

The role of entrepreneurial education and support in business growth intentions: the case of Canadian entrepreneurs

Abstract - We investigate the role of academic and non-academic entrepreneurship education programs on entrepreneurs' growth intentions by employing attributes perceived by entrepreneurs as valuable in their education. Entrepreneur status (nascent/wanna-preneurs versus experienced entrepreneurs) is then explored to decipher its influence on these relationships. We analyzed a sample of 2609 Canadian adults who were active or non-active (wanna-preneurs) in entrepreneurship activity. The results confirmed the significant impact of the 'traditional' essence of academic (e.g., knowledge) and non-academic (e.g., funding) programs on growth intentions. They further proved the relevance of academic programs to experienced entrepreneurs' and of non-academic programs to nascent/wanna-preneurs' intentions toward growing their business. Implications of these results for higher education and programs for entrepreneurs, as well as for policy-makers, are discussed.

Introduction - Research focused on entrepreneurial intentions has mainly looked at intentions to start a business. Growth intentions have captured academic attention in the last two decades (Cassar, 2007; Gartner, Shaver, Carter, & Reynolds, 2004; Gundry & Welsch, 2001; Hessels, Van Gelderen, & Thurik, 2008; Shane, 2009; Shaver, Gartner, Crosby, Bakalarova, & Gatewood, 2001). Yet, these explorations are too broad, lack construct clarity (Suddaby, 2010), and treat this holistic construct as a single generic one (Fitzsimmons & Douglas, 2011; Krueger, 1993; Krueger & Brazeal, 1994; Krueger et al., 2000; Lee et al., 2011). Most of these studies incorporate growth intentions into entrepreneurs' plans to grow their businesses, and consider the individual's predisposition for growth as dependent on his or her entrepreneurial self-efficacy. The present study draws on two main theoretical frameworks to conceptually capture the relationships between EE and growth intentions: *entrepreneurial self-efficacy* (Wilson, Kickul, & Marlino, 2007; Zhao, Seibert, & Hills, 2005), and the *theory of planned behavior* (Ajzen, 1991; Krueger, et. al., 2000).

The interface of EE and growth intentions can be introduced through the entrepreneurial self-efficacy model, specifically by shedding light on the role of EE in building self-efficacy, which is linked to growth intentions. Then the theory of planned behavior can elucidate the subsequent entrepreneurial performance deriving from those growth intentions.

Empirical studies attest to the key role of growth intentions, motives and aspirations (Davidsson, Achtenhagen, & Naldi, 2010; Delmar & Wiklund, 2008; Fatoki, 2010) in entrepreneurial behavior, as intentions are essential entrepreneurial competencies in entrepreneurial development (Sadler-Smith, Hampson, Chaston & Badger, 2003); moreover, in their absence, the business is less likely to grow (Douglas, 2013). The development of growth intentions has been assigned in research as an outcome of EE (Fayolle, & Gailly, 2015; Gibb, 2005; Valerio, Parton, & Robb 2014). However, relationships between different representations of growth intentions, e.g., expanding the current business, acquiring a new business, merging with another business, or education have barely been tackled.

Entrepreneurial education - Researchers are continuously debating the extent to which entrepreneurship is teachable (Fiet & Samuelsson, 2000; Mount & Belanger, 2004), although most studies agree that developing business-related capabilities and skills induces the relevant competencies to manage the uncertain, risky conditions typifying the entrepreneurial realm. Consequently, the development of such capabilities may enhance learners' preparation for growing their entrepreneurial businesses (DeTienne, & Chandler 2004; Minniti & Bygrave, 2001; Neck & Greene, 2011). As a result, multiple programs have been developed for entrepreneurs at the academic, governmental, public, corporate and private-body levels, aimed at providing a real-world platform that allows practicing, networking, exchanging and sharing. Concurrently, these programs aim to expedite the learners' relevant capabilities, skills, mindsets and knowledge,

which can bridge management and growth of the business (Katz 2003; Kuratko 2005; Oslo Agenda 2006).

Academic programs consist primarily of general business and/or specific, content-based knowledge and the skills needed to manage and grow the business (Karlan & Valdivia 2011; Wilbanks, 2013). Non-academic education addresses supportive services, and mentoring for networking and funds (Barbero et al., 2014; Isabelle, 2013). Some studies stress the facilitation value of non-academic programs toward accessing funds and networks (Pauwels, et al., 2016); however, these have not yet been studied in the context of subsequent perceptions, such as growth intentions.

Research studies have drawn attention to the impact of types of entrepreneurial programs on intentions—ranging from learning how to draft a business plan and developing entrepreneurial capabilities, to reinforcing entrepreneurial intentions (Fayolle, & Gailly, 2015; Lans, Gulikers, & Batterink 2010; Ferreira et al., 2018; von Graevenitz et al., 2010). Nevertheless, little attention has been paid to the finer educational attributes with regard to entrepreneurial outcomes (Bechard & Gregoire, 2005; Pittaway & Cope, 2007)—their interpretations by participants, including the perceived value that will be gained (Bae et al., 2014; Rideout & Gray, 2013) and the relevance to intentions (Dilts & Fowler, 1999; Lüthje & Franke 2003)—leaving this emerging field still vague and general. Research calls for further exploration of the deeper relationships between EE programs and entrepreneurial perceptions and intentions (Bae et al., 2014; Martin et al., 2013; Peterman & Kennedy, 2003).

Hypotheses - Our two hypotheses attempt to respond to knowledge gaps by investigating the effect of education on growth intentions. This is accomplished by delving into the specific relationships between the attributes of EE and growth intentions. The first hypothesis focuses on academic EE programs, and the second on their non-academic counterparts.¹

H1. The perceived value gained by attributes conveyed in academic EE programs (e.g., obtaining certificates/degrees, acquiring general knowledge and skills, acquiring skills in business management) will differentially affect growth intentions.

H2. The perceived value gained by attributes conveyed in non-academic EE programs (e.g., access to entrepreneurs' network, private funding, technical advice) will differentially affect growth intentions.

Methodology - The sample includes the entire population of Canada², collected through an online questionnaire. The 2609 respondents were Canadian residents of at least 18 years of age. The respondents were part of a large database. In this study, we will use two statuses: *nascent/wanna-preneurs* and *experienced*. A representative sample was taken of the adult population, whether active or not in the entrepreneurial process. The sample consisted of 2609 respondents, 1265 (48.5%) men and 1344 (51.5%) women; mean group age was 40–44 years; 870 (approx. 33%)

¹ As this study's unique perspective on the relationships between EE and growth intentions is relatively embryonic in research, our first two hypotheses are primarily intended to decode the magnitude of the differences, rather than the specific directions of such relationships. Moreover, recent studies suggest that the impact of EE programs on perceptions and performance is vague since research has provided inconclusive results, with both positive and negative outcomes (Dickson, Solomon, & Weaver, 2008; Fayolle, 2013; Martin, McNally, & Kay, 2013; Thompson, JonesEvans, & Kwong, 2010). Hence, there is still no rigorous empirical grounds to expect positive or negative directions for these relationships with each EE attribute.

² Since 2014, in collaboration with Léger Marketing² and La fondation de l'entrepreneurship (FDE),² the Institute for Entrepreneurship National Bank/HEC Montréal² has been conducting one of the largest surveys on entrepreneurship in Quebec, the IEQ (Quebec Entrepreneurial Index).²

had children. The present study included 469 of these respondents who had participated in either academic or non-academic programs.

Results -For the hypotheses hierarchical regression analyses were conducted.

Academic EE programs – The results of H1, addressing the academic programs, confirmed significant and negative effects of four attributes (out of six included)—'obtaining certificates/degrees'; 'acquiring general knowledge and skills'; 'acquiring specific knowledge and skills for a job in my field'; 'acquiring skills in business management'—on one type of growth intention: 'expand the current business'. A different group of significant and positive effects emerged for four attributes—'acquiring general knowledge and skills'; 'acquiring specific knowledge and skills for a job in my field'; 'surrounding myself with good people/building a network'; 'acquiring the necessary skills to start a business'—on another type of growth intention: 'grow your business in other ways'. The attributes representing knowledge, especially general knowledge and skills, and specific knowledge and skills for a job in the business, influenced growth intentions in opposite ways when referring to expanding the current business (negative relationships) versus growing the business in other ways (positive relationships). The results also revealed a significant and negative effect of 'obtaining certificates/degrees' on all attributes of growth intentions. The perceived value for each of the three EE attributes— 'acquiring general knowledge and skills'; 'acquiring specific knowledge and skills for a job in my field'; 'acquiring skills in business management'—significantly and positively affected three attributes of growth intentions: 'acquire a new, existing business'; 'merge with another business'; 'start a completely new business' (though not all of the attributes affected all components). H1 was aimed at measuring the effect of the academic attributes of EE programs on different types of growth intentions; significant results were revealed for most, though not all attributes; hence, H1 was confirmed.

Non-academic EE programs – For H2, addressing non-academic EE, most of the included non-academic EE attributes that emerged as significant positively affected all types of growth intentions—'expand current business'; 'acquire a new, existing business'; 'merge with another business'; 'grow your business in other ways'; 'start a completely new business'. H2 was confirmed by the results.

Discussion - This study aimed to decipher the role of EE on growth intentions, as a pre-dispositional construct of entrepreneurs' pursuit of performance intended to grow their businesses (Van Gelderen et al., 2008). The scarce research on the relationships between specific attributes of both EE programs and growth intentions, the lack of effort aimed at distinguishing between academic and non-academic EE in such relationships, and incomplete attention to the role of prior experience as related to both EE and growth intentions (Barringer et al. 2005; Dobbs & Hamilton, 2007; Rauch & Rijkskik, 2013; Wiklund & Shepherd, 2003) drove this study.

Academic EE –the value assigned to obtaining a degree/certificate emerged as having a negative effect on growth intentions. This can be explained by the entrepreneurs' approach to time spent 'only' to obtain a certificate as wasted time. Second, obtaining knowledge and skills also disclosed interesting findings: positive effects were found on growth intentions that are more associated with 'external strategies' for growing a business, e.g., acquire a new, existing business, merge with another business, or start a new business; while negative effects were found on growth intentions that seemed better aligned with 'internal strategies' for growing a business, i.e., expanding the current business. These findings support previous research stressing that academic programs that vary in structure, method, etc.—represented in our study by the different attributes—have different impacts on intentions (Fayolle, & Gailly, 2015; Lans et al., 2010; Ferreira, et al., 2018; von Graevenitz et al., 2010). This study advances our understanding of EE effects on growth intentions by disclosing relationships between the value assigned to acquisition of knowledge and skills and more 'externally' or 'internally' driven growth intentions.

These findings are most valuable for, and greatly foster research, especially considering the continual pursuit of relevance and applicability of EE programs (Kuratko, 2005; Zaharia & Gibert, 2005).

Non-academic EE –technical assistance was found to be valued and mostly positively affecting the different attributes of growth intentions, whereas private and public financial sources, which are commonly deemed to be major offerings of non-academic programs, gave mixed results, suggesting that their value is undetermined.

By refining the investigation in this study, and including attributes that echo the known complexity of growth intentions (Liao et al., 2005; Lichtenstein et al., 2007; Newbert, 2005), the specific relationships of EE and growth intentions are revealed, offering a more comprehensive look at the complexity of growth intentions, especially with reference to education (Fayolle, 2013).

Implications and limitations - by delving into each EE attribute, our findings can be embedded in the planning and implementation processes of academic and non-academic programs, thereby enabling the creation of EE programs that are more relevant to entrepreneurs.

Our results contribute to both research and practice by considering entrepreneur status in planning and implementing EE programs. Non-academic EE programs seem to be more appropriate for nascent/wanna-preneurs in boosting their growth intentions. The opposite picture emerges for experienced entrepreneurs, where the range of effects from academic EE appears larger than that from non-academic EE.

Yet, this study lacks a multinational overview of both attributes that are valued in academic and non-academic EE programs and the types and magnitudes of the growth intentions. Furthermore, our questionnaire lacks some aspects relevant to the EE programs that could affect learners' perceptions of the value gained, e.g., the pedagogical design of academic EE (Kuratko, 2005) or of the learning process (Fayolle & Gailly, 2015). Future research should create a thorough classification of non-academic programs to provide a complete picture of learners' value gained.