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Between Studying and New Venturing: Personal Knowledge Management Challenges Through the Lens of Entrepreneurship Undergraduate Students

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Abstract

Research to improve entrepreneurship education in higher educational institutions (HEIs) has gained much attention over the past years. Prior studies have thoroughly investigated the challenges of entrepreneurship education based on the providers' and educators' perspectives. However, the experiences of the students who receive and undergo the process have not received equal attention, especially when investigating the "for" entrepreneurship approach where the goal is to develop entrepreneur graduates. Thus, a phenomenological study was conducted to understand the challenges that the students perceive in studying entrepreneurship whilst creating their businesses as the expected outcome of the "for" entrepreneurship approach. The data gathered from six participants from an undergraduate entrepreneurship program revealed that their struggles were related to personal knowledge management practices. This finding extends the literature on entrepreneurship education and presents avenues for further inquiry on personal knowledge management for entrepreneurship education.

Keywords: *Entrepreneurship Education; Higher Educational Institutions; Personal Knowledge Management; Students; Phenomenology*

INTRODUCTION

Entrepreneurship education in higher educational institutions (HEIs) has become a prevalent topic due to the rising acknowledgment of the beneficial impacts of nurturing entrepreneurship (Lindner, 2018; Nabi et al., 2017). Despite the benefits, findings on the effectiveness of entrepreneurship education have been inconsistent (Martínez-Gregorio et al., 2021; Nowiński et al., 2019; Rauch et al., 2018). As a result, attention, demands, and effort paid to explore and address the challenges to deliver an effective and successful entrepreneurship education have been significant over the past years (Bell & Bell, 2020; Blenker et al., 2008; Lin & Xu, 2017).

Numerous empirical studies have tried to evaluate the issues that affect the quality of entrepreneurship education in terms of the pedagogical aspect and institutional approach (i.e., resources and teaching staff) that focuses on the provider's side (e.g., De Almeida Souza et al., 2020; Hameed & Irfan, 2019; Hoppe, 2016; Mandel & Noyes, 2016; Wiklund et al., 2019; Wu et al., 2019). These aspects received much attention, especially concerning the entrepreneurship education "for" entrepreneurship approach, which is found to be the most effective in creating entrepreneur graduates. It is due to the method's nature that it adopts a practice-based process that integrates classroom learning and real-life business practices with multiple parties (Bell, 2015; Bell & Bell, 2020; Boldureanu et al., 2020; Fiore et al., 2019; Hyams-Ssekasi & Caldwell, 2018; Welsh et al., 2016). Therefore, inquiries on the subject in relation to its supporting elements are increasing (Hannon, 2005; Hyams-Ssekasi & Caldwell, 2018; Welsh et al., 2016).

However, one aspect that has often been overlooked is the experience of the students, who are the main participants, actors, and audience of entrepreneurship education (Naia et al., 2014). Although

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there are studies that take into account the students' experiences in learning, they have not been able to capture the details since they still approached the learning aspect as a predictor and moderated variable to explain a relationship and draw the overall effect of entrepreneurship education (Ahmed et al., 2020; Hahn et al., 2017). Meanwhile, the process is actually essential, if not the core, for entrepreneurship education (Sirelkhatim & Gangi, 2015; Welsh et al., 2016), which would support a better explanation for the outcome of entrepreneurship education. As Pittaway and Thorpe (2012) suggest, the outcome of a course is subject to each student's experiences, indicating the importance of individual observation. They play an important role in determining the effectiveness of entrepreneurship education since students are the recipient who is expected to apply what they have learned. Therefore, examining the students' thoughts, especially their challenges, is equally critical to provide input that would help improve entrepreneurship education and tailor the curriculum to meet the students' needs and conditions. Although acknowledgment of the students' roles in improving entrepreneurship education is growing (Byun et al., 2018; Hahn et al., 2017; Vanevenhoven, 2013; Vanevenhoven & Liguori, 2013), insights on entrepreneurship students' outlook are mainly from the western side of the globe (Linton & Klinton, 2019; Mason & Arshed, 2013; Wu et al., 2019; Xu et al., 2021). Cases representing entrepreneurship students in emerging countries are still scarce. Meanwhile, context and culture are two aspects that could affect the quality of education (Savard & Mizoguchi, 2019).

Hence, this study attempts to answer the demand to better understand the students' side and fill the gap of a comprehensive exploration of entrepreneurship education students' experiences in emerging countries such as Indonesia. In particular, the present study aims to obtain an in-depth understanding of the challenges the students face in receiving and undergoing entrepreneurship education at higher educational institutions (HEIs) that adopt the 'for' entrepreneurship approach. By providing evidence of the entrepreneurship education students' essence, especially in terms of the challenges, this research contributes to the entrepreneurship education literature in HEIs. The lived experiences' findings will help evaluate and enhance entrepreneurship education programs provided at HEIs that follow the 'for' entrepreneurship curriculum design strategy.

LITERATURE REVIEW

Entrepreneurship education

One of the most common understandings of what entrepreneurship education entails is based on its categorization, which is according to the learning outcomes (Hannon, 2005; Hytti & O'Gorman, 2004). Based on this aspect, entrepreneurship education is divided into entrepreneurship education 'about', 'through', and 'for' entrepreneurship (Hannon, 2005; Lindner, 2018). The first category, teaching about entrepreneurship, falls into an academic study where the mode of delivery or learning experience is through the elaboration of entrepreneurial concepts directly in an entrepreneurship education program (Hannon, 2005). The learning outcome of this approach is to enhance students' understanding of the theoretical foundations of entrepreneurship (Hytti & O'Gorman, 2004). On the other hand, the teaching 'for' entrepreneurship's objective is to encourage entrepreneurship, which requires learning by doing (Pittaway & Cope, 2007). The outcome of this category is creating new ventures (Hytti & O'Gorman, 2004). As a result, the curriculum of entrepreneurship education following this approach is often in reference to the stages of new venture creation (Mandel & Noyes, 2016; Sirelkhatim & Gangi, 2015). Frameworks for new venture creation are numerous, but generally, it follows three main stages: pre-creation, initiation, and growth (Diakanastasi et al., 2018). Considering the method and curriculum corresponding to that of incubators, scholars have argued that the teaching 'for' entrepreneurship method is the most efficient to generate entrepreneurial graduates since the entrepreneur's orientation is mostly action-based (Ramsgaard, 2018). Business schools are even encouraged to change their way of

educating the students to prepare them "for" entrepreneurship, not teach them "about" (Kirby, 2004). Meanwhile, the last method through entrepreneurship is often found as a course in a wide variety of study programs outside of business and management (Lindner, 2018).

Understanding this differentiation is essential for HEIs offering entrepreneurship education since specific approaches and delivering entrepreneurship hold great significance to the success of entrepreneurship education (Piperopoulos & Dimov, 2015). Once HEIs and the facilitators have distinguished and identified the purpose of the program and adjusted the delivery method, investigating other aspects of the program to achieve it could be done (Kickul et al., 2018) since the teaching method needs to be modified according to it (Mwasalwiba, 2010). Reflecting on the vision of exclusive entrepreneurship programs provided at higher educational institutions that aim to have graduates who have or can run their own business, this study approaches entrepreneurship education based on teaching 'for' entrepreneurship. Therefore, this study adopts the definition of entrepreneurship education as the process of teaching and fostering entrepreneurial competencies for students to become successful entrepreneurs (Fayolle & Gailly, 2015; Gautam & Singh, 2015).

However, HEIs offering entrepreneurship education has not been well aware of this differentiation (Haara et al., 2016). This has resulted in a mix of teaching methods, even for the same courses offered in the same university (Nabi et al., 2017; Piperopoulos & Dimov, 2015). Consequently, the extant literature on entrepreneurship education has, in large part, been concerned with evaluating and determining the effectiveness of entrepreneurship education (Henry, 2015; Naia et al., 2014; Vanevenhoven & Liguori, 2013).

Many studies have tried to evaluate the teaching methods in delivering a learning-by-doing approach toward entrepreneurship education and its impact on self-employment (Blenker et al., 2008; Guerrero et al., 2020; Mandel & Noyes, 2016; Wu et al., 2019). However, the findings have shown inconsistent results (Martínez-Gregorio et al., 2021). Despite this discovery, only a few have recognized the need to investigate the reason or the challenges as to why entrepreneurship education might not be accomplishing what is expected effectively. Fretschner and Lampe (2019) were one of the very few who tried to find an explanation of the impact of entrepreneurship education and found that the typical measures used to evaluate entrepreneurship programs are generally ineffective. One of the reasons for this might be that most studies also mainly look at the end goal without the scrutiny of the process. This explains the lack of studies that examine the students' learning process in comparison to the outcome investigation. Meanwhile, the "for" entrepreneurship method is a process-based approach centered on the students. Mason and Arshed (2013) are one of the very few who are aware of the importance of the students' perspective in entrepreneurship education as they analyzed the students' reflection on their learning process. However, their study only included first-year students, which is not yet sufficient to provide a picture of the whole entrepreneurship education program. Thus, calling for research to a more extensive inquiry involving all years of entrepreneurship students to provide a more comprehensive account.

Moreover, another intriguing matter is that research on entrepreneurship education seems to have left the aspect of knowledge management untouched even though the teaching and learning process can be highly related to it and can even benefit from it (Bandera et al., 2016). Especially considering the nature of entrepreneurship education, which is iterative and flexible (Neck et al., 2014; Neck & Corbett, 2018), knowledge management and personal knowledge management become even more relevant to support the broader level of entrepreneurship education and the individual level.

Personal Knowledge Management

Although studies on knowledge management are extensive, the discussion on personal knowledge management (PKM) is still growing. There has not been an overarching framework that describes PKM comprehensively, starting from its emergence in the extant literature. In terms of its background, Völkel and Abecker (2008) were one of the first scholars who investigated and put forward the idea that the term PKM was first introduced by Polanyi (1958). However, Pauleen (2009) advanced that PKM emerged from Drucker's (1968) concept of the knowledge worker. Nevertheless, to date, the history and the subject of PKM itself have not reached an agreement. As a result, previous studies have kept evolving the theory over time.

Beginning with Frand and Hixon (1999), they assert that PKM grew as a response to the phenomenon where people are surrounded by data, which becomes the main source of people's problems. PKM is argued to be essential to adapt to this situation so that individuals can differentiate and make use of the relevant knowledge for them out of the abundance of options out there (Frand & Hixon, 1999). One limitation of their study is that PKM is mainly concerned with individualistic activities. Departing from this, Avery et al. (2001) further developed their framework of PKM by adding activities involving others, such as collaborating with others. While the two previous studies mainly focused on the activities in PKM, Tsui (2002) presented a new view that incorporates technology or PKM tools in the process. This study began the PKM divide, which turned PKM into two different streams: activity-based and technology-based (Cheong & Tsui, 2011).

Out of the previous studies conducted, the most comprehensive model yet on PKM was proposed by Cheong and Tsui (2011). In their model, PKM consists of four main aspects, namely personal information management, personal knowledge internalization, personal wisdom creation, and interpersonal knowledge transferring (Cheong & Tsui, 2011). Each of these elements contains different knowledge management processes. The key knowledge management process in personal information management is locating knowledge. In contrast, knowledge creation happens in the personal knowledge internalization, which is then applied in the personal wisdom creation phase. The last phase involves transferring or sharing knowledge (Cheong & Tsui, 2011), outlined in interpersonal knowledge transferring.

RESEARCH METHOD

This study aims to provide a comprehensive portrayal of the experience, particularly the challenges of being a student in a particular study program: entrepreneurship program. Thus, a qualitative design is chosen, specifically phenomenology, since this method can reveal and comprehend what lies behind any phenomenon from the common experiences of those who undergo the phenomenon (Van Manen, 2017).

The participants of this study were six students who are currently undergraduate students in an entrepreneurship program at a business school in Indonesia. Each of the students is in different years: from years 1, 2, and 3. They were chosen using purposive sampling considering the context of the entrepreneurship program's curriculum, which is divided into three years that reflect the new venture creation and growth stages. Therefore, it is required and expected that the informants of the present study are in different stages of their new venture creation process to provide a raw and holistic experience of each stage. As for the number of interviewees, it was drawn heuristically, meaning that the total number was determined when there was no new information learned or the data had reached the saturation point. Moreover, the number is considered to be representative as phenomenological studies tend to involve five to ten participants (Creswell, 1998; Polit & Beck, 2010).

Data Collection and Analysis

To collect the data, participants were interviewed through an online semi-structured interview via Zoom meeting due to the current pandemic situation. Each of the interviews lasted about 40-60 minutes and was recorded to ensure the accuracy of the transcription. The participants were asked open-ended questions about how they perceived their lived experiences in their current study program.

The interview recordings were transcribed and analysed in five steps following Moustakas's (1994) framework. The first step, bracketing, involved rereading the transcripts while playing the interview recordings repeatedly to refresh the researchers' memory and become familiar with the participants' statements and body of language to have a judgment-free understanding. The next step was horizonalization, where the statements relevant to the phenomenon, referred to as the horizons, were noted down separately. The horizons were then reviewed and ensured that they did not overlap. The statements were selected following the requirements of being a necessary and sufficient part of the experience for better understanding and those which can be separated and labeled (Moustakas, 1994). The units of meaning were also selected based on their significance in terms of how much it was mentioned. The statements that met these requirements are then referred to as the invariant constituents. These constituents were then gathered, and the general themes were determined from the individual experience. The following step was to carry out a textual description of each participant. This stage was done to display their own perceptions related to their studying challenges in an entrepreneurship study program. A composite textural description is then presented, which groups all of the individual descriptions into one that describes the whole phenomenon. To ensure the reliability of the findings, we also referred to several theories during the data interpretation as a means for triangulation.

FINDINGS AND DISCUSSION

The overall findings from the analysis revealed that even though the participants of this study varied according to their personalities and backgrounds, they faced several common challenges during their study in the entrepreneurship program. The challenges were not only external or technical issues but also due to the students' struggle to execute several skills, and it eventually affected their progress. These challenges are categorized into three main themes, listed in table 2, drawn based on the participants' meaning units that emerged from their statements. The identified themes—finding resources, applying knowledge, and communication, are generally related to the literature on Personal Knowledge Management (PKM).

Table 1. Identified Challenges Faced By Entrepreneurship Students

Common Challenges of Entrepreneurship Students
Finding Resources
Applying Knowledge
Communication

According to their framework, PKM consists of four essentials: personal information management, personal knowledge internalization, personal wisdom creation, and interpersonal knowledge transferring (Cheong & Tsui, 2011). However, the themes identified in the study only correlate with three out of four PKM elements proposed by Cheong and Tsui (2011), excluding the personal knowledge internalization aspect. A more detailed elaboration on this matter is presented in the following.

Finding Resources

One of the first struggles the participants shared falls into finding resources. This theme is in line with the first aspect of PKM from Cheong and Tsui's (2011) framework, namely personal knowledge management, whereas the resources, in this case, are mostly knowledge-related and persist in each of the venture creation stages or curriculum year. Starting from the first stage, i.e., pre-creation, the participants reflect that the challenges are primarily in the ideation phase. This stage involves finding opportunities and creating business ideas from them, which is the primary process of personal information management or the foundation of PKM (Cheong & Tsui, 2011). Even though competent lecturers and successful business people mentored them, they argued that they still find it difficult to start. The participants felt that their struggles were due to a lack of prior knowledge of entrepreneurship in general and related to information about ongoing businesses or the ideas proposed. This issue affected how they recognized opportunities that would lead to business ideas because prior knowledge is considered a central element and mediator for new business ideas (Grégoire et al., 2010; Mary George et al., 2016; Pittaway & Thorpe, 2012). Therefore, this proposition explains why the participants who argue that they do not have relevant background or knowledge find it difficult to find resources to help them propose new business ideas.

As for the second stage of their venture creation, the initiation stage, the findings indicate that the participants struggle the most in the production stage. However, it does not mean that there are no challenges in the other aspects; but they simply consider the production stage the most significant. One of the causes is the lack of data about the vendors. Yet, this lack of data does not always mean that the data does not exist, but the participants agree that they are at fault, meaning that they are the ones who do not have the data. Searching for the relevant data was challenging as it was time-consuming for them because the data were frequently unorganized.

Meanwhile, in the growth stage, which is the last stage of the venturing journey, one of the resources they struggle to find is knowledge related to creating new value from their business products. In their last year of education and last stage of business development, the participants are demanded to innovate constantly. To execute this process, creativity is also relevant (McDonald et al., 2018; Tantawy et al., 2021), and the students are very well conscious of this. Creativity has long been believed to be the heart of entrepreneurship and has also proven to be its antecedent (Tantawy et al., 2021), which can lead to the proposition of new ideas or the creation of novelty, which has often been considered synonymous with business innovations (Karimi et al., 2016; Yar et al., 2008).

Based on the exploration above, searching for the relevant knowledge, including theoretical or practical knowledge and information related to stakeholders, that would help them advance their business, is pertinent to all the participants in every year and stage of business. This finding is consistent with previous studies that found locating information is the challenge noted by educators of entrepreneurship education (Fiore et al., 2019; Karimi et al., 2016). Furthermore, this major theme is relevant to the PKM element of personal information management, in which the main KM practice is capturing or locating knowledge (Cheong & Tsui, 2011).

Applying Knowledge

Another aspect that describes the participants' challenge is the ability to apply knowledge. Each participant indicated this category of struggle in their narrative through the meaning units of practice, application, execution, and initiation. This study found that applying the knowledge is one of the most notable challenges that affected their experience. Compared to the learning process in the classroom, they find the practice a real problem. They assert that even though they have been equipped with the best practices in the classroom, which are relevant, they do not know how to apply them when needed. Although neither of the participants explicitly mentioned the case of

knowledge application, their statements implied that they found difficulty in applying the lesson learned. One of the reasons, as one participant argues, is due to idiosyncrasy.

Another factor, as suggested from the analysis, that influences their challenge to come up with a business idea or strategy from the given resources was induced partly by their creativity to exploit the knowledge and experiences gained from the classroom. Thus, a need to enhance the students' creativity is necessary. This phenomenon is confirmed by previous studies upholding that creativity mediates opportunity and business idea strategies (Bhatti et al., 2021; Frolova et al., 2021; Heinonen et al., 2011; Mary George et al., 2016; Nabi et al., 2017). Moreover, the findings support the importance of the ability to leverage resources, including knowledge, in order to be able to make the most of business opportunities (Fuentes et al., 2010).

However, their experience also indicates that the curriculum structure also plays a part. The students argue that one factor inhibiting them from applying knowledge effectively is due to the misalignment between what they receive with what they need at the moment. This highlights the fact that the courses might be misplaced in the curriculum, which does not follow the new venture creation timeline. This finding is consistent with Byun et al.'s (2018) claim that one of the causes of ineffective entrepreneurship education is a lack of synchronization in the curriculum. Moreover, it also corroborates previous studies' suggestions that entrepreneurship education should focus on the coherence of subjects and objectives (Klofsten et al., 2019; Nambisan et al., 2019; Wu & Wu, 2017). Thus, this stipulates further research on entrepreneurship education's curriculum design, especially related to the 'for' entrepreneurship approach since this study finds that most students' struggles happen during business practice in the classroom.

The above is an elaboration of the participants' challenges in terms of applying knowledge based on their own experiences. The ability to use the knowledge attained, which is part of the personal wisdom creation practice in PKM, is one of the vital skills to build and grow a business successfully (Anderson & Hardwick, 2017; Bandera et al., 2016; Cheong & Tsui, 2011), which, unfortunately, has been overlooked as previous studies have focused more on providing ways for students to acquire knowledge (Amalia & von Korflesch, 2021; Boldureanu et al., 2020). Not being able to apply the knowledge when needed effectively makes the practical learning journey in entrepreneurship education challenging. However, there are also cases knowledge application could not be made because the resources were not present at the time needed.

Communication

The last common theme experienced by the participants is related to communication. This theme was associated with the following meaning units: miscommunication, conversation, discussion, contribution, approachable, share, and present. Based on the findings, there are two kinds of struggles experienced by the participants in the communication category linked to idea-sharing activities that fall under the interpersonal knowledge transferring element of PKM.

The first challenge in communication occurs in conveying ideas formally, mainly in verbal forms that happen in the context of classroom learning. One of the most common moments shared by the participants is their struggle to present in front of the class and in front of lecturers, mentors, or even investors. The analysis further points out that the challenge in presenting is partly due to the students' doubts about their abilities. The word "nervous" and "cannot" have been uttered multiple times by the participants to describe their condition, implying that they are not yet comfortable presenting their ideas to other people in a formal context. These findings further support Hahn, Minola, Bosio, and Cassia's (2020) study that found entrepreneurship students tend to be more assertive to activities that may reinforce their skills and knowledge rather than those that help develop their skills from the beginning, which in this study's case is classroom presentation.

Meanwhile, in informal communication, challenges also persist due to one's ability to deliver a certain knowledge clearly. Discussion with peers, lecturers, and stakeholders is an activity that is recurrent for the students, and when the ideas are unclear or the discussion is misinterpreted, it affects the overall process. The findings indicate that when knowledge sharing is done ineffectively, it takes up plenty of time to go over a talking point. Furthermore, it shows that one's inability to convey a matter to their peers or team often leads to both internal and external conflicts, suggesting that sharing knowledge is a critical challenge.

The participants also felt that sometimes the struggle is not only because of the lack of ability to communicate with others but also a lack of willingness. Even if one does intend to share their knowledge, their intention is at times doubted. Hence, it can be inferred that the challenges in terms of communication are highly related to teamwork and competition in the classroom. This also demonstrates one of the experiential learning challenges, which the students might have misunderstood. Since the teaching 'for' entrepreneurship approach integrates the new venture creation journey and classroom expectations (Piperopoulos & Dimov, 2015), there are instances where the students may struggle to position themselves as a business team member vs. a participant in the class. The competition to achieve better individual scores has occasionally hindered the knowledge-sharing process required within a team and overall performance. This phenomenon supports Linton and Klinton's (2019) findings that students perform better when they do not put their orientation towards it. Hence, the struggles of sharing ideas appear both from inability and reluctance, which leads to more conflict.

Conflicts are generally something that the participants, especially in the early years, try to avoid, which hinders knowledge sharing. Although the participants are aware of the importance and benefits that communicating or sharing knowledge with others bears on performance, sometimes they prefer not to engage in such activities since conflict is inevitable. These experiences are supported by findings that suggest sharing knowledge comfortably, team openness, and establishing a rapport are significant prerequisites (Bissola et al., 2017; Solomon et al., 2019; Xu et al., 2021). Since this experience mainly occurs in first-year students, it indicates that teamwork or team closeness matters to facilitate knowledge sharing to improve their education and business performance (Centobelli et al., 2017; Høvig et al., 2017; Solomon et al., 2019). In contrast, not engaging in knowledge-sharing activities has been found to jeopardize one's creativity and, eventually, the overall performance (Bogilović et al., 2017; Černe et al., 2014).

Thus, it can be concluded one of the essence of the participants' challenges is due to communication issues. The students feel that this aspect is considered their challenge since they are still trying to master that skill. Regardless of how brilliant the idea is, if one does not and cannot convey and reach the audience's understanding, it would eventually threaten the student's classroom and business performance.

CONCLUSION

The present study has explored and described the phenomenon of the students' challenges in studying and creating new ventures. The challenges turn out to be largely associated with Personal Knowledge Management (PKM) practices. Although some difficulties occurred inside the classroom, challenges prevailed outside of the classroom more; when they were required to execute the knowledge and skills attained from the classroom to their real-life entrepreneurial tasks. Being able to search, implement, and communicate are basic competencies compulsory for nascent entrepreneurs to make their ventures work out well. They are all part of PKM practices, which the students find challenging to gain mastery over. As demonstrated by this study's findings, the ineptitude of these skills eventually affects the participants' performance, which ultimately impacts

their learning progress and grade. Thus, our findings suggest that PKM is an essential skill required for nascent entrepreneurs to navigate from classroom activities to their entrepreneurial activities.

This paper contributes to the literature on entrepreneurship education by presenting the challenges faced by the students for insights to improve the teaching and learning process of entrepreneurship education. It also extends the literature by covering a linkage between entrepreneurship education and personal knowledge management, which is under-researched. Additionally, this study provides practical implications for the study program to refine the curriculum of entrepreneurship education. The findings support the importance of embedding personal knowledge management in the teaching and learning process since it is a skill that is pertinent in every year or new venture stage. Moreover, more attention should be put into providing the appropriate guidance for students outside the classroom by experienced mentors according to each case.

LIMITATIONS & FURTHER RESEARCH

This study is not without limitations. Even though phenomenology does not aim for the generalization of findings, the small sample of this study could limit the breadth of the data. Future studies could take in a larger sample of participants from other entrepreneurship education programs in other universities to illustrate a more comprehensive understanding of the phenomenon.

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