions can be further enhanced by alertness and flexibility created by mindfulness (Frese & Gielnik, 2014; Mathias et al., 2015). Therefore, it can be expected that an individual’s mindfulness can explain the extent or intention of their social business. Research shows that some individuals with
high mindfulness tend to be more consistent than others (Baer et al., 2006; Brown & Ryan, 2003).

Mindfulness has shown a positive connection with general notions of self, such as self-efficacy (Greason & Cashwell, 2009). Bandura (1997) proposed that the origins of self-efficacy are related to both cognitive and emotional processes. In social cognitive theory, Bandura (1986) suggested that individuals tend to act in the way they interpret reality and this activity is in turn strongly determined by the degree of self-recognition, their self-awareness, self-regulation, and self-control. Other researches have pointed out that clear cognition and a clear mind also increase people’s ability to think more positively (Kabat-Zinn, 1990).

Feldman et al. (2007) found that people with high levels of mindfulness tend to have greater cognitive flexibility, problem analysis, deployment planning, and less procrastination. Astin (1997) reported that participants who completed mindfulness training tended to exhibit a higher sense of control over a cognitive, emotional, and behavioural experience. Specifically, the ability to observe the mind’s activities nonjudicially is associated with more realistic perception (Brown et al., 2007). Studies also reported that people with high levels of mindfulness tend to have a high ability to deal with challenges and difficulties (Feldman et al., 2007), which positively affects self-control and seeking help, while reducing the trend towards procrastination (Howell & Buro, 2011). It is proven that mindfulness can promote more self-adaptive behaviours by easing habitual or automatic cognitive events (Vago & David, 2012). Therefore, the following hypothesis was formulated:

**H3:** Mindfulness is positively related to self-efficacy.

The idea of a stable and unchangeable reality can push people into a sense of destiny, hindering their perception of control (Caplan & Schooler, 2003). When mindfulness is high, individuals are aware that everything changes constantly and can thus, respond accordingly (Langer, 1989). At this time, an individual can adapt to the present situation, not based on past knowledge that the situation is inexplicable. This argument allows people to experience more control because they perceive reality as something that is constantly changing, thus creating the ability to control the situation and flexibly respond to situations that arise. In contrast, according to Langer (1989), people with low mindfulness perceive many threats to perceived controllability. These individuals rely on past events to visualise the present, and this may limit their perceived controllability. In particular, negative expectations about the context, others, and themselves have narrowed their awareness of possible realities, contributing to a passive mindset.
A high level of mindfulness thus, can contribute to starting a business for various reasons. Mindfulness has been shown to improve flexibility, alertness, and readiness to see, understand, and act in a specific situation (Dane & Brummel, 2014; Good et al., 2016). Dane (2011; 2018) argues that being able to engage in various beneficial stimuli in a business environment, characterised by uncertainty and change, helps entrepreneurs aspire to gather important information for their decision making. Moreover, working in uncertain and changing conditions requires individuals to think to adapt and improvise to reduce error rates (Dane & Brummel, 2014; Rerup, 2005). In contrast, Dane (2011) and Good et al. (2016) suggested that low mindfulness can distract an individual from pursuing goals, meaning that he or she spends less time and resources on awareness for performing tasks. Therefore, the following hypothesis was proposed:

H4: Mindfulness is positively related to perceived controllability

According to Sutcliffe et al. (2016), mindfulness brings positive results to an organisation. This is due to the efficient allocation of resources and innovative solutions, especially in complex and dynamic business activities, and this is similar to social entrepreneurship activities. Previous literature and studies have pointed to a relationship between mindfulness and intent to behave while dispositional mindfulness can play an important role in SEI. Based on the concept of mindfulness in the context of performance (Dane, 2011; Good et al., 2016) and extending Rerup’s (2005) conceptualisation of entrepreneurship, the current research examines how mindfulness relates to business actions, defines how actions are performed to start an independent business of their own according to their real interests or intention. Therefore, the following hypothesis is proposed:

H5: Mindfulness is positively related to SEI.
RESEARCH METHODOLOGY

Data Collection and Sample

The study subjects were students, at all academic levels (bachelor, Master’s, and PhD) studying economics-related majors at universities with head campus in Ho Chi Minh City. The universities are Ho Chi Minh City University of Economics (UEH), Ho Chi Minh City Open University (OU), Ho Chi Minh City University of Technology (HUTECH), Ho Chi Minh City University of Technology (HCMUT), University of Finance - Marketing (UFM), Banking University (BUH), and Hong Bang University (HIU). The convenience sampling method was adopted and questionnaires were sent to 400 students (the sample size).

The survey was conducted between August 2019 and October 2019. Only 294 valid questionnaires were accepted for data analysis. Table 1 shows the result of the data analysis.

Table 1  
Sample descriptive statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>160</td>
<td>54.4</td>
</tr>
<tr>
<td>Female</td>
<td>134</td>
<td>45.6</td>
</tr>
<tr>
<td>Age (year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>69</td>
<td>23.5</td>
</tr>
<tr>
<td>25–35</td>
<td>87</td>
<td>29.6</td>
</tr>
<tr>
<td>36–45</td>
<td>81</td>
<td>27.6</td>
</tr>
<tr>
<td>Over 45</td>
<td>57</td>
<td>19.4</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University student</td>
<td>175</td>
<td>59.5</td>
</tr>
<tr>
<td>Master student</td>
<td>83</td>
<td>28.2</td>
</tr>
<tr>
<td>PhD student</td>
<td>36</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Measurement

Questionnaires are often used to collect data in modern scientific studies. This study used a 5-point Likert scale where 1 means strongly disagree and 5 strongly agree. The scales of the research concepts in this study were adopted from previous studies. The SEI scale was inherited from Liñán and Chen (2009) that included six items. The perceived controllability scale was built from studies of Armitage
and Conner (1999a; 1999b) that included four items. The self-efficacy scale was inherited from Pihie and Bagheri’s (2013) with four observed variables. The mindfulness scale of nine items was inherited from Langer (1989).

Data Analysis

Data in this study were processed using SEM. The SEM is used to test the theory in various fields because SEM’s statistical methods and mathematical models are suitable for estimating models with multivariate structure (Kaplan, 2008). This study used the partial least squares-structural equation modelling (PLS-SEM) (partial least squares) method because it is suitable for small sample size studies and for exploring model studies (Hair et al., 2011). SmartPLS 3 software was used for this sample analysis. Hair et al. (2019) proposed a PLS-SEM analysis process consisting of two phases: the measurement model assessment and the structural model assessment. The measurement model assessment phase is conducted by assessing the reliability and validity check. Meanwhile, structural model assessment is done through multicollinearity test, R² and path coefficients evaluation, and model comparisons.

RESULTS

Measurement Model Assessment

Reliability test

The reliability of the scales were used to validate the statistical results of the study. Typically, the reliability of the scale is assessed through Cronbach’s alpha or composite reliability. It helps to check the convergence of observed variables belonging to the same research concept. However, compared to Cronbach’s alpha, the composite reliability is considered to be superior in terms of the internal consistency of the scale because it uses standard loads of observed variables (Fornell & Larcker, 1981). However, the interpretation of the reliability of these two indicators is similar. Litwin (1995) suggested that the value of Cronbach’s alpha should be higher than 0.7. According to Hair et al. (2016), aggregate reliability between 0.6 and 0.7 is considered acceptable in exploratory research, while results between 0.7 and 0.95 represent satisfactory to good.
Table 2
Reliability test

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>No. of items</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>9</td>
<td>0.902</td>
<td>0.919</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>4</td>
<td>0.900</td>
<td>0.930</td>
</tr>
<tr>
<td>Perceived controllability</td>
<td>4</td>
<td>0.748</td>
<td>0.840</td>
</tr>
<tr>
<td>SEI</td>
<td>6</td>
<td>0.866</td>
<td>0.897</td>
</tr>
</tbody>
</table>

Table 2 shows that the scales with Cronbach’s alpha ranged between 0.748 and 0.902. The range of composite reliability was between 0.840 and 0.930. Thus, the scales of the research concepts in the current model achieved satisfactory reliability.

Convergent validity

It is also important to assess the convergence of concepts in the research model to illustrate the full convergence of the measurement items on their respective structures (Fornell & Larcker, 1981). Typically, the evaluation of convergent validity is based on the average variance extracted (AVE) and the outer loading (Götz et al., 2010). The observed variables in the model need to explain more than 50% of the difference compared with other variables to express the reliability level. Therefore, these outer loadings need to be greater than 0.7 to be considered satisfactory. Hair et al. (2010) suggested that the AVE should be over 50%, the extracted factors could be more explainable than any other extract combinations. This proves that the structure has convergence. The results in Table 3 show that the AVE indicators and outer loadings both satisfy the above conditions.

Table 3
Convergent validity and collinearity statistics

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>No of items</th>
<th>Outer loadings</th>
<th>AVE</th>
<th>VIF</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>9</td>
<td>0.708–0.769</td>
<td>0.559</td>
<td>1.782–2.204</td>
<td>–</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>4</td>
<td>0.852–0.889</td>
<td>0.770</td>
<td>2.249–2.796</td>
<td>0.210</td>
</tr>
<tr>
<td>Perceived controllability</td>
<td>4</td>
<td>0.724–0.788</td>
<td>0.569</td>
<td>1.391–1.469</td>
<td>0.167</td>
</tr>
<tr>
<td>SEI</td>
<td>6</td>
<td>0.733–0.810</td>
<td>0.591</td>
<td>1.673–1.949</td>
<td>0.385</td>
</tr>
</tbody>
</table>

Note: VIF = variance inflation factor
Discriminant validity

It is a method of independently evaluating the scales of different concepts to prove that these concepts have required convergence, that is, no correlation with each other. According to Fornell and Larcker (1981), discriminant validity is assessed by comparing the square root of the AVE of each structure in the research model and the inter-correlation with the remaining structures. If all of these square roots of the AVEs are greater than their inter-correlations, then the discriminant of the research concepts is satisfied. In this study, the square root of the AVEs is bigger than the correlations with other structures. Therefore, its discriminant validity is qualified.

Table 4

Discriminant validity

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>SEI</th>
<th>Mindfulness</th>
<th>Perceived controllability</th>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEI</td>
<td>0.769</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>0.457</td>
<td>0.747</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Perceived controllability</td>
<td>0.309</td>
<td>0.409</td>
<td>0.754</td>
<td>–</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.564</td>
<td>0.458</td>
<td>0.196</td>
<td>0.877</td>
</tr>
</tbody>
</table>

Structural Model Assessment

Multi-collinearity statistics

Multi-collinearity is a phenomenon that magnifies the extent to which research structures interact with each other. The VIF index is used to assess this phenomenon. If this index is not greater than 5, we can conclude that multi-collinearity does not occur (Sarstedt et al., 2016). According to the results shown in Table 3, the largest VIF is 2,796, a lot smaller than the “cut-off point.” Thus, the multi-collinear phenomenon has a negligible impact on the results.

Table 5

Total effects in the model

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>SEI</th>
<th>Perceived controllability</th>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>0.457</td>
<td>0.409</td>
<td>0.458</td>
</tr>
<tr>
<td>Perceived controllability</td>
<td>0.142</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.448</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Explanatory power assessment

The PLS-SEM assesses the relationship between the research concepts proposed in the model through $R^2$ (coefficient of determination) (Hair et al., 2012) and $\beta$ (the path coefficients of the model) (Chin, 1998); $R^2$ explains the degree of bias in potential endogenous variables while $\beta$ indicates the magnitude of the influence of relationships in the research model (Lleras, 2005). Chin (1998) argues that $R^2$ is strong, medium, and weak at 0.67, 0.33, and 0.19, respectively.

Falk and Miller (1992) stated the “cut-point” value of 0.10 can be used to determine whether an endogenous structure is satisfactorily explained by a set of exogenous structures. If $R^2$ fails, the structural model may be considered unsatisfactory. Thus, the $R^2$ values in Table 3 are larger than 0.10. Therefore, the path coefficients can be used to evaluate the effects of research concepts.

The statistical significance and model comparisons

Hair et al. (2019) suggested using bootstrapping to assess the statistical significance of the path coefficients. The results in Table 6 show that most of the path coefficients are statistically significant at 95% confidence level. In the relationship between perceived controllability and SEI, the $p$-value of 0.085 was greater than 0.05. This relationship is important to compare the difference between perceived controllability and self-efficacy. Therefore, it is statistically significant at 90% level.

Table 6

<table>
<thead>
<tr>
<th>Paths</th>
<th>Original sample</th>
<th>Sample mean</th>
<th>Standard deviation</th>
<th>T-statistics</th>
<th>$P$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness $\rightarrow$ Perceived controllability</td>
<td>0.409</td>
<td>0.409</td>
<td>0.081</td>
<td>5.045</td>
<td>0.000</td>
</tr>
<tr>
<td>Mindfulness $\rightarrow$ Self-efficacy</td>
<td>0.458</td>
<td>0.461</td>
<td>0.064</td>
<td>7.156</td>
<td>0.000</td>
</tr>
<tr>
<td>Mindfulness $\rightarrow$ SEI</td>
<td>0.193</td>
<td>0.198</td>
<td>0.090</td>
<td>2.143</td>
<td>0.032</td>
</tr>
<tr>
<td>Perceived controllability $\rightarrow$ SEI</td>
<td>0.142</td>
<td>0.146</td>
<td>0.083</td>
<td>1.722</td>
<td>0.085</td>
</tr>
<tr>
<td>Self-efficacy $\rightarrow$ SEI</td>
<td>0.448</td>
<td>0.443</td>
<td>0.089</td>
<td>5.037</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Figure 2 and Table 5 show the relationships in the research model to be positive. Thus, the proposed theories are supported, the research concepts are positively related to each other. In particular, the direct impact of self-efficacy on SEI is strongest compared to other relationships (β = 0.448, see Figure 2). However, it is interesting to note that self-efficacy is an intermediate variable that enhances the relationship between mindfulness and SEI (β = 0.205, see Table 7). This intermediate effect is even stronger than the direct effect of mindfulness on the SEI. Another interesting finding is the relatively small effect of perceived controllability on SEI (β = 0.142, see Figure 2), as well as its unclear intermediary role in the relationship between mindfulness and SEI (β = 0.058, see Table 7). This shows that the survey participants were still apprehensive about developing their careers through social enterprises.

Table 7

<table>
<thead>
<tr>
<th>Specific indirect effects</th>
<th>Paths</th>
<th>Specific indirect effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness → Perceived controllability → SEI</td>
<td>0.058</td>
<td></td>
</tr>
<tr>
<td>Mindfulness → Self-efficacy → SEI</td>
<td>0.205</td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION AND CONCLUSION

The objective of the study was to understand the relationship between mindfulness, self-efficacy, perceived controllability, and SEI. The results supported the proposed hypotheses. The results showed that mindfulness had an impact on self-efficacy (0.458), perceived controllability (0.409), and SEI (0.193). The current study added knowledge of personality and entrepreneurship theory (Frese & Gielnik, 2014; Baum et al., 2014). The results showed that predictive power can be increased by using specific characteristics, such as dispositional mindfulness, for business activities and decisions (Caliendo et al., 2014; Rauch & Frese, 2007).

According to one study, mindfulness promotes high states of consciousness through realistic experience with attention and awareness (Brown & Ryan, 2003). The practitioners therefore become more confident about self-efficacy as well as perceived controllability in focusing on the dual mission of creating economic and social value and becoming agents of change (Dees, 1998). In assessing the indirect impact of dispositional mindfulness on intention, attention is key. The indirect effect of mindfulness on SEI through self-efficacy is stronger ($\beta = 0.205$) than its direct effect ($\beta = 0.193$). This result reaffirms the important role of self-efficacy which explains the SEI (Fitzsimmons & Douglas, 2011; Forster & Grichnik, 2013; McGee et al., 2009; Mair & Noboa, 2006; Tyszka et al., 2011).

In contrast, the indirect effect of mindfulness on SEI through perceived controllability is quite weak ($\beta = 0.058$), although the regression model shows that self-efficacy and perceived controllability constitutes a large part of the total impact in the model of SEI. Ajzen (2002) defined perceived controllability in the context of SEI as “beliefs about the extent to which performing the behaviour is up to the social entrepreneurship.” This suggests that the current study participants appeared to have underestimated the means of action that rely primarily on self-efficacy or it may be that they underestimated external support or fear of barriers from an institutional or cultural perspective.

The current research is among handful of studies on social entrepreneurship in transition markets like Vietnam, particularly among start-ups in the field of commercial business. This seminal study provides avenue for future research on social entrepreneurship. Policies that support the start-up of social entrepreneurship may need to be more concerned with the mental characteristics of future entrepreneurs as well as their self-improvement and self-efficacy through mindfulness. The support of society and the state in creating favourable conditions and the means to help future social entrepreneurs in the early stages is also one of the important factors helping to promote their SEI.
This study also points to a new direction in developing social entrepreneurs through training activities. In the past, practices related to mindfulness were often viewed as mental therapy. However, the effect of mindfulness in addition to increasing awareness of business opportunities also increases compassion, which informs ethical decisions (Capel, 2014; Kelly & Dorian, 2017). Training programmes that integrate mindfulness impacts the participants’ perceptions, thereby changing their spirit and nature.

This study has some limitations. First, the study was conducted in Vietnam, where social businesses are in the early stage of formation and development. Therefore, future studies should be carried out in other emerging economies to test and increase the generalisability of the proposed research model. Second, the starting point of social entrepreneurs is diverse (Leadbeater, 1997), hence, it is necessary to expand the survey subjects in the future study (this study only surveyed students). Third, this study was cross-sectional and hence, further studies can fix this shortcoming by using data collected at different times. In addition, future researchers can design longitudinal studies to further refine and understand the process from SEI to actual behaviour.

ACKNOWLEDGEMENTS

This research was funded by the Ho Chi Minh City Open University under grant number E2021.14.1.

REFERENCES


Mindfulness and social entrepreneurial intention


## Appendix

### Measurement scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Code</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Entrepreneurial Intention</td>
<td>Int1</td>
<td>I am ready to do anything to be a social entrepreneur</td>
<td>Liñán &amp; Chen (2009).</td>
</tr>
<tr>
<td></td>
<td>Int2</td>
<td>My professional goal is to become a social entrepreneur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Int3</td>
<td>I will make every effort to start and run my own social firm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Int4</td>
<td>I am determined to create a social firm in the future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Int5</td>
<td>I have very seriously thought of starting a social firm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Int6</td>
<td>I have the intention to start a social firm some day</td>
<td></td>
</tr>
<tr>
<td>Perceived Controllability</td>
<td>PControllability1</td>
<td>Whether or not I start a social firm is entirely up to me</td>
<td>Armitage &amp; Conner (1999a; b)</td>
</tr>
<tr>
<td></td>
<td>PControllability2</td>
<td>I feel like I can control over running a social firm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PControllability3</td>
<td>There are likely to be plenty of opportunities for me to start and run a social firm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PControllability4</td>
<td>I feel that starting and running a social firm is not beyond my control</td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Efficacy1</td>
<td>If I decide to start a social business, I have skills of marketing to run it well</td>
<td>Pihie &amp; Bagheri’s (2013)</td>
</tr>
<tr>
<td></td>
<td>Efficacy2</td>
<td>If I decide to start a social business, I have skills of personnel management to run it well</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Efficacy3</td>
<td>If I decide to start a social business, I have skills of production/service management to run it well</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Efficacy4</td>
<td>If I decide to start a social business, I have skills of organization to run it well</td>
<td></td>
</tr>
</tbody>
</table>

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(continued)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Code</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>Mind1</td>
<td>I like to investigate things about social entrepreneurship</td>
<td>Langer (1989)</td>
</tr>
<tr>
<td></td>
<td>Mind2</td>
<td>I am always open to new ways of doing things about social entrepreneurship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind3</td>
<td>I “get involved” in almost everything I do about social entrepreneurship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind4</td>
<td>I am very creative.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind5</td>
<td>I attend to the “big picture” about social entrepreneurship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind6</td>
<td>I am very curious.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind7</td>
<td>I try to think of new ways of doing things about social entrepreneurship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind8</td>
<td>I like to be challenged intellectually.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mind9</td>
<td>I like to figure out how things about social entrepreneurship work</td>
<td></td>
</tr>
</tbody>
</table>