

Cultivating Evidence-Based Entrepreneurship Education (EBEE): A Review on Synchronization Process behind Entrepreneurial Spirit

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This paper, through literary assessment on evidence-based entrepreneurship (EBE), has categorized how systematic examination of phenomena puts a major barrier to the advancement of evidence-based entrepreneurship education (EBEE). The study being theoretical in nature, portraying an integrated conceptual framework on EBEE, we tried to explain a unique set of empirical phenomena containing factors necessary for promoting evidence-based practice in entrepreneurship education in a broader domain of management studies. Through qualitative analysis, we reviewed 89 articles on the current literature in the theme of EBE, EBEE, EBMgt, Entrepreneurial Intentions, Entrepreneurial Orientations and others. A generic description of the phenomenon—evidenced-based approach for entrepreneurship and entrepreneurship education drawn from the variety of literature reviewed— does not devalue the findings and legitimize EBEE to conclude it only as a research setting. We make an attempt to identify a series of congregating forces crafting entrepreneurial ecosystem for aspiring entrepreneurs and detecting trigger points to understand the complexities behind new venture creation.

Given the importance of new venture formation in an economy, the findings provide an assessment from the public policymakers' perspective for students dreaming about new venture and small business formation. Linking the findings in practical implication, we focus on public policy institutions to practice EBEE as a tool to design programs for entrepreneurship teaching practice that will score in dispensing evidence-based entrepreneurship knowledge (EBEK). Through a real life approach, considering “de novo” nature of entrepreneurship theory, we argue that practice in evidence-based modeling in entrepreneurship needs to be contextually embedded in the scholar-practitioner's environment. By elucidating the scope of this field, the paper complements reasonable body of earlier research, adding more valuable points to the literature.

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The beginning of Schumpeterian era defined entrepreneurial spirits wild and termed it as *Unternehmergeist* (Candeias, 2008). Schumpeter divulged a new way of economic development and to describe it he borrowed the phrase “creative destruction” and elaborated it as “the doing of new things or the doing of things that are already being done in a new way” (Schumpeter, 1947, p.151). Many decades after his seminal work, entrepreneurship is in strong footing in academic and research arena and exploring new dimensions to engage itself in a greater way to foster its pivotal position in the field of economics, management, and social science at large. We see in recent years public policymakers putting an enormous thrust on fostering entrepreneurship as an economic agenda and this drift is due to the pervasive acknowledgement that business start-ups drive economic growth and also significant job originator. The impact of entrepreneurship education has been recognized as one of the crucial factors that help youths to understand and foster an entrepreneurial attitude (Gorman, Hanlon, & King, 1997; Kourilsky & Walstad, 1998).

At the beginning of 21st century, the younger generation is accentuating to be the most entrepreneurial generation since the Industrial Revolution. Timmons and Spinelli (1994) confirmed that one third of Harvard Business School (HBS) graduates ended up working for themselves, and 90% of HBS students aspire to start their own business. Scott and Twomey (1988) found that 40.7% of students in the UK and 34.3% of Irish students were interested in starting new venture. Throughout this study we attempt to create a spider web of converging forces that work seamlessly to ratify an entrepreneurial ecosystem both from the end points of personal psychology as internal environment and socio-economic psychology as external. The reason behind this approach is that entrepreneurship involves the nexus of two phenomena: the presence of lucrative

opportunities and the presence of enterprising individuals (Venkataraman, 1997). Drawing of such an entrepreneurial equation involves personal characteristics as independent variable, containing factors like personal attitudes, risk taking propensity, risk-averse attitude, need for independence and entrepreneurship knowledge. Intention toward entrepreneurship as dependent variable comprises factors like entrepreneurial interest, entrepreneurship intentions, attitudes regarding their future employment preferences and entrepreneurial spirit. To make this nexus complete, environment cognition arrive as intervening variable featuring factors such as ethnicity, citizenship, family income level, family business experience, opportunity cost of capital, entrepreneurship education characteristics and outcomes, opportunity identification and existence of venture network in economy.

EBE builds on the insight from related practice of evidence-based management (Rousseau, 2012). But when we dive deep inside, it gives us quite a clear view that the practice of evidence-based management historically started as long back as the innovation of germ theory which is mostly propounded by Ignaz Semmelweis and fostered by the work of Lister and Pasteur 40 years later when Ignaz Semmelweis (1847) discovered that the doctors are the main culprits in infecting new born babies and their mothers by carrying germs in-between babies and dead bodies (Semmelweis & Carter 1983). Evidence-based medicine is already a success story as the first domain to institutionalize evidenced-based practice (Rousseau, 2005).

But when we tried to integrate all favorable insights of evidence-based practice derived from the success stories mainly from medicine, criminology, and other fields, we find it quite tough to manipulate because unlike medicine or nursing, management or entrepreneurship is not a profession (Rousseau, 2005). The principle lacuna that emerges here is, unlike core professions like medical, we cannot establish

benchmark in management or in entrepreneurship based on the best available evidence. The basic understanding regarding entrepreneurship in a greater and revolutionary aspect comes with notion like romance of leadership (Meindl, Ehrlich, & Dukerich, 1985) where we see an entrepreneur as a change agent, a revolutionist who transforms things in a new way and the crucial element he comes with is novelty. This aspect of entrepreneurial definition is partially true when we focus on transformational entrepreneurship but mostly untrue when our focus diverted towards subsistence Entrepreneurship (Schoar, 2010). When it's transformational entrepreneurship, the uniqueness in deliberation both in the thought process and the demonstration becomes truly valid. The very heuristics (Busenitz & Barney, 1997) nature that comes with entrepreneurship makes newborn entrepreneur mostly dependent on guts and being swift to find opportunities and accept it. Consequently, empirical support (or lack of support) for attributes that differentiate entrepreneurs from other members of society is often questionable because these attributes confound the influence of opportunities and individuals (Shane & Venkataraman, 2000). Thus it is plausible that evidence-based recommendations concerning entrepreneurship education may be appropriately made only at higher levels of abstraction than found in other evidence-based fields (Frese, Rousseau, & Wiklund, 2014).

Implementation of evidence-based practice in the field like entrepreneurship comes with a drawback that entrepreneurship, unlike other professions, does not need any typical schooling or degree certificate. There is a huge discomfort zone that never let scholars put all sorts of heterogeneity among entrepreneurs in a single group and divulge one single evidence-based practice that will best suit for a particular type of problem. Each successful entrepreneur can sort out and bring solution to a different kind of problem or even for the same problem but in a

different manner so promoting solutions based on best available evidences hardly match the intimate need. Despite of this entire lacuna, still there is ample space for evidence-based entrepreneurship to grow. Most importantly, if we see the implementation of EBEE from the perspectives of public policymakers, shareholders, bankers, and seed-fund managers, EBEE has a huge chance to flourish. Characteristics of entrepreneurship education programs of successful universities should be taken into consideration in order to improve the situation in universities and it may help deans and curriculum managers who accept the critical importance of entrepreneurship as part of business management education (Lüthje & Franke, 2002).

Unlike in most developed nations, the emergence of EBEE is not so vibrant in newly emerging economic powers. In developing countries, designing EBEE as a technique to articulate programs for entrepreneurship development are mostly by public policy institutions, which can thrive both new ventures and already existing small business. Designing programs based on already existing evidences that will train, guide, and award fund for effective entrepreneur will be nonpareil form government perspective and will make sure EBEE as a dependable mechanics to disseminate knowledge earned on existing proven exercise.

LITERATURE REVIEW

Although the alleged benefits of entrepreneurship education have been much extolled by researchers and educators, the impact of entrepreneurship programs on attitudes and intention remains relatively untested (Krueger & Brazeal, 1994; Gorman et al., 1997; Peterman & Kennedy, 2003). There are various personal characteristics, cognitions, and social conditions that affect an individual's choice to pursue entrepreneurial activities (Carter, Gartner,

Shaver & Gatewood, 2003). It is improbable that entrepreneurship can be explained solely by reference to a characteristic of certain people independent of the situations in which they find themselves (Shane & Venkataraman, 2000). Like any other research topic here too is no less in the presence of conflicting research outcome about students' intention towards formation of own business. Kolvereid and Moen (1997) claimed that graduating students are more likely than before to see the possibility of establishing their own enterprises as a positive rather than residual career option. Wang and Wong (2004) disconfirmed the argument through their research on science and engineering graduates in city-state Singapore—that its rapid economic development and high demand for manpower, the well-educated generation typically prefers jobs in large corporations rather than self-employment. Still, estimates of the number of people who engage in entrepreneurial behavior range from 20% of the population (Reynolds & White, 1997) to over 50% (Aldrich & Zimmer, 1986). However, students' pursuit of entrepreneurial career and existence of entrepreneurial opportunity varies in-between space and time.

Empirically, we have learned that situational (for example, employment status or informational cues) or individual (for example, demographic characteristics or personality traits) variables are poor predictors. Predicting entrepreneurial activities by modeling only situational or personal factors usually resulted in disappointingly small explanatory power and even smaller predictive

validity to understand and predict entrepreneurial activity (Krueger, Reilly, & Carsrud, 2000). Students' behavior towards entrepreneurship is the result of their career intention and intentions in turn are determined by attitudes, and attitudes are affected by “exogenous influences” such as traits and situational variables (Ajzen, 1991; Krueger et al., 2000). Three notable personal characteristics and attitude models are often cited by researchers. The first one is Goldberg's (1981) Big Five model for personality trait that was primarily developed from five-factor structure, by Norman (1963), Borgatta (1964), and Digman and Takemoto-Chock (1981) in lists derived from Cattell's 35 variables. Following Norman (1963), the factors were initially labeled as:

- (I) Extraversion or Surgency (talkative, assertive, energetic);
- (II) Agreeableness (good-natured, cooperative, trustful);
- (III) Conscientiousness (orderly, responsible, dependable);
- (IV) Emotional Stability versus Neuroticism (calm, not neurotic, not easily upset); and
- (V) Culture (intellectual, polished, independent-minded).

The other two are intention-based models in terms of their ability to predict entrepreneurial intentions: Ajzen's theory of planned behavior (TPB) and Shapero's model of the entrepreneurial event (SEE), (Krueger et al., 2000).

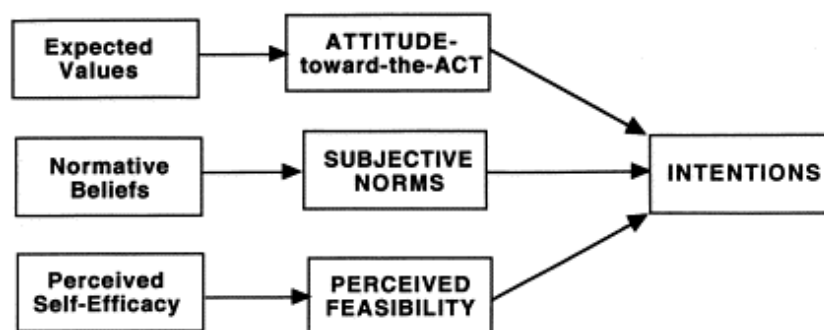


Figure 1. Ajzen's theory of planned behavior.

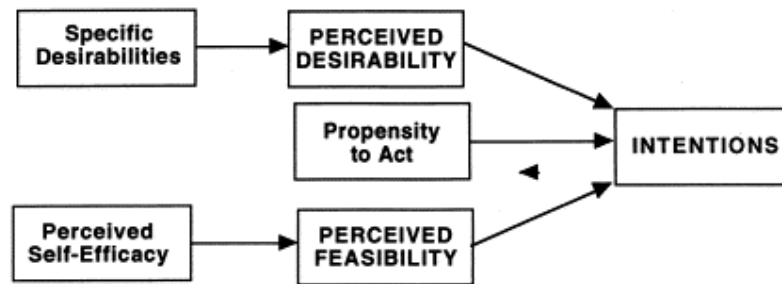


Figure 2. Shapero-Krueger model.

Entrepreneurial intention, which is a planned behavior, reflects the founders' desire to start a business and organizational emergence, which is a process consisting of a series of purposeful, perception-driven decisions as Shapero (1982), Bird (1988), and Katz and Gartner (1988) suggested; then intentions channel this decision-making process. Implementing intentions-based planned behavior in EBEE, teachers, consultants, advisors, and entrepreneurs can understand the motivations and intentions of students and trainees and to help students and trainees understand their own motivations and intentions. Along with motivational and intentional factors, environmental factors (including economic, social culture, and policy factors) affect individual entrepreneurial will and ability (Gnyawaii & Fogel, 1994). Researchers, theoreticians, and entrepreneurship trainers should be expert in understanding the phenomena: what triggers opportunity scanning, the sources of ideas for a business venture, and how the venture ultimately becomes a reality (Krueger et al., 2000). Government policies, taxation, entrepreneurship training, venture capital existence, and consultancy efforts work as environmental factors that have huge impact in shaping individual's entrepreneurial attitude. The idea of becoming an entrepreneur may become more and more attractive to students because it is seen as a valuable way of being employed without losing one's independence (Martínez, Mora, & Vila, 2007).

Sequentially, in sections below we tried to develop a conceptual framework for entrepreneurship propensity and spirit. Next, discussion on relevant topic that finally rests in conclusion. But the most important part of our study remains a brief note on findings for the exercise of researchers, educators, and policy makers. The ending remark comes with some limitations and future research options.

Conceptual Framework Design

An economy is said to be efficient to create a pro-start-up ecosystem if people and organizations have access to the sources of opportunities, the process of discovery, evaluation, and exploitation of opportunities and incontestably the presence of the set of individuals who discover, evaluate and exploit them (Shane & Venkataraman, 2000). It means suppliers, buyers, universities, consultants, government agencies, and competitors all serve as sources of vital knowledge (Jewkes, Sawers, & Stillerman, 1969). So the primary objectives while designing any entrepreneurship program are the ability to combine existing knowledge with both externally obtained or internally engendered knowledge for innovation. Along with fundamental models, experiential learning based on evidences inspires both the program curator and the aspiring entrepreneurs to focus on psychological issues like belief, perception, motives, attitude, and situational factors with exogenous influences, like political regime,

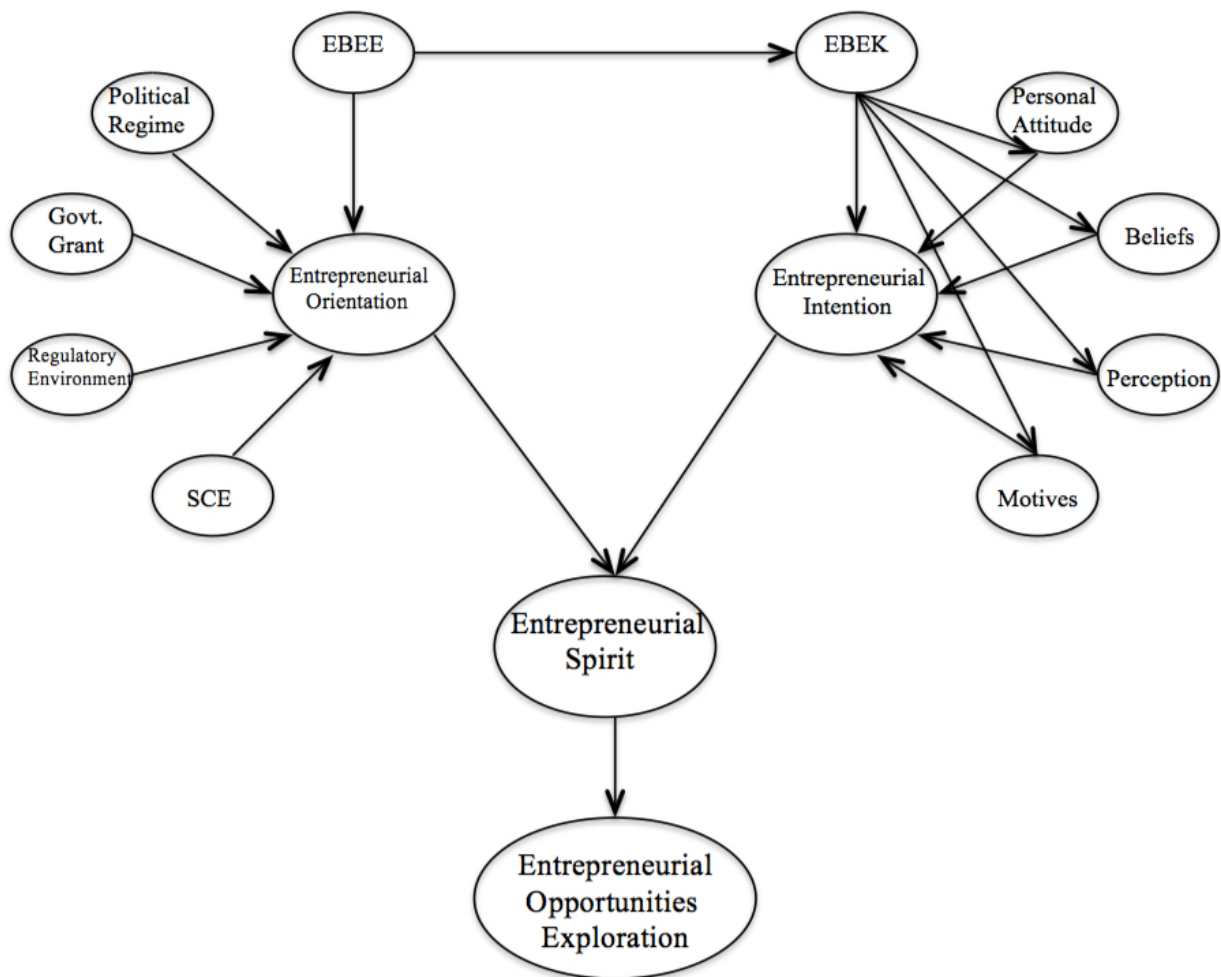


Figure 3. Integrated conceptual model showing the mechanism of entrepreneurial spirit synchronization.

government grant, regulatory environment, and socio-cultural environment (SCE) close to its current experience. This concludes that pro-start-up hypothesis is established mainly on two notions: (1) ecosystem is efficient to curate new ideas and (2) participants are knowledgeable about resources and means to exploit. In this section we draw an integrated conceptual framework with the theories of the social as well as psychological factors that have the prophetic impact on the decision-making behavior of individuals. The various patterns through the following framework have been demonstrated

to signify the doctrine of evidence-based entrepreneurship theories.

Why Entrepreneurship-Education?

It is already an accepted truth and exists for quite a long time that the kind of knowledge generated in academic arena in the field of both entrepreneurship (Zahra and Wright, 2011) and management (Rynes, Bartunek, & Daft, 2001; Thomas & Tymon, 1982) are quite different from the kind of knowledge that is expected in real life practice. This notion is partially true because

it is already validated that very few managers regularly read academic journals (Rynes, Colbert, & Brown, 2002) but are running their business successfully. So the question arrived here is, does entrepreneurial training or management education help to run a business successfully? Or why is it that all those good findings in academic field mostly remain untouchable to the practitioner? The evidence-based management and entrepreneurship education still being non-existent in real life practice is mostly because of the way all those business studies curricula is designed has never excited new managers to deeply focus on scientific research evidence; rather it persuaded them to spend most of their course-time on extensive case studies. This is because, many argue, management is not a profession where practitioners are required to pass examinations to obtain license to practice, or undertake continuing education (Rousseau & McCarthy, 2007; Rynes, Giluk, & Brown, 2007). Still there is a need for entrepreneurial training and development to arouse entrepreneurial intentions among students. Whereas entrepreneurial education is mostly denoted as education for entrepreneurial attitudes and skills, entrepreneurial intentions are desires to own or start a business (Bae, Qian, Miao, & Fiet, 2014). Thus, the absence of entrepreneurship education from our collective theories of entrepreneurship-development, firm-creation, organization building, and change makes our knowledge of the business landscape incomplete. Like Baumol's (1968) persuasive comments on entrepreneurship, the study of business without an understanding of entrepreneurship is like the study of Shakespeare in which "Prince of Denmark has been expunged from the discussion of Hamlet" (p. 66). Here, entrepreneurship education like entrepreneurship in Baumol's quotation quite impeccably gets a similar expression in the discussion of building entrepreneurial attitude, intention, orientation, and environment.

Who are Suitable Candidates?

Many studies have observed the phenomenon, "male students have stronger entrepreneurship aspirations than females" such as those of de Wit and van Winden (1989) in the Netherlands; Lerner and Hendeles (1996) and Mesch and Czamanski (1997) on Russian immigrants in Israel; Matthews and Moser (1996) on business graduates in the US; Crant (1996) on US under-graduates and MBAs; and Kourilsky and Walstad (1998) on US high school students. Such phenomenon neither just happen because female university students are less interested in entrepreneurship nor because of their risk-averse attitude but due to the lack of entrepreneurial knowledge as well as the possible influence of the traditional social role (Wang & Wong, 2004). Van de Ven, Hudson, and Schroeder (1984) found that college educated entrepreneurs were more likely to be associated with longer surviving firms so the positive effect of entrepreneurship education may be accentuated in the case of start-ups in high technology areas but opportunity cost has significant deterrent factor outweighing the importance of more advanced education in technology-based start-up by graduates in technical fields. Such claim is also confirmed by Ghazali, Ghosh, and Tay (1995) wherein they found that (1) university graduates of Chinese origin are less likely to be self-employed, (2) graduates with good honors or higher degrees are less likely to be self-employed, and (3) there is gender differences in self-employment rate among professional and non-professional students. Entrepreneurship education and training has its presence in many universities through different types of specific programs, limiting it to students having economics and business management in their area of specialization. Most universities, though, prefer to embrace a crosscutting approach; they encourage students from both undergraduate and postgraduate programs to take part in entrepreneurship development training

through various disciplines of studies. To have entrepreneurship education, we must first have entrepreneurial mindset among students which constituted of psychological equations of all those phenomena which direct our feelings, intention, motivation, attitude, and behavior to the precise direction in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production (Casson, 1982). Identifying students with entrepreneurial potential at the early age nurturing them throughout their career experience can result in more entrepreneurially enriched individuals and society which is vertically asymptotic towards a vibrant economy (Hatten & Ruhland, 1995).

Entrepreneurial Intention (EI)

EI scholars has always tried to draw a model that encompasses how beliefs, attitudes, and perceptions make few individuals more sensitive to perceive feasibility of a new opportunity and feel confident that they are personally able to start their own business (Shapero & Sokol, 1982). Meta-analyses (Kim & Hunter, 1993) empirically show that intentions successfully predict behavior, and attitudes successfully predict intentions and the sensitivity of intentional processes to initial conditions. Ajzen (1987) confirmed that attitudes explain over 50% of the variance in intentions, which in turn explains 30% or more of the variance in behavior. This suggests that in entrepreneurial teaching or training programs, the trainer should look for differences in perceived desirability and, more likely, perceived feasibility to have a better understanding of how intentions are formed and how founders' beliefs, perceptions, and motives coalesce into the intent to start a business and gain considerable value (Krueger et al. 2000). Entrepreneurship training influences entrepreneurial knowledge, while entrepreneurial knowledge and personal attitude influence entrepreneurship intentions that result

to instill entrepreneurial spirit among students. In the case of entrepreneurship education, intention models shape strategic decisions that help entrepreneurship development trainer to explore significant conceptual overlaps between intentions and opportunity identification, better understanding of students' motivations and intentions, and thus, provide better training. Gender, family background, race, nationality, educational performance, risk-averse attitude, risk-taking propensity, and need for independent lifestyle raise alertness to opportunities (Wang & Wong, 2004) and have impact on emotional chemistry between individual and particular opportunity.

Entrepreneurship Orientation (EO)

EO is so solely connected with national culture and philosophy that for a developing country, EO is indispensable in forming a national agenda for entrepreneurial upsurge. EO has a close bonding with informal institutions like culture and formal institutions like economic, political, and regulatory environments, which determine the context in which strategic postures are implemented (Bruton, Ahlstrom, & Li, 2010; Hoskisson, Eden, Lau, & Wright, 2000). Strategic-choice theory (Child, 1972) introduced us with EO for the first time. Later on, EO's close bonding with culture is more cemented in Miller's (1983) pioneering work when he partitioned EO in innovativeness, productiveness, and risk taking. Culture as an informal institution in national front has always been influenced by cross-cultural psychological dimensions like uncertainty avoidance, power distance, in-group collectivism, and assertiveness along with formal institutions like economic, regulatory, and political environment that always been used to determine the "rules of the game" in strategy implementation at the national level (House, Javidan, & Dorfman, 2001; North, 1991; Peng, Wang, & Jiang, 2008). Similar to EI, the

field of EO is much fragmented with so many heterogeneous, self-conflicting ideas that put urgency for an evidence-based approach in the field of EO, which will arrive not on the basis of a single study but from a rigorous observation.

Entrepreneurial Spirit

Career related decisions reflect a process in which beliefs, attitudes, and intentions evolve as we cognitively process our knowledge, beliefs, and experiences (Lent, Brown, & Hackett, 1994). However, Souitaris, Zerbinati, and Al-Laham (2007) argued the importance of inspiration and proposed that often there is something more than information, background, personality or cognition, which is whether the individual “falls in love” with the entrepreneurial career and/or with an entrepreneurial opportunity driven by emotion and personal preference (love is blind) rather rational evaluation. Perhaps the most compelling objective of any entrepreneurial program is to understand intentions that help us to find sources of ideas for a business venture and how to materialize those ideas into reality and to create an environment that is positive towards engendering entrepreneurial intention among its fellow student.

Entrepreneurship Education and Real-Life Exploitation of Opportunities

Entrepreneurship education is quite different from basic degree programs. In entrepreneurship development program, we wholly focus on psychological bend of mind that follows toward creation of valued materialistic outcome and prove its new means-ends relationship. Like all other development programs, the existence of an asymmetry of information is a must have for encouraging fellow students to join the program. Chances to exploit an opportunity increase when we already have useful information about the opportunity and when we can transfer

the information from prior experience to the opportunity (Cooper, Woo, & Dunkelberg, 1989). We can synthesize two broad categories of factors that influence the probability that a particular student will discover particular opportunities: (1) the possession of the prior information necessary to identify an opportunity and (2) the cognitive properties necessary to value it (Shane & Venkataraman, 2000). Stronger social ties to resource providers facilitate the acquisition of resources and enhance the probability of opportunity exploitation (Aldrich & Zimmer, 1986). Individual level of differences in the willingness to bear this risk influences the decision to exploit entrepreneurial opportunities (Kihlstrom & Laffont, 1979; Knight, 1921). Factors like greater self-efficacy and more internal locus of control are more likely to exploit opportunities because exploitation requires people to act in the face of skepticism of others (Chen, Greene, & Crick, 1998), and those who poses a high need for achievement (McClelland, 1961). Research in the field of cognitive science has shown that people vary in their ability to combine existing concepts and information into new ideas (Ward, Smith, & Vaid, 1997). Information about hidden resources, unfulfilled demand, virgin technology, and political and governing regime change is very concentrated and very few individual and society have access to such information because of immense peculiar life pattern in our society. Avoiding counterfactual thinking, finding a match in-between individuals and opportunity characteristics, and sometimes entrepreneurs' search for accessing an economic system with less capital market imperfections and requirement for complementary asset may put a major barrier for de novo startups to accumulate enough financing for their venture (Cohen & Levin, 1989).

Primarily, entrepreneurial education unlike formal education, needs to design programs which will enhance students' attitude towards opportunity search and creating high levels of

involvement with the information search task and with informational resources (Steffens, Weeks, Davidsson, & Isaak, 2014). Practitioner audience who may be either manager or aspiring entrepreneur always look for compact information but most of the times scholars prefer to put their findings in highly academic jargons, which most of the times are very much inaccessible and unappealing to them (Cascio, 2007; Terpstra & Rozell, 1998). While evidence-based entrepreneurship is still a controversial field of discussion that earns comments whether science-based practice in EBEE can be used to mediate it as a technique to fabricate, analyze, and interpret entrepreneurial opportunity findings and to a greater extent designing a framework for promoting EBEE and to make it more relevant in fulfilling practitioner and research gap.

DISCUSSION AND CONCLUSION

We always prefer to see an entrepreneur a bit angel-like or demonic. As an angel, he or she simply arrives almost unknowingly, bringing beautiful changes in the way we used to live or think till date and we just love to accept the newness he or she brings to our life. But when it's demonic, he or she comes with a whirling wind just to destroy the status quo, he or she is impatient, pirate in nature, creates new approaches to live life by ensuing creative destruction. Seeing entrepreneurship through the above structured lenses make it almost impossible for research community to draw systematic observations of the practices of entrepreneurs and the outcomes of their actions have been rare (Dimov, 2011).

To develop a science-informed practice in entrepreneurship education, much expensive meta-analysis as a tool is often found useful by scholars because good evidence is given when empirical relationships are based on several studies and several observations, rather than on just one study and one observation (Frese,

Bausch, Schmidt, Rauch, & Kabst, 2012). Inside meta-analytic studies on EBEE, we found most of the studies are done in the arena of quantitative research because when look for evidence-based practice we somehow shipped into randomized controlled trails that are generally accepted as the most valid source of evidence (Davies & Nutley, 1999). The field of entrepreneurship is increasingly accepting quantitative meta-analyses as a way of establishing evidence in this domain (Rauch, Doorn, & Hulsink, 2014). However, the field of entrepreneurship is diversified, which is reflected by contributions from multiple disciplines, different theoretical perspectives, different and partially incompatible methodologies, and various units of analysis (Davidsson, Low, & Wright, 2001).

To resolve this dilemma, scholars can take the help of systematic synthesise of qualitative case-studies, which is new in EBEE but already been conducted in areas such as healthcare, nursing research, and psychotherapy (Briner & Denyer, 2012). The main focus of scholars always remain on the fact that their theories become grounded and robust when other researchers verify their findings by looking at the same phenomenon from different angles using different data collection strategies and data source (Yin, 2003). Without generalizing evidence-based approach in medicine or in entrepreneurship is hardly acceptable for implementation because generalization in evidence-based approaches will enhance decisions and steps accomplished through the synthesis should be shared, and thus should be replicable (Rauch et al., 2014). It is critical because the landscape of entrepreneurship research, still to a large extent, is multi-paradigmatic in nature, including fundamentally different prospective on what entrepreneurship is, how entrepreneurial opportunities are formed, and what determines the performance of new ventures (Ireland, Webb, & Coombs, 2005; Leitch, Hill, & Harrison, 2010; Zahra & Wright, 2011).

This very nature always troubled scholars to find out a single paradigm in the field of entrepreneurship with divergent ontological and epistemological views obstructing to bring all entrepreneurial research work in single paradigmatic topic to advance it as a scholarly discipline and professional practice (Burg & Romme, 2014). Here evidence-based practice may arrive as a savior with its science-defined mechanism to synthesize a dispersed body of existing research in the field of entrepreneurship following a review of Cochrane Collaboration which works as a community to give online access to doctors to get information about clinical practice with proven evidence generated by health care expert (Rousseau, 2005).

The most benefit receptor of this kind of evidence-based practice in entrepreneurial research will be the entrepreneurship policy makers, provider of fund for newcomers in the field of entrepreneurship, and from the perspective of a developing nation, its government at large. Creating an entrepreneurial environment we must include all strata of society (Hood & Young, 1993), including government officials, politicians, suppliers, investors, bankers, friends, and neighbors; and the larger community must also see entrepreneurial activity as desirable and feasible (Shapiro, 1982). When policies are perceived as an influential factor towards attitudes and intentions, only then economic and community development by promoting new enterprises results in increased positive perceptions about viability and desirability.

Entrepreneurial Intention (EI) and Entrepreneurship Orientation (EO) will be two most interesting areas of evidence-based entrepreneurship research from a government perspective and it will result in designing best entrepreneurial education, training, and development program. Studies on EI and EO will help policy makers who are responsible for architecting government grant, awarding rules, and regulations. EI and EO with large counts

of alternative models can be tagged as the most divergent field of research with multiple emerging models, most of the time conflicting with each other, results in a fragmented outlook that highly appreciates an evidence-based approach to integrate it in a more precise model build-up. The studies on EI and EO are fragmented into two parts—either methodological or contextual constructs—to inculcate a more systematic overview of the empirical evidence on the determinants of EI and EO. We need to identify the points of uncertainty in those competing theories and their respective constructs (Schlaegel & Koenig, 2014).

Factors like self-belief, inspiration results in driving attitudes, and intention can help entrepreneurship program designer to use entrepreneurship program as a trigger-event, which could arouse emotions and changes in mindset. Seeing entrepreneurship through an emotional lens requires a scientific validity that can open virgin areas for scholar with myriad opportunity to explore. Trainer may evaluate “Charismatic Leadership” along with other factors to inspire students, stir-up their positive attitude and intention that will eventually results in pursuing entrepreneurial career. Perceptual measures of benefits from entrepreneurship development program are attuned when knowledge and resources could proliferate the likelihood of success for those who are going to start a new venture (Gorman et al., 1997).

Connecting science with management practice in a constructive way has always been an area of concern but the approach to build an evidence-based model to understand the natural science of organization and its unanticipated problems associated with authority and consent goes back as early as Chester Barnard (1938). A reasonable body of previous research in the field of evidence-based approach is quite enlightening. However at this age of scientific development except bright-spot like medicine, the practice

of science-informed decision making is mostly unnoticed in the field of management and entrepreneurship because practitioners mostly depend on heuristic-based decision making and giving ultimate reliance on earned experience through their professional career. If modern days managers put little effort to set aside their advocacy on heuristic and use research evidences from past to derive principles and translates them into sound organizational practices, they can avoid investing their precious resources in a bad decision-making. As we mentioned, evidence-based practice in the field of management or precisely entrepreneurship education has the burden of its newness, so being controversial in nature with conflicting ideas is totally acceptable. Hence, the way scholars approaching with meta-analysis both in quantitative and qualitative field of research, we could aspire to see EBEE or EBMgt as a field of practical implications for those who divulge new regulations from the public institution's perspective for awarding grants to new venture formation and design educational and developmental programs for new entrepreneurs or existing practitioners who normally avoid to read all those scholarly new findings. Perhaps the most important infix that comes with evidence-based management and entrepreneurship is blurring the boundaries among practitioner, researcher, educators, and policy-makers.

EBEE may be struggling with some fundamental conceptual issues but the development of meta-analysis with more fine-grained information can help us to replicate results across a wide set of economies and culture, eventually theorizing about evidence-based practice in entrepreneurship. Point estimation on the relationship between entrepreneurship education and entrepreneurial activities have been found across previous studies and we look for an understanding whether the variation is high enough to demand an evidence-based examination of moderators of the EBEE–

performance relationship. Few methodological instructions for future EBEE research shall be drawn from our review. Using meta-analysis in evidence-based approach for entrepreneurship research, scholars can refute different conceptual arguments bifurcating EBEE as a uni- or multi-dimensional construct. Our conceptual model can be used in entrepreneurial strategy-making processes when key decision makers plan for a nationwide policy paradigm that postulate a basis for entrepreneurial decisions and actions to ratify national purpose, sustain its vision, and create competitive advantage.

Finally, in a situation full of debate, different outcomes, absence of research on moderators, theoretical imprecision, and a substantial number of studies on evidence-based theories on entrepreneurship, suggesting that EBEE with the precision of meta-analysis is a promising way ahead and an expected next step.

LIMITATIONS OF THE STUDY AND FUTURE RESEARCH SCOPE

The primary concern for us is the scarcity of related literature in the field of evidence-based practice in entrepreneurship and many a times due to our inability to access necessary articles. Another obvious limitation of this paper is being conceptual in nature. Evidence-based practice is a broad concept that has a few bright spots with practical application in areas like medicine; but due to lack of empirically proven data base confirming its application in multi-dimensional-field like entrepreneurship, many a times discourage both scholars and practitioners. Again questions—like, why does a very small portion of those who participate in entrepreneurship development program at the end start new business? How does some entrepreneur find a particular industry with fulsome opportunities prior to much information about the industry concern? How do stimuli like emotions affect our

cognition and result in entrepreneurial passion?—requires answer verified by many tests and applicable to varied contexts of entrepreneurial activities and environment.

Future research on entrepreneurship education can draw evidence-based practice to explain how learning about entrepreneurship ultimately offers fellow students a slice of self-realization. Evidence-based practice with meta-analysis can scientifically verify the often-portrayed image of a heroic figure who overcomes a number of obstacles and goes against all odds in his pursue of an opportunity (Gartner, 1993). Evidence-based practice comes with a lot of new hopes; it will truly help practitioners to make decisions based on scientific evidence. If future research can include more related variables effecting entrepreneurship formation with empirically tested data, we can get a more cohesive picture of EBEE and can develop a more comprehensive framework that will help initially entrepreneurship as a literature and furthermore we can highlight the scenarios behind an overall entrepreneurial structure formation.

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