

“Entrepreneurial Self-Efficacy and Competencies: Entrepreneurs’ Embedded Resources”.

INTRODUCTION

In a new venture creation process, entrepreneurs need to have a significant level of self-confidence and also ability in performing specific entrepreneurial tasks. These elements are considered as embedded resources for the entrepreneurs. It is important to recognize these two elements at the early stage of the new venture creation process because they can influence entrepreneurs thinking, behaviour and also action. However, these elements must be studied further due to their similarities and also differences.

Previous works (see Chen et al., 1998, De Noble et al., 1999 and Kickul et al., 2009) recognize entrepreneurs’ self-confidence through entrepreneurial self-efficacy construct (ESE). While entrepreneurs’ ability to perform entrepreneurial tasks is recognized by entrepreneurial competencies construct (Ahmad, 2007; Man & Lau, 2000; Rowe, 1995). Notably, ESE construct is about self-assessment about certainty in performing entrepreneurial tasks. However, the entrepreneurial competencies construct (in term of assessment) tends to recognize the same components as ESE because it integrates and anticipates future entrepreneurial tasks which also may lead to assessment of self-belief constituent. So, the purpose of this study is to develop and test a measurement, which may recognize the possession of self-belief and ability among entrepreneurs.

This study integrated the set of questions from survey instrument used by Chen et al. (1998), De Noble et al. (1999) and Ahmad (2007) to form a new survey instrument, which was distributed among the incubator tenants. Interview sessions were also conducted as part of qualitative study in order to verify respondents’ feedback in the survey instrument.

This study suggests that the entrepreneurs’ ability to perform entrepreneurial tasks is reflected from their previous experiences in successfully carrying out the tasks. The behavioural outcome has become main factor in determine the actual entrepreneurs’ ability.

BACKGROUND

The Needs for Embedded Resources

In order to anticipate the challenges in the new venture creation process, an entrepreneur must possess entrepreneurial skills and knowledge. Among the crucial skills needed are ability to refine an idea, recognize an opportunity and organize appropriate resources (Gelderen, Thurik, & Bosma, 2005). Levenbrug et al. (2006) highlighted that this set of skills are required to ensure the success of a new venture creation and are different compared to skills in managing established business. The possession of those skills can also differentiate between entrepreneurs and business managers (Chandler & Jansen, 1992). Beside the skills and knowledge, the characteristics of the entrepreneur are also essential for ongoing venture and they are embedded in the entrepreneur.

Entrepreneurial knowledge and skills can be promoted through entrepreneurship education (Baroha et al., 2006, Kirby, 2004). Entrepreneurship education can be recognized under three main themes, which are: education ‘for’, ‘through’ and ‘about’ enterprise (Caird, 1990 cited in

O'Connor et al, 2009). Scott et al. cited in Matlay and Mira (2002) described education 'for' enterprise as a training program for potential and existing entrepreneurs; education 'through' enterprise involved the use of pedagogic mode making use of enterprising environment and education 'about' enterprise involved creation of awareness about enterprise as an agent of social and economic change. According to O'Connor et al. (2009), education 'for' entrepreneurship mainly tries to enhance individual probability to start a business. While education 'through' entrepreneurship tries to equip individual with appropriate entrepreneurial skills (O'Connor, Burnett, & Hancock, 2009). Education is very important in entrepreneurial development because it promotes reliance on theory which is vital in understanding any unclear elements through observation (O.Fiet, 2000).

Beside the knowledge and skills, entrepreneurs must also consider the essential resources in order to start and grow a new venture. Ucbsaran et al. (2001) suggested that entrepreneurial resources may consist of human, social, physical, financial and organizational capital. These resources must be bundled together in order to attain competitive advantage (Alvarez & Busenitz, 2001). However, in start-up stage, Chandler and Hanks (1994) stressed that the founder of the firm must also be able to mobilize the resources in order to maximize its capabilities and then increase the new venture survivability. Those resources may also become idle and under utilized if the main driver of the new venture creation process (who is the entrepreneur) does not possess significant level of confidence (Chen, Greene, & Crick, 1998; Kickul, Gundry, Barbosa, & Whitcanack, 2009) and also ability to execute the entrepreneurial tasks (Baum, Locke, & Smith, 2001; Man, Lau, & Chan, 2002). These two elements are considered as embedded resources in the entrepreneurs.

Identification of Entrepreneurs' Embedded Resources

Self-Confidence

One approach to identify level of confidence among entrepreneurs is through entrepreneurial self-efficacy (Chen, et al., 1998). Chen et al. (1998) also stressed that entrepreneurial self-efficacy or ESE measures the likelihood of an individual to become an entrepreneur. In recognizing a significant level of confidence, ESE emphasizes the measurement of an individual level of confidence in performing predetermined tasks (Forbes, 2005). Furthermore, those tasks always fall within a specific domain (Forbes, 2005). This is vital to ensure that ESE will be able to maintain its predictive ability in recognizing a potential entrepreneur.

By recognizing the specific domain of tasks to be performed, it is easier for people to determine causal relationships and also to recognize the completion of the tasks as the main outcome (Chen, et al., 1998). Completion of tasks can be considered as the outcome as it may influence an individual level of confidence (Chen, et al., 1998). Recognition of tasks also can guide an individual to start to act and end role as an entrepreneur. However, in the same study Chen argued that the tasks can be generalized but should be more or less interconnected. The generalization of entrepreneurial tasks can enhance the predictive ability of ESE (De Noble, Jung, & Ehrlich, 1999).

Perception of confidence in carrying out a predetermined task can be influenced by several factors. As this perception falls under self-efficacy concept, Bandura (1986) cited in Zhao et al (2005) noted that an individual's level of self-efficacy can be influenced by: i) enactive mastery, ii) role of modelling and past experience, iii) social view and iv) personal psychological assessment. In consolidating self-efficacy in entrepreneurship area, Zhao et al. (2005) highlighted that ESE can be influenced by: i) formal education and training, ii) previous experience and risk-taking propensity. In the same study, Zhao et al. found that perception of formal learning was

significantly related to entrepreneurial self-efficacy compared with other variables such as entrepreneurial experience, risk-taking propensity and gender.

The perception of confidence to carry out predetermined tasks also must align with the actual tasks needing to be performed by entrepreneurs in order to attain and preserve business success. Studies by Chen et al. (1998) and De Noble et al (1999) suggest a set of tasks need to be performed by entrepreneurs. However in reviewing the ESE construct, Kickul et al. (2009) suggested an ESE scale based on a cognitive approach. In that study, Kickul et al. also proposed ESE scale, which is applicable to the new venture creation process stages. An understanding about business life cycle may give advantage to entrepreneurs in term of selecting and accomplishing appropriate entrepreneurial tasks at each stage. Lichtenstein & Lyons (2008) highlighted that stages in the business life cycle are dynamic and each must be mastered accordingly. Each life cycle requires entrepreneurs to execute unique actions and a failure in execution may lead to a firm's failure (G. A. Lichtenstein & Lyons, 2008). In addition, to ensure the tasks will be executed effectively, entrepreneurs must also possess an ability to perform them.

Ability

One measures to recognize entrepreneurial abilities is through an entrepreneurial competencies approach (Ahmad, 2007). Baum et al. (2001) defined individual competencies as "individual characteristics such as knowledge, skills, and/or abilities required to perform specific job" (p.293). Meanwhile, the concept of entrepreneurial competencies was defined by Bird (1995) cited in Ahmad (2007) as "underlying characteristics such as generic and specific knowledge, motives, traits, self-images, social roles, and skills which result in venture birth, survival and/or growth"(p.21). Ahmad (2007) further refines the definition by incorporating attitudes and behaviour, which are crucial for attaining and preserving business success (Man, et al., 2002).

It is also important to recognize that the entrepreneurial competencies is solely depends on the individual factor such as knowledge, skills and personality characteristics. According to Hayton and Kelly (2006) those elements influenced individual competencies through application of knowledge to achieve a given outcome. Then, the individual skills become a crucial factor in implementing the knowledge. Consequently, the personality characteristics are required to motivate the implementation of the knowledge and skills in achieving a desired outcome. By incorporating those elements, competency approach can be reliance as a measurement of an individual output in completing specific tasks (Hoffman, 1999). Furthermore, individual competency will reflect the person's behaviour and action.

An entrepreneurial competencies approach also recognizes the tasks or roles which are needed to be performed by entrepreneurs in new venture creation process. Entrepreneurs will engage in three important roles: the entrepreneurial role; managerial; and the technical or functional role (Baum, et al., 2001; Chandler & Jansen, 1992). Various tasks are associated with the entrepreneurial role, including developing a challenging but achievable vision, formulating strategies, recognizing unmet consumer needs and producing new product and services (Chandler & Hanks, 1994; Chandler & Jansen, 1992). For a nascent entrepreneur, the entrepreneurial role is become more substantiate because it needs to be performed before an entrepreneurial firm is created. Once the firm is created, managerial and technical role can be performed later on.

In studying the influence of entrepreneurial competencies in small medium enterprises success, Ahmad (2007) has suggested areas of entrepreneurial competencies, which are: strategic, commitment, conceptual, opportunity, organizing and leading, relationship, learning, personal, and technical. Those elements can be summarized as per table below:

	Competencies	Descriptions
1.	Strategic	<ul style="list-style-type: none"> i. related to ‘setting, evaluating and implementing the strategies of the firm (Man, et al., 2002) ii. one of the key competencies in meeting the challenging and unpredictable business environment (Thompson, 1996)
2.	Commitment	<ul style="list-style-type: none"> i. considered as a reflection of the entrepreneurs’ attitude towards success and achievement ii. put emphasize on the entrepreneurs’ ability to possess the following behaviours: being dedicated to make the venture work (Ahmad, 2007)
3.	Conceptual	<ul style="list-style-type: none"> i. reflects the entrepreneurs’ ability to think innovative and creatively (Bartram, 2000) ii. could play a major role for entrepreneurs in dealing with a situation requiring receptiveness to new ideas and experiences, which is applicable to the new venture
4.	Opportunity	<ul style="list-style-type: none"> i. the ability related to recognizing market opportunities through various means (Man, et al., 2002) ii. identify goods and services that customers want, perceive unmet customer needs, look for products and services that provide benefit to the customer and seize high quality opportunities (Ahmad, 2007)
5.	Organizing and Leading	<ul style="list-style-type: none"> i. related to the organization of different internal and external human, physical, financial and technological resources including team-building (Man, et al., 2002) ii. it includes tasks like initiate action, give direction and take responsibility (Bartram, 2000)
6.	Relationship	<ul style="list-style-type: none"> i. competencies related to person-to-person or individual-to-group based interactions (Man, et al., 2002) ii. ability to interact and present the business ideas to others (Bartram, 2000)

New Venture Creation Process

As suggested by Lichtenstein & Lyons (2008), each stage in a new venture creation process is crucial and the entrepreneur needs to be critical in dealing with challenges in each stage. Those challenges may be arise when an entrepreneur need to make decisions under condition of risk and uncertainty (Alvarez & Barney, 2005). These risky and uncertain conditions arise because the outcome of the decision made may be out of the entrepreneur’s control due to new and untried markets (Alvarez & Barney, 2005) and entrepreneurs also frequently make irreversible commitments of resources (O.Fiet, 2000).

A new venture creation process must also consider the development of the entrepreneurial development process. An entrepreneurial process consists of several stages such as searching, planning, marshalling and implementation (Kickul, et al., 2009). Krueger et al. (2000) suggested that an entrepreneurial process is initiated from development of an intention to start an enterprise. Then, it is followed by recognition of entrepreneurial opportunity where a business concept is developed (Gelderen, et al., 2005). Next, resources are assembled and an entrepreneurial firm is created. The firm then interacts with the market to create economic valued activities. Gelderen et al. (2005) suggested that a nascent entrepreneur is actively involved in activities before the organization is created which are creation and refinement of opportunities and also extraction of appropriate resources. These activities can influence the entrepreneurial firm’s survival in the start-up stage. So under this study context, it is vital for an entrepreneur to acquire a substantial

level of knowledge about the new venture creation process and possess relevant entrepreneurial skills in start-up phase.

In entrepreneurial development cycle, the individual involved is known as nascent, potential and starting entrepreneurs (Gelderen, et al., 2005). Aldrich and Martinez (2001) defined a nascent entrepreneur as an individual who initiates serious activities that are meant to get involved in a viable business start-up. Davidson and Honig (2003) suggested that the start-up activities can be independent or interrelated due to there is no organization or firm was formed at that time and the nascent entrepreneurs will only depend their cognitive thinking to generate ideas. So, based on that situation, the nascent entrepreneurs need to pursue with serious and timely entrepreneurial activities to ensure the ideas did not become eroded. According to Naffziger et al. (1994), some business ideas evolve into successful venture while many ideas never reach the venture creation stage. Among the vital entrepreneurial activities need to be carry out by the nascent entrepreneurs is identification and acquisition of resources (B. B. Lichtenstein & Brush, 2001).

Promotion of Embedded Resources among Nascent Entrepreneurs

Studies about entrepreneurial resources often discussed about physical resources such as financial, human and organizational (Y.Kor, T.Mahoney, & C.Michael, 2007). However due to business environment which is uncertain and risky (O'Brien, Folta, & Johnson, 2003), entrepreneurial development initiatives must also consider resiliency of the entrepreneurs in facing the anticipated challenges (Dequech, 1999; Dickson & Giglierano, 1986). As discussed above, this study focuses on entrepreneur's self-confidence and ability as part of resources, which vary from the physical resources. However, from other perspective, it is also important to recognize that these resources may have similarities and also differences in its function, roles and applicability in nascent entrepreneurs' development.

Self-confidence or ESE is recognizes as a factor that may influence person likelihood to become an entrepreneur. This construct emphasizes on people belief about their possession of skills and abilities to start a business (Chen, et al., 1998; De Noble, et al., 1999; McGee, Peterson, Mueller, & Sequeira, 2009). Kickul et al. (2009) highlighted that entrepreneurs' belief is influenced by their cognitive ability either intuitive or analytic, which form a perception about them. The perception or belief about entrepreneurial abilities will then influence the entrepreneurs' intention to start a business. Barbosa et al. (2007) also discussed about ESE in term of individual conviction and feel about his/her abilities to execute the entrepreneurial tasks. Generally, the ESE construct discussed about people perception and perceiveness of their skills and abilities, which can uplift their likelihood to start a business. Despite having self-confidence, entrepreneurs must also possess genuine ability in performing entrepreneurial tasks (Kickul, et al., 2009).

As discussed above, one measure to recognize individual's ability in performing entrepreneurial tasks is through entrepreneurial competencies approach. In studying the importance of entrepreneurial competencies in SMEs success, Ahmad (2007) defined entrepreneurial competencies as individual characteristics that include both attitudes and behaviour, which enable entrepreneur to achieve and maintain business success. Ahmad (2007) also added that competencies include overall characteristics of an individual that are related to the effective performance of given job. Beside the individual characteristics, Hoffman (1999) defined competency as a standard, quality or outcome, which further elaborated as a term of measuring output of an individual behaviour. In recognizing the entrepreneur's abilities in performing entrepreneurial tasks, the entrepreneurial competencies approach must be extended into recognition of the outcome from the individual characteristics and also behaviour.

The outcome-based assessment is important because it put focus on performance based on the jobs and tasks need to be completed. According to Hoffman (1999), the outcome from the

individual behaviour is required to demonstrate competent performance. Beside that, Rowe (1995) added that the competency approach needs to integrate the application of knowledge and skills which be translated into actual doing or practice. It is vital to integrate the actual practice in the competency approach because if it is only rely of individual characteristic and behaviour, the competency approach will only discover people belief about their skills and abilities, whilst not the actual individual abilities.

METHODS

The aim of this study is to discover a possibility to distinguish between entrepreneurial self-confidence and entrepreneurial competencies. Studies in ESE discussed about entrepreneurs' perception and belief about possession of entrepreneurial knowledge, skills and abilities (Chen, et al., 1998; De Noble, et al., 1999; Kickul, et al., 2009). While, studies in entrepreneurial competencies suggest that the construct needs to be able to reveal the entrepreneurs actual abilities in performing entrepreneurial tasks(Hoffman, 1999; Rowe, 1995).

As this study is considered as pilot and exploratory, the selection of method is quite challenging. Given the nature of the study, quantitative and qualitative methods were selected. The quantitative study involves distribution of questionnaires to the sample, while the qualitative study required an interview session to be conducted.

The main sample of this study is incubator tenants in University of Adelaide Incubator Program. The sample was selected because in incubation process, the incubatees are involved in a formal learning through the academic/study component of the program and practicality of a business (Abduh, D'Saouza, Quazi, & Burley, 2007). Generally incubatees spend the first six months during the tenancy completing the study component by selecting relevant subjects. Concurrently, incubatees also proceed with their business idea. The viability of the business idea is one of the prerequisite for them to be accepted into the incubator program.

A business incubator program tries to serve different purposes. Grimaldi and Grandi (2005) suggested that an incubator concept promotes an effective means to integrate resources and techniques to place on the incubator's participants. The business incubator program also is recognized as a mechanism for uplifting the economy by encouraging development of new practical entrepreneurial ideas and also increases the likelihood of a person establishing companies (Aeroudt, 2004; Grimaldi & Grandi, 2005). O'Connor et al. (2009) also suggested that a business incubator program can also be part of entrepreneurship education system which acts as a structured training program (De Foite, Henry, Johnston, & Van Der Sijde, 2003).

The sample of this study is also considered a nascent entrepreneur. Nascent entrepreneur is defined as an individual who actively involves in starting up an enterprise (Arenius & Minniti, 2005). Among the main activities carried out by the nascent entrepreneur are refinement of an opportunity and also extraction of appropriate resources (Gelderen, et al., 2005). These activities require the incubatees to engage with formal learning and perform the actual entrepreneurial tasks.

Survey Instrument

The major part of the scale utilized in this study was used to measure of entrepreneurial self-efficacy and competencies. The survey instrument was developed based on instrument used by Ahmad (2007), who studied the importance of entrepreneurial competencies in SMEs success. From that study, Ahmad (2007) suggested a survey instrument, which based on 12 key constructs;

strategic, commitment, conceptual, opportunity, relationship, organizing and leading, learning, personal, technical, ethical, social responsibility and familism.

In meeting the study objective, the instrument was reconstructed based on literature in entrepreneurial self-efficacy, which identified two different measurement scales for ESE.

The first scale that was developed to measure ESE was presented by Chen et al. (1998). They considered ESE to be a multidimensional construct comprising of five factors (subscales); marketing, innovation, management, risk taking and financial control. Chen et al.'s scale consisted of 22 items. Respondents were asked to indicate their level of certainty in performing various but specific entrepreneurial tasks. A 5-point Likert scale ranging from 1=completely unsure to 5=completely sure was used.

An alternative scale that measures ESE was devised by De Noble et al. (1999). De Noble et al. (1999) aimed to improve how the ESE construct was operated. De Noble et al.'s ESE scale is multi-dimensional scale consisting of six factors; building an innovative environment, initiating investor relationship, defining core purpose, coping with unexpected and developing critical human resources.

The scale proposed by De Noble et al. (1999) consists of 23 items measured on a 5-point scale ranging from 1=strongly disagree based on a question "How capable do you believe you are in performing each of the following tasks?". Both the Chen et al. (1998) and De Noble et al. (1999) ESE scales present a reliable and valid operationalisation of ESE. Moreover, both of these scales have been used in recent research on ESE (see example Forbes, 2005; Kickul et al., 2009).

The survey instrument used in this study was developed from the combination of Hazlina (2007), Chen et al. (1998) and De Noble et al (1999) questions. Each question used by Hazlina (2007) was compared to each questions used by Chen et al. (1998) and De Noble et al. (1999) and each intersection of meaning was marked. The process was carried out separately between De Noble et al.'s questions and Chen et al.'s questions. Each mark from the intersection from De Noble et al.'s and Chen et al.'s set of questions was added up to form the combination of marked. From the combination of marked, any questions, which scored the lowest and second lowest under each category was eliminated from Hazlina (2007) questions list. However, questions under ethical and social responsibility category were not eliminated although they did not match with Chen et al.'s and De Noble et al.'s questions because these categorizes are considered very important in conducting a business after failure of big corporations due to lack of ethical and social responsibility among the business managers.

The main objective of this analysis was to reconstruct the competency's questions based on self-confidence questions because the new set of questions will have self-confidence factor in the competencies questions. From the analysis, the entrepreneurial competencies questions were whittled down from 90 items to 57 items, which fall under 11 categories, exclude the familism.

The new survey instrument comprises two parts (Part A and Part B). Part A consists of 57 questions and the respondents were asked about their competency before and after joining the incubator program. A 5-point Likert scale ranging from 1=completely not competent to 5=completely competent is used. For the part B, the respondents were asked about whether they have applied knowledge and skills in certain occasion based on recalling of examples. A 5-point scale also be used ranging from 1=no recall to 5=very easily recall.

Whilst, a qualitative method was used in order to get confirmation about the respondents' answer in Part B of the survey instrument. Any feedback or answer from the respondent about their past experience or occasion in applying the skills and knowledge around the 11 categories of competencies were monitored.

Analysis / Findings

This study only manages to get five incubatees as respondents. Respondents were asked to fill up the questionnaires and then the interview was conducted. The summary for questionnaires results as per Appendix I and Appendix II.

From the survey instrument, it showed that most of the respondents reported changes in their competence before and after joining the incubator program. In the areas of strategic, conceptual, organizing and leading, all respondents' competency increased between 16% and 22% except for only one respondent whose competency did not change in areas of conceptual and organizing and leading.

Two categories of entrepreneurial competencies: relationship and social responsibility did not indicate significant changes among the respondents. While in commitment, learning and ethical competencies, there was slightly increased and also unchanged condition. It is also important to note that, there was decreasing in opportunity, personal and technical competencies. It is quite interesting because the decreasing was only reported by one respondent (respondent 2).

Each respondent also reported an increase in their competencies, at average five items. However, one respondent (respondent 5) had only recorded an increase in one category only, which is strategic competency. One respondent also recorded a decrease in his opportunity, personal and technical competencies.

From the Part B of the survey instrument, it revealed that the respondents were able to recall their experience in applying skills and knowledge especially in ethical and social responsibility competency. The respondents' feedbacks were ranging from moderately easy to very easily recall for examples or cases. Meanwhile, for technical competency, feedback from respondents ranging from difficult to recall to moderately easy showed that they were having difficulties in recalling for examples except for two respondents who recorded easily recall. Respondent 5 also become an interesting subject because she recorded 'very easily recall' for all competency categories.

From the analysis, it is important to note that the experience of 'doing' is in higher order compared to experience of learning and observation in promoting the entrepreneurial competencies. If the respondents only rely on learning and observation experience, it does not register changes in competency but only changes in self-belief.

Feedback from Part B of the survey instrument was used as guidance for conducting the interview. The main purpose of the interview session was to verify answers/feedback given in the Part B of the survey. From the interview, it is recognized that most of the answers were based on the respondents' past experience (either personal, employment or entrepreneurial) and also based on their needs to face future business challenges.

DISCUSSION AND IMPLICATIONS

This study acknowledges the ESE construct as one measurement to recognize self-belief among the entrepreneurs and entrepreneurial competencies as one measure to recognize the

entrepreneurial abilities. Literatures in ESE field had suggested that ESE is a belief construct that recognizes entrepreneurs' perception about their possession of skills, knowledge and also abilities in execution of specific entrepreneurial tasks (Sequeira, Meuller, & McGee, 2007; Wilson, Kickul, & Marlino, 2007; Zhao, Seibert, & Hill, 2005). This belief can influence the entrepreneurs' behaviour and also action (Krueger, Reilly, & Carsrud, 2000). It is also vital to recognize that the ESE construct still subject on how actually the entrepreneurs' organize their thinking either based on analytic cognitive or intuitive cognitive (Kickul, et al., 2009). This factor is also important because it will influence the entrepreneurs' ability in decision-making process especially in uncertain and risky business environment (McMullen & Shepherd, 2006; Simon, Houghton, & Aquino, 1999). Zhao et al. (2005) highlighted that among the main factor that influence ESE is the perception of formal learning. In this study, the incubator program is considered as a comprehensive formal learning (O'Connor, et al., 2009) which integrates the academic components and practical as well.

The findings show that the respondents' ESE generally has increased during the incubator tenancy compared to before joining the incubator. However, the findings also suggest that the increase in ESE only occurred in certain categories of competencies; strategic, conceptual, organizing and leading. These categories of competencies may be interrelated in term of the tasks need to be performed. It is aligned with Chen et al. (1998) findings that suggest the measurement of ESE should be based on tasks that are interrelated in order to enhance the ESE predictive ability.

As for other categories of competencies like commitment, relationship, personal, ethical and social responsibility, the finding suggested that the entrepreneurs' perception of their confidence maybe not influence by their current stake of activities. As for this study, the respondents who spend less than one year (at average six months) in the incubator program did not actually proceed with business activities. The opportunity to practically perform activities under those scopes may enhance their ESE level. Recommendation by Zhao et al. (2005) in term of extending the entrepreneurship education by incorporating diverse type learning experience to the promotion of greater ESE appears to be justified by these study findings. Under this context, the learning experience must integrate the actual doing or performing the tasks.

However, it is important to note that the ESE construct is measuring the likelihood of an individual to become an entrepreneur and can be recognized as antecedents in entrepreneurial success.

In discussing about factors that influence entrepreneurial success, it is suggested entrepreneurial competencies become more important factor compared to ESE. The entrepreneurial competencies emphasize on the entrepreneurs' actual abilities to execute entrepreneurial tasks (Ahmad, 2007; Man & Lau, 2000). Literatures in this area are segregated into two main areas; 1) competencies as attributes of a person such as his/her knowledge, skills and abilities (Ahmad, 2007; Man, 2006), 2) competencies as standard of the outcome or result (Hoffman, 1999; Rowe, 1995). The first set of literatures demonstrated entrepreneurial competencies as discrete items and it is useful to integrate them into the other definition of competency (in term of exhibit individual behavioural output).

The results in Part B of this study suggest the entrepreneurs' actual abilities are demonstrated from tasks that were performed and completed in the past events, although their belief about the competency had increased during the incubator tenancy. The completion of tasks is also recognized as the main outcome from the behaviour which part of the entrepreneurial competencies attributes. In addition, results in the Part B also suggested that the respondents' feedback about the occurrence of the past events depend on their ability to recall when and how

the events were took place. However, in conducting this survey (Part B), the belief factor still has the high influence on respondents' feedback. It is due to their feedback was based on their self-assess certainty in performing the tasks. This whole notion of assessment is tied back to the ESE concept and not actual competencies.

In order to reflect the actual competencies, entrepreneurs' must able to give proof about their behavioural outcome. The recalling for evidence can be one avenue that imparts the outcome from the past behaviour. This study findings especially from the interview suggested that the evidence was based on the entrepreneur past experiences (employment, entrepreneurial and personal) observation and learning. It is vital to recognize that, entrepreneurial experience plays a major role in forming the actual competencies. The respondent who has past entrepreneurial experience reported a constant feedback in recalling the evidence and also was verified in the interview about detail tasks that were performed before.

This study also proposes new hypotheses: experience based learning would have stronger relationship in recognizing changes of individual competency compared to either knowledge or observation based learning.

The entrepreneurial experience still has an influence on entrepreneurs' self-belief and also competencies because it integrates entrepreneurs' perception and behaviour. Unless detail assessment about the experience can be carried out to isolate the perception factor, hence the entrepreneurial experience has emerged as a subjective measurement in this study in term of measuring the actual entrepreneurs' competencies. This issue was recognized because as entrepreneurial experience was based on past occasions, it is argued that the same level of competence may not be able to be reported for future entrepreneurial activities.

In anticipating future entrepreneurial challenges, the timing of the past experiences occurrence and also the nature of the experience become an important issue. As for certain respondents who heavily rely of their employment and entrepreneurial experiences that occurred quite long time ago, their competencies level may have changed overtime. This is also due to the functionality of each competency. From this study, level of entrepreneurial competency in strategic, conceptual and organizing and leading has been increased among the respondents and they also able to describe the application of these competencies in their past experiences. However, in other competencies, respondents' feedbacks in Part B of the survey were not clearly described in the interview. The past experience may be was formed from a mixture of observing, learning and actual 'doing' experience.

The entrepreneurial ability is also not highly reflected from the entrepreneurial experiences because each occurrence may have different set of intervene factors. This argument forced the reliance on entrepreneurial experience need a further refinement in term of repetition of the same tasks fall under certain category of competencies.

From other perspective, the ability to perform the entrepreneurial tasks regularly become more important in determine the actual entrepreneurial competencies. The repetition of entrepreneurial action can enhance the effectiveness of the tasks execution in term of time taken and also the quality. The repetition of behaviour and actions also leads to further argument about the consistency of the entrepreneurs' competency level. As per business idea, which can be faded away if no appropriate action is taken, the individual competency level also may face fluctuation over period of time.

LIMITATION

This study only focused on nascence phase of entrepreneurial development process. By focusing on the nascence phase, it limits the inferences about the factor that influences the starting entrepreneurs especially to achieve success and growth phases. Furthermore, the nascence phase only exhibits the potential entrepreneur ability to form and refine a unique idea, identify of an opportunity and assemble resources. These abilities are prerequisite to form a business firm and not exclusive factors that influence the firm's success. Beside that, the study limitation also in both the survey and interview methodology.

As an exploratory study, this study relies on interview as data collection technique. The interview will be undertaken to get handle on the situation and understand the phenomena (Cavana, Dalahaye, & Sekaran, 2001). However, due to the time constraint, the outcome of the interview might not reflect the real situation in the incubator program. During the interview session, the interviewer was only able to concentrate on few competencies items in comprehending the respondents' feedback in the Part B of the survey instrument in term of exploring for evidence for actual possession of entrepreneurial skills and abilities among the respondents. Subject to a better interview structure, the session may reflect the real situation/ condition occurred in the past.

From the survey instrument perspective, the subjectivity of the answers in Part B also becomes one of the study's limitations. The question of 'how genuine' of the respondents' feedback must be resolve in conducting future research. As per discussion, this study is relying of respondents' past experiences but at the same time it is argued that the individual's competencies level may decay over time. Furthermore, the survey instrument also needs to integrate the ESE scale and the sample size needs to be increased in order to provide a statistical basis for analysis and comparison between areas of competency and ESE.

CONCLUSION

All of these findings indicate and provide additional evidence that the self-efficacy and abilities can be considered as an embedded resource for the entrepreneurs. However, these two factors must be able to be segregate in order to enhance their effectiveness. Despite the main assumption of that these factors as embedded resource, which are expected to be remained in the entrepreneurs, it is also important to note that fluctuation in self-belief and competency level also encountered overtime. This scenario draws down the importance of continuous entrepreneurial learning program. As per business life cycle, the entrepreneurs' roles in enterprise development also emerge accordingly. So, entrepreneurs may lose their certain skills or abilities which been applied before in earlier stage of the business.

The importance of continuous entrepreneurial training will ensure entrepreneurs may able to face the same challenges in establishing, managing and growing the business under different contexts if they need to. This situation may arise due to the fact that under harsh economic condition, entrepreneurs are forced to restructure the enterprise and even shutting down their businesses. While threats of unstable and uncertain economic condition also become main obstacle that discourages new entrepreneurs in starting up a business. So, if entrepreneurs are not able to successfully execute the tasks over a period of time, it also will affect the existence of SMEs in the economic system.

The promotion of embedded resources among the entrepreneurs must be taking into consideration by parties who involved entrepreneurs' development initiative like the Government, universities and also business incubator in term of providing continuous training program, which integrates knowledge and also practicality of the business.

REFERENCES

APPENDIX ISummary of Questionnaire Results

	PARTICIPANT									
	1		2		3		4		5	
Section 1										
Education Background	Diploma		Certificate		Undergraduate degree		Postgraduate degree		Postgraduate degree	
Experiences	1) Employment 2) Entrepreneurial		1) Employment		1) Employment		1) Employment 2) Entrepreneurial		1) Employment 2) Entrepreneurial	
Business background family	No		No		No		No		Yes	
Duration in incubator	Less than 1 year		Less than 1 year		Less than 1 year		Less than 1 year		2 years	
Section 2	A	B	A	B	A	B	A	B	A	B
Strategic	35	Easily Recall	4	No recall	14	Easily Recall	41	Difficult to recall	4	Easily Recall
Commitment	6	Very easily	0	Easily Recall	0	Easily Recall	18	Moderately easy	0	Easily Recall
Conceptual	27	Very easily	11	Difficult to recall	26	Easily Recall	44	Easily Recall	0	Easily Recall
Opportunity	8	Very easily	-7	No recall	57	Easily Recall	67	Difficult to recall	0	Easily Recall
Relationship	0	Very easily	0	Moderately easy	0	Easily Recall	6	Easily Recall	0	Easily Recall
Organizing and leading	33	Easily Recall	17	Difficult to recall	4	Moderately easy	25	Difficult to recall	0	Easily Recall
Learning	50	Moderately easy	0	Moderately easy	0	Very easily	38	Moderately easy	0	Easily Recall
Personal	18	Easily Recall	-6	Moderately easy	0	Very easily	8	Moderately easy	0	Easily Recall
Technical	36	Moderately easy	-6	Difficult to recall	36	Easily Recall	27	Difficult to recall	0	Easily Recall
Ethical	0	Very easily	13	Moderately easy	0	Very easily	10	Easily Recall	0	Easily Recall
Social responsibility	0	Very easily	0	Moderately easy	0	Very easily	8	Easily Recall	0	Easily Recall

A) Percentage of change in competencies level

B) Recalling for evidence

APPENDIX II

No	Items		BEFORE					AFTER					RECALL				
		Full Score	R1	R2	R3	R4	R5	R1	R2	R3	R4	R5	R1	R2	R3	R4	R5
1	Strategic	35	20	26	22	17	27	27	27	25	24	27	4	1	4	2	4
2	Commitment	20	17	19	16	11	18	18	19	16	13	18	5	4	4	3	4
3	Conceptual	35	22	27	23	18	28	28	30	29	26	28	5	2	4	4	4
4	Opportunity	30	24	27	14	12	24	26	25	22	20	24	5	1	4	2	4
5	Relationship	25	22	22	18	18	21	22	22	18	19	21	5	3	4	4	4
6	Organizing and leading	35	18	24	25	20	28	24	28	26	25	28	4	2	3	2	4
7	Learning	15	8	13	11	8	13	12	13	11	11	13	3	3	5	3	4
8	Personal	20	11	17	17	13	16	13	16	17	14	16	4	3	5	3	4
9	Technical	20	11	16	11	11	16	15	15	15	14	16	3	2	4	2	4
10	Ethical	30	24	23	28	20	24	24	26	28	22	24	5	3	5	4	4
11	Social responsibility	20	17	17	17	13	16	17	17	17	14	16	5	3	5	4	4

- 1** No recall
2 Difficult to recall
3 Moderately easy
4 Easily recall
5 Very easily