The When and Why: Student Entrepreneurial Aspirations

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Abstract

Although connections between university enterprise courses and entrepreneurial activity have been examined, less work has investigated the intended timing of future entrepreneurial activities. Using data from a survey of U.K. business students, it is found that those intending to enter entrepreneurship right away place less emphasis on avoiding stress and responsibility, seeing themselves as natural leaders. They were also more confident of succeeding, but not because of superior knowledge. A greater emphasis on entrepreneurial activities in all institutional environments, including the corporate, may help balance the need to harness enthusiasm while it lasts with the need to acquire relevant experience.

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The When and Why: Student Entrepreneurial Aspirations

Introduction

The potential for greater small business ownership to increase the level of entrepreneurial activity, innovation and creativity within an economy has made policies and programmes aiming to promote new venture creation extremely attractive to policymakers (Gilbert et al. 2004; Acs, and Audretsch 2003; van Stel, et al. 2005; Audretsch, et al. 2006). Along with a greater dissatisfaction with traditional corporate careers, such a shift has led more business students into contemplating careers as business owners in their own right (Brockhaus, and Horowitz 1986). This has in recent years led to an explosion in the number of entrepreneurship modules and courses taught within business schools (Vesper, and Gartner 1997; Katz 2003; Kuratko 2005). The aims of such programmes are to increase awareness amongst those who have little knowledge of the entrepreneurial career option (Donckels 1991; Kantor 1988), and for those who have already developed interest in entrepreneurship, to increase their start-up and small enterprise management capabilities (Johannisson 1991; Kantor 1988). Traditionally university entrepreneurship education pays most attention to the latter, with the action-orientated "go-out-and-do-it-now" philosophy remaining the most prominent approach (Ronstadt 1985). Within this philosophy the role of enterprise education through the acquisition of skills and network connections is to increase students' self-confidence in relation to the process of starting a business and thereby creating a linkage from vision to action (Johannisson 1991).

However, whilst a minority of business school graduates immediately embark on an entrepreneurial career upon graduation, a majority prefer working for others first before taking the plunge (Collins et al. 2004; Galloway, and Brown 2002; Brown 1990; Brockhaus, and Horowitz 1986; Ronstadt 1985). The desire to wait can partly

be attributed to a lack of emphasis on practical start-up skills, knowledge and network connections in university courses (Volery et al. 1997; Carter, and Collinson 1999), with many students taking both technical or business subjects found to prefer developing greater experience and knowledge prior to business ownership (Bird, and Schjoedt 2009; Collins et al. 2004; Ronstadt 1985). Thus the decision to wait is essentially to decrease the risk of failure, which coincidentally is at the highest at the initial stage of a new venture (Choi et al. 2008; Das 1987). Although learning from failures can also be beneficial where serial entrepreneurship occurs (March 1991; Shepard 2003), this process of learning can be emotionally difficult to handle (Shepherd 2004). Some argue that only experiential human capital has any value (Politis 2005), this would suggest that delaying initiation to gain greater occupational experience would have little effect on the probability of success. Others, however, have found that experience in work helps develop routines that will be used to guide the management of businesses in the same industry as well as building social capital through professional networks, although further learning occurs after new venture creation which cannot be undertaken beforehand, such as, managing relationships with employees (Rae 2005). Waiting may allow the correct opportunities to be identified and the relevant resources put in place; so those that wait may be more innovative and able to achieve greater growth in the future (Capelleras et al. 2010; West, and Meyer 1997).

Whilst there has been some interest in the temporal issues within existing ventures (Capelleras et al. 2010; Bird, and West 1997; Bird 1992), and the common observation that there is often a significant time lag between the occurrence of entrepreneurial intention and the actual start-up behaviour (Katz 1994; Reynolds 1994; Krueger et al. 2000; Bird, and Schjoedt 2009; Carsrud, and Brannback 2011),

existing literature on entrepreneurship education has made little effort to distinguish between the two groups mentioned above. Understanding the timing of entrepreneurial activities would not only enrich our understanding regarding the role of education in the emergence of graduate entrepreneurship, but also the way in which the nature of the subsequent growth and development of these ventures can be best supported. On one hand, those starting immediately may require greater support and assistance with practical skills and network creation (Carter, and Collinson 1999). On the other hand, for the "wait-and-see" entrepreneurs, assistance in developing a long term yet imaginable path to obtain essential skills, experience and finance to enter entrepreneurship may need to be provided, otherwise their entrepreneurial intention may tend to dissipate (Carsrud, and Brannback 2011; van Geldren et al. 2006; Galloway et al. 2006). This time lag is rarely factored into the development of university enterprise education curriculum, with most existing programmes confined to the period of university attendance and any support beyond graduation, outside of the limited capacity of incubator units, is deemed beyond the university's remit (Galloway, and Brown 2002).

This study explores the issue of entrepreneurial timing using data from a survey of UK business and enterprise students within the context of a number of well-known intention and behaviour models. The study concentrates on attitudes expressed by those considering the next stage in their careers after completing their formal education at university. These expectations will not necessarily come to realisation. For example, studies have found around a third of undergraduate students display positive attitudes to entrepreneurship (Henley et al. 2009), but generally less than one in ten will become self-employed within the first five years after graduation (Rosa 2003). Discrepancies can relate to entrepreneurial aspiration questions capturing

desires with no or little commitment to action rather than firm intentions (van Geldren 2006). This means that studies of alumni may provide a more accurate picture of the actual drivers and inhibitors of entrepreneurial activities. However, the study takes a forward looking approach rather than considering actual behaviour of alumni, as a considerable variety of outside events and influences beyond graduation are likely to come into play, that educators have little or no control over. In addition, there is also likely to be some hindsight and retrospective bias in responses from alumni, which may lead to merging of actual behaviours and their original preferences (Chell, and Allman 2003). For example, theoretical models considering the entrepreneurial choice have also suggested that those considering entering entrepreneurship are not fully aware of their true ability and only become aware of their true ability over time (Jovanovich 1982; Evans, and Jovanovich 1989). Given that expectations of unobserved adjustment appear to be relatively slowly, although more quickly in the case of younger entrepreneurs (Parker 2006), this process could take a relatively long time. Those choosing to not start ventures due to uncertainty about ability may cite other practical reasons rather than admit the truth. This makes it unlikely that alumni will recall with complete clarity their confidence of success on entering business ownership and even their motivations at the time, but rather their recall will be coloured by their experiences upon engagement. The study therefore splits current students into those who expect to start businesses within the next three years and those intending to wait between three and ten years, the groups are compared in terms of what they consider to be entrepreneurial activities, their preferences of occupational characteristics, and the attitudes they possess which relate to the intentions of becoming entrepreneurs. This is not to say that alumni experiences are not important, and as such studies examining these where appropriate are used to

inform the hypotheses developed below. As such, this study tries to concentrate on the expected choices of students and their reasoning behind these choices in order to examine where differences exist and how the universities may best design entrepreneurship education to cater for both groups and where necessary develop support beyond the end of university careers.

The Temporal Dimension of Planned Entrepreneurial Behaviour of Potential Entrepreneurs

In a vast majority of cases, the decision to start a new venture is a clearly planned behaviour, and as such models developed to explore this decision are based around influences that make the behaviour more attractive and increase the probability of success. The two models which dominate the literature are Ajzen's (1991) Theory of Planned Behaviour (TPB), and the Shapero model of the Entrepreneurial Event (SEE) (Shapero, and Sokol 1982). Despite some notable differences, both models suggest the decision to start a business is driven by the attitudes that individuals have towards entrepreneurship, whether they are favourably disposed towards the activity, is entrepreneurship perceived seen as 'desirable', and the probabilities of succeeding. The latter is described by Shapero and Sokol (1982) as the perceived feasibility of the behaviour, and perceived behavioural control (PBC) by Ajzen (1991). Such perceived ability to control the event is extremely important for the concept of entrepreneurship, because entrepreneurial activities operate in an environment where barriers, resource obstacles and uncertainty make the success of entrepreneurial activity impossible to predict before hand, i.e. where complete volitional control over accomplishment of the behaviour is absent (Ajzen, and Fishbein 1980). Such unpredictability has considerable importance when one attempts to understand the gap between the

positive attitudes and intentions expressed by students towards entrepreneurship while undertaking their studies and the relatively low level of realisation of these aspirations. In addition to perceived behavioural control, the models also point to the role of the individual's attitudes towards the behaviour as well as well as social norms in the development of intention. In the entrepreneurship context, becoming an entrepreneur should be attractive to not only the individual themselves but also to their "important others" – i.e. friends, family and those who had previous entrepreneurial experiences. These influences are what determine the entrepreneurial intentions of the individuals (Lüthje, and Franke 2003). In turn, intentions have been found to be a strong predictor of actual behaviour in a variety of contexts (Armitage, and Conner 2001; Phan et al. 2002; Lüthje, and Franke 2003).

While possible displacement events between intention and behaviour have been discussed in the existing literature as an explanation for the discrepancy between intention and behaviour (Shapero 2002; Carsrud, and Brannback 2011; Bird, and Schjoedt 2009), few studies attribute such a discrepancy to the matter of timing. Studies have found that, when a temporal dimension is specified, situational and perceptual factors are better at explaining long term rather than short term intentions (Reitan 1996; Audet 2004). This is consistent with Armitage and Conner's (2001) suggestion that where intention measures require less commitment and are closer to desires, these factors will play a smaller role. In the context of entrepreneurship, the heavy commitment required to start a business often means that, even after visualising the entrepreneurial process for themselves and making a realistic assessment, some potential entrepreneurs may still decide not to enter entrepreneurship immediately, due to a perceived lack of some essential skills, knowledge and experiences that often can be best gained outside the context of entrepreneurship, such as through

employment (Collins et al. 2004; Katz 2007). In fact Carter and Collinson (1999) found 20 percent of graduates were considering entering entrepreneurship immediately upon graduation, and Rosa (2003) found only one in ten graduates had become an entrepreneur five years after finishing their studies. Therefore, it would be logical to assume that those who are intending a rapid business start are likely to possess very different personal qualities to those who opt for the "wait-and-see" approach.

Based upon these findings, it might be reasonable to assume that students fall into a number of groups based on quite different desired and expected career paths. In this section, we develop our hypotheses in order to explain these differences. Figure 1 depicts our operational model:

(Insert Figure 1 here about)

Perceived Behavioural Control

The importance of perceived behavioural control for entrepreneurship, as demonstrated above, suggests that a person's perceived behavioural control may have a role to play in determining the time lag between the occurrence of entrepreneurial intention and the actual behaviour in starting a business. The start-up process requires the completion of specific technical events, such as the often formidable task of writing a business plan (Bird 1988), and dealing with the ambiguous and chaotic nature of early stage business development (Boussouara, and Deakins 1999; Soloman 2007). In combination, these may mean the feasibility of entrepreneurship is quite low or unclear at this stage of business development (Bird 1988). Presumably then those

who are willing to commit to more explicit behaviour expectations when questioned are those whose perceived behavioural control is greater. Conversely, would-be entrepreneurs who do not possess the required start-up skills are likely to perceive more difficulties the closer it is to the launch of a business, and are more likely to delay the start-up process (Volery et al. 1997). Evidence from studies of alumni have found that a lack of confidence in possessing the relevant skills, particularly those relating to practical competencies (Matlay 2008), can act as a deterrent to immediate entrance to self-employment upon graduation (Carter, and Collinson 1999). A lack of confidence has also been identified as a reason for not attempting to follow up an entrepreneurial aspiration (Rae, and Woodier 2006). Based on the discussion above, the following hypothesises are proposed:

Hypothesis 1a: Those looking to immediately move into entrepreneurial activities are more likely to feel that they have the skills and knowledge required to start a business than those who wait for longer.

Hypothesis 1b: Those looking to immediately move into entrepreneurial activities are more likely to be confident in their own ability to start a business than those who wait for longer.

Attitude towards Entrepreneurship

In addition to skills and resources acquisition, entrepreneurship research has also emphasised the role played by personality traits in contributing to entrepreneurial behaviours (Boyd, and Vozikis 1994; De Noble et al. 1999; Kristiansen, and Indarti 2004; Douglas, and Fitzsimmons 2008; Brockhaus, and Horwitz 1986; Cooper et al. 1988; Ashworth et al. 1998; Ismail et al. 2009). Little difference should be expected

in terms of the penchant for entrepreneurship between those who intend to start a business rapidly and those who intend to start a business at a later date, as both groups display an intention to start a business. A fact reflected in those alumni of entrepreneurship and small business management course (Donckels 1991). Carter and Collinson (1999) also found that such positive attitudes to entrepreneurial activities did not dissipate quickly on leaving university even where students chose to enter employment for others. Differences in timing, however, may arise in terms of personal attitudes towards the alternative to entrepreneurship, which is working for others. Those who dislike working for others are more likely to concentrate more on their setting up of a business immediately after graduation, whilst those who do not mind working for others maybe more inclined to use employment as an opportunity to learn the trade (Carter, and Collinson 1999).

Trait studies have mainly focused on identifying specific personality variables that would distinguish entrepreneurs from other groups and that were presumed to lead to the founding of new organisations (Cogliser, and Brigham 2004). Unsurprisingly, studies have found considerable overlap between entrepreneurship and leadership (Cogliser, and Brigham 2004; Vecchio 2003). Leadership qualities such as extraversion, sensing, and good judgement are most likely to be prominent amongst first generation entrepreneurial leaders (Stavrou et al. 2005). Such leadership qualities are not only essential in providing inspiration, vision and value (Kets de Vries 1993; Kelly et al. 2000; Ling et al. 2008), but more importantly, enable them to get down to the nitty-gritty of the events leading to the actual business start-up, including exploration, examination, categorisation and organisation of opportunities (Vecchio 2003). Therefore, individuals who perceived their leadership capabilities more positively will have a shorter time lag between the occurrence of entrepreneurial

intention and the actual behaviour. Likewise, perceived desirability for having authority over others, for example, wishing to lead or to avoid being led by others, and to gain a non-pecuniary return, can also affect the behaviour of the individual upon graduation and make entrepreneurship more likely (Blanchflower, and Oswald 1998). It is therefore only reasonable to expect that these individuals would place greater importance on achieving leadership or autonomy in a shorter period of time.

Furthermore, some studies have found the temporal dimension of entrepreneurial activity and life stress are related (Bluedorn, and Martin 2008). Those who can withstand greater stress or those who are more capable of coping with stress through better time management behaviour involving goal and priority setting are more likely to become entrepreneurs within a shorter timeframe (Macan 1994; Bluedorn, and Martin 2008). The literature on personality traits therefore leads to the development of the following hypotheses.

Hypothesis 2a: Those looking to enter entrepreneurship immediately will display similar levels of desire for entrepreneurship as those looking to work for others first before becoming entrepreneurs at some point in the future.

Hypothesis 2b: Those looking to enter entrepreneurship immediately are more likely to display a dislike of employment than those looking to work for others first before becoming entrepreneurs at some point in the future.

Hypothesis 2c: Those looking to immediately move into entrepreneurial activities will be more likely to feel that they have stronger leadership capabilities than those who wait for longer

Hypothesis 2d: Those looking to immediately move into entrepreneurial activities will enjoy being a leader more than those looking to work for others first before becoming entrepreneurs at some point in the future.

Hypothesis 2e: Those looking to immediately move into entrepreneurial activities are more likely to display a greater willingness to take on additional responsibilities and stress than those who wait for longer.

Social Norms towards Entrepreneurship

Networks and external support are vital in determining the speed of venture creation, not only through shaping one's perceived behavioural control (Shane 2003), but also through the social norms experienced by the students. Studies have found that it is those who possessed network ties with executives and bankers who are most likely to start their businesses in a speedy manner (Capelleras et al. 2010). However, for a majority of students with little or no employment history and little associated human, social and financial capital, they will be reliant on the support of their family and friends to internalise risk (Katz 2007; Das 1987). This may manifest itself through perceived behavioural control when students consider the resources and emotional support that others are likely to make available for them (Cromie et al. 1993; Allen 2000). In addition, the support of friends, family and important others is also crucial in shaping the social norms experienced by the students (Henderson, and Robertson, 1999; Matlay 2008). For example, family commitments may put a pressure on individuals to fulfil certain roles, such as providing a secure and stable income for the family, or alternatively, to follow a career seen as desirable by parents. Both of which may influence the timing of entrepreneurial events. Although Trafimow and Finlay (1996) suggest that only a minority of individuals are strongly influenced by societal

pressure, such pressure is likely to be more influential amongst those who expect to start a business early in their career. Therefore, opinions from the group of important others received at the point of undertaking university studies in relation to possible career choices are likely to have less impact at later dates. Henley et al. (2009) found most students did not feel parents felt strongly about their future careers, although not expressing a desire to see their children avoid entrepreneurial activities, given the uncertainty present in a new venture creation a lack of vocalised support could have a similar effect. This means that those expressing stronger behavioural expectations may potentially have either greater support in terms of social norms, and will place less importance on social norms. Those only displaying entrepreneurial desires on the other hand may either lack support in terms of social norms, and will value these opinions of important others more. The following hypotheses are developed:

Hypothesis 3a: Those looking to immediately move into entrepreneurial activities will be more likely to feel that they have the support from important others than those who wait for longer.

Hypothesis 3b: Those looking to immediately move into entrepreneurial activities will value the opinion of others less than those who wait for longer.

Activities that are considered to be Entrepreneurial

The difference in timing may also have important implications regarding the types of activities that these potential entrepreneurs may regard as entrepreneurial (Quinn 1985). Carter et al. (1996) found considerable differences in terms of activities undertaken during new venture creation for nascent entrepreneurs who engage in start-up activities and those who prefer to wait-and-see. Less work has examined what

activities students who intend to start a business at some point in the future regard as constituting entrepreneurship. However, given the different careers and skills that students will possess when entering entrepreneurship if they follow the different paths, it might be expected that those looking to enter entrepreneurship immediately may regard entrepreneurship in a different light to those who wish to acquire resources and an in-depth knowledge of an industry before making the leap. Our study proposes that those with a future orientation are more likely to consider innovative activities such as R&D as entrepreneurial due to their intention to explore their entrepreneurial idea through careful long term planning (Das 1987; West, and Meyer 1997). Fleming (1996) finds that for alumni, that the lack of an appearance of a business opportunity is seen as the strongest reason for not starting a business. On the other hand, those who rush into the market rapidly may be more inclined to accept cost reduction practices as entrepreneurial, as the quick capture of opportunities is likely to be the essence of their entrepreneurial strategy (Das 1987; Eisenhardt, and Bourgeois 1988; Eisenhardt 1989). Given the literature on attitudes of students and actions of alumni it may be that potential rapid entrepreneurs have a wider conception of entrepreneurship and seek to start a business, which may or may not innovate, whilst entrepreneurs-in-waiting feel a new innovative niche must be identified and then business ownership follows. These predictions are captured within the following hypotheses:

Hypothesis 4a: Rapid entrepreneurs are more likely to emphasise the importance of cost-reduction compared with those who intend to wait for longer.

Hypothesis 4b: Rapid entrepreneurs are less likely to emphasise the importance of innovation compared with those who intend to wait for longer.

Data and Methodology

In order to examine the hypotheses developed in the preceding section quantitative data from a survey of UK students was utilised. The sample of students was drawn from those studying business and enterprise courses at a UK higher education institution, who had attended at least one module on entrepreneurship. The cross-sectional data was obtained in the form of a questionnaire containing items designed to examine personality traits, entrepreneurial intentions and preferences, and career intentions and preferences in general. These items were developed from prior studies of entrepreneurial attitudes and traits of those in higher education to ensure that the items were contextually suitable. Initially a pilot was conducted with a group of nine volunteer postgraduate students in order to ensure that the wording of items were suitable and identify any problems associated with the completion of the questionnaire. After completing the questionnaire the students provided feedback to one of the project team members, and a number of minor changes were made to the wording of some items to provide clarity. Some additional items representing other aspects of the course that students felt were important were added where previously absent.

The questionnaire was administered to all students studying business and enterprise courses across all years including both undergraduates and postgraduates. Identically worded online or paper versions were available. The final usable sample of responses was 151 – 56 first year, 38 second year, 24 third year undergraduate respondents, and 33 postgraduate respondents. The main division of students is based upon the time frame within which they expect to become an entrepreneur. Our study divided the students into three groups: potential rapid entrepreneurs (intending to start

in less than three years); entrepreneurs-in-waiting (those wishing to have a career working for others before starting a business in between three and 10 years time); and finally those only looking to become entrepreneurs in the distant future (10 years or more), or not at all, that can be described as doubtful entrepreneurs. Those already entrepreneurially active are excluded from the sample as this group although small are likely to be outliers in terms of their responses compared to even the potential rapid entrepreneur group.

This study concentrates on those items relating to the preference and intention for entrepreneurial activities and what students felt these activities included. In order to examine whether the choice of timing could be explained by the planned behaviour models, items relating to attitudes towards entrepreneurial activity were compared for the different groups of students. A majority of the items used in the survey are based on 7 point Likert scales, requiring the extent of agreement with a statement to be indicated (1 strongly disagree to 7 strongly agree). Alternatively where preference style items are included the scales are bi-polar, so for example students are asked to what extent they would prefer working as self-employed or working for someone else (1 would definitely prefer to be employed by someone else to 7 would definitely prefer to be self-employed). Given the ordinal nature of these measures, and the relatively small sub-sample sizes comparisons are made using Mann-Whitney non-parametric tests, which are the equivalent of the parametric *t*-tests used with continuous data. Where comparisons are made between the scores given by the same individuals on different items Wilcoxon rank sum tests are applied.

As well as using items associated with attitudes towards entrepreneurship for consistency with the theory of planned behaviour those capturing social norms and perceived behavioural control are also examined. However, as there is no consensus

of what constitutes entrepreneurship, a selection of items are included to determine the extent to which the students agree that these activities constitute entrepreneurship. Once identified the different groups of students are also compared in terms of their preferences for different work roles, and characteristics relating to work such as perceptions of leadership abilities. In the case of those variables related to the Theory of Planned Behaviour these may be inter-related (Ajzen 1991). In order to accommodate this, a Multiple Analysis of Variance (MANOVA) approach is used to supplement the bivariate Mann-Whitney analysis.

Entrepreneurial Time-Scales of Potential Entrepreneurs

Given the nature of the courses studied by the students it is of no surprise that a majority are male (57.6 percent), however, there are no significant differences between the male and female students in terms of their ages and stage of study. Half the sample is aged between 18 and 21 years, with a further 40 percent in the 21 to 25 years category. As might be expected, for students taking business and enterprise courses many have a strong entrepreneurial background with three fifths of the students claiming that their parents had at some point started a business of their own.

(Insert Table 1 about here)

Figure 2 below shows the distribution of students indicating their expected time scale for entrepreneurial activities. As with the other items discussed above no significant difference was found between the genders.

(Insert Figure 2 about here)

The results clearly show that although 40 percent of the students intend to become entrepreneurs rapidly after graduation (within the next three years), consistent with other studies (Galloway, and Brown 2002; Henley et al. 2009), a majority of those who see themselves becoming entrepreneurs have a much longer time span in mind. Nearly a quarter expected to become entrepreneurs only after at least 10 years. This shows why questions in studies that have asked students to specify which career path they expect to follow on graduation find a much lower preference for entrepreneurship than items just capturing interest (Armitage, and Conner 2001).

The Mann-Whitney tests indicate that there are few significant differences between the groups in terms of what they class as an entrepreneurial activity (Table 2). Entrepreneurs-in-waiting are found to have the strongest feelings regarding inventors bringing new products to market consistent with *hypothesis 4b*, and may therefore develop more innovative ventures (Capelleras et al. 2010). At the same time, potential rapid entrepreneurs are more likely to perceive cost-cutting measures as entrepreneurial activities than doubtful entrepreneurs. Potential rapid entrepreneurs, however, still indicate greater agreement that new product commercialisation was an entrepreneurial activity than cost reduction (Wilcoxon = 3.970, p-value = 0.000).

(Insert Table 2 about here)

The remainder of the analysis largely concentrates on the two groups intending to start within the next 10 years, as the final group, as is shown above, are the group which exhibit the least preference for an entrepreneurial career.

Perceived Behavioural Control

The results presented in Table 3 suggest that potential rapid entrepreneurs are more certain of their ability to make their entrepreneurial experience a success, thus confirming *hypothesis 1b*. However, there is no evidence of *hypothesis 1a* that that such confidence came from the skills and knowledge that students felt they possessed, with no significant difference found between the groups. Although this group may have possessed slightly greater entrepreneurial experience as 35.4 percent of the potential rapid entrepreneurs were postgraduates compared to only 15.9 percent of the entrepreneurs-in-waiting (chi-square 4.046, p-value 0.033). Potential rapid entrepreneurs were also more likely to have parents who started businesses than the entrepreneurs-in-waiting (77.1 percent compared to 54.5 percent, chi-square 5.219 p-value 0.022). This means that although these individuals are by and large relatively inexperienced themselves they have potentially strong role models from their parents, allied with a higher level of formal education.

(Insert Table 3 about there)

As Ajzen (1991) suggests the different constructs in the Theory of Planned Behaviour are likely to be in part interdependent it is reasonable to examine this variables together using MANOVA analysis, to allow for any correlation (Table 4). Given that these variables may also be influenced by the level of study this is included as an additional factor alongside the type of latent entrepreneur. No significant relationship was found between level of study and type of latent entrepreneur, so it was possible for both to enter as independent factors. Interestingly only the type of entrepreneur

was found to have a significant influence on the Theory of Planned Behaviour variables. The largest differences are clearly between the doubtful entrepreneurs and the others, but the contrasts do weakly confirm the findings of the bivariate analysis in Table 3. A significant interaction is found with rapid entrepreneurs in their last year of undergraduate study more likely to feel they have the knowledge required. This is not found for rapid entrepreneurs undertaking postgraduate study.

Attitude towards Entrepreneurship

It is found that both potential rapid entrepreneurs and entrepreneurs-in-waiting display a strong preference for self-employment (Table 3), with no significant difference found between the two groups (confirming *hypothesis 2a*). Although the MANOVA results indicate that the entrepreneurs-in-waiting and potential rapid entrepreneurs do show a greater preference for entrepreneurship than doubtful entrepreneurs (Table 4). Understandably, however, entrepreneurs-in-waiting do show a greater inclination for acquiring skills working for others first before becoming entrepreneurs (Table 5). Once an entrepreneurial career has been started, neither group shows a greater preference than the other for serial or portfolio entrepreneurship. In order to establish the reason(s) for such differences, the analysis now turns to the factors behind career choice decisions.

(Insert Table 4 about here)

(Insert Table 5 about here)

One explanation for the timing difference is the desire to control expressed by the individuals (Stavrou et al. 2005). The results in Table 6 suggest that rapid

entrepreneurs are more likely to perceive themselves as leaders (*hypothesis 2c*), although there is no evidence that they have substantially greater confidence in their leadership skills or enjoy being in such a position. This means that there is little evidence for *hypothesis 2d*, that potential rapid entrepreneurs seek out responsibility and control of others. These results may reflect a degree of modesty as they do indicate that they naturally tend to be selected by others or fate to be in these positions. Another explanation for the difference in timing is because of the value individuals placed on stress and responsibilities. Whilst both groups do not place a great deal of importance on avoiding responsibility, and only moderate importance on avoiding stress (Bluedorn, and Martin 2008), the desires to avoid responsibility and stress are more important for the entrepreneurs-in-waiting than the potential rapid entrepreneurs (thus confirming *hypothesis 2e*). Clearly the potential rapid entrepreneurs have a strong image or vision they wish to complete and are more willing to accept some stress to accomplish it.

(Insert Table 6 About here)

Social Norms

The results provide little evidence to support either *hypothesis 3a* or *hypothesis 3b*, with no significant differences in the extent that two groups of entrepreneurs feel they have the support of others and the degree they care about this support (Table 3). Table 6 also finds that the two groups display minimal differences in their preferences for participating in a social environment. The contrasts in Table 4 did, however, provide weak evidence that potential rapid entrepreneurs did feel they had more support than entrepreneurs-in-waiting (*hypothesis 3a*).

Discussion

Consistent with previous literature (Donckels 1999; Carter, and Collinson 1999), our study found no considerable attitudinal differences between rapid entrepreneurs and entrepreneur-in-waiting in terms of their desire to start a business. Although the motivations for and form that these start-ups will take do appear to differ. For potential rapid entrepreneurs they are less worried about avoiding stress and responsibility and entrepreneurship is potentially more closely associated with business ownership in general and less strongly restricted to innovative activities. These findings match with studies of barriers to entrepreneurship experienced by alumni. For example, a lack of viable ideas (Carter, and Collinson 1999), and a lack of security (Rae, and Woodier 2006), have been identified as reasons for delaying start-up activity. It is understandable that those not intending to break new ground and less worried about the stress associated with business ownership will be those that are more likely to take the plunge relatively rapidly. Entrepreneurship courses in the UK are focused more on business students rather than engineers and scientists who are perhaps more likely to create innovative products (Levie 2009). Bringing non-business students into the courses may be of great value to potential rapid entrepreneurs as their desire for business ownership can be linked to those who are perhaps less commercially minded, but have the potential to generate innovations with commercial potential (Thursby 2005).

For those that choose to delay entry into entrepreneurship the results suggest that there is still a distinct preference over working for others, but entrepreneurship is part of a career planned over a longer period. However, for entrepreneurs-in-waiting fulfilling these ambitions of starting a business requires entrepreneurial aspirations to

be sustained beyond university. Much of this choice to delay seems to be associated with a third barrier found in studies of entrepreneurial activities of alumni, that of a desire to acquire more skills (Matlay 2008). Whilst our study found no difference in terms of the skills and knowledge possessed by both rapid entrepreneurs and entrepreneurs-in-waiting, the potential rapid entrepreneurs were more confident of succeeding if they were to start a new venture. It is impossible to determine which group of aspiring entrepreneurs was incorrect as the skills required will vary by type of start-up instigated. In addition, whilst some studies suggest that the most relevant skills and knowledge are only likely to come from experience of business ownership (Politis 2005), there are likely to be some resources, which can be acquired in preparation to increase the probability of success. As such, perceived deficiencies can be due to the actual lack of technical skills, but equally it can be due to lack of practical know-how (Matlay 2008; Rae, and Woodier 2006). Studies have criticised the impractical, 'bums-on-seats' approach of many of the more traditional management education programme which do not enable students to connect the different competencies required to start a business together in a meaningful manner (Matlay 2008). Concerns of entrepreneurial alumni in relation to a lack of skills can be attributed frequently to a lack of actual work or entrepreneurship experience (Carter, and Collinson 1999). Working for others helps accumulate this missing experience and allows them to place the knowledge they gained from their formal management and entrepreneurship training at university. Without such experience, alumni lacked the context of immediacy surrounding these issues (Matlay 2008). According to these entrepreneurial alumni, this perceived lack of skills is also related to a lack of access to specialist support, guidance and advice (Smith, and Beasley 2011, Rae, and Woodier 2006). An alternative view is that in trying to generate

creative enterprising individuals a mythical image of the superhuman entrepreneur is created, those lacking ‘the next big idea’ may worry they cannot live up to this, and delay involvement in pursuit of this unicorn (Laukkanen 2000). The further constraint that might be overcome with time spent working for others is a lack of finance (Smith, and Beasley 2011; Carter, and Collinson 1999).

On average both groups suggested that important others were mildly supportive of careers in self-employment, but not greatly so. Although, important others are likely to relate largely to family members rather than university staff (Henderson, and Robertson 1999), traditionally the lack of emphasis placed on networking opportunities in many courses, which restricts this group of important others to individuals with less direct knowledge and information on entrepreneurship, may have been a cause (Garavan, and O’Cinneide 1994). Whilst opportunities to network with active entrepreneurs is now generally incorporated within courses, perhaps there is still opportunities to increase this still further. End of year dissemination events with invitations to parents and other family members to join the audience could increase these social norms.

The above findings highlight the challenges faced by universities in preparing graduates for an entrepreneurial career. Studies found that alumni would like to receive more vocational orientated, technical based training whilst studying at university (Donckels 1991; Carter, and Collinson 1999). These include a ‘portfolio of entrepreneurial skills’ to help manage a long term entrepreneurial career, including financial management, particularly an understanding of the balance sheet, business communication and other business start up skills such as evaluating a business idea and to draw up a business plan (Donckels 1991; Carter, and Collinson 1999). At the same time, the introduction of innovative methods to develop skills and experience

including the use of long term apprenticeships have been strongly encouraged (Aronsson 2004). Indeed, there is evidence of changes in delivery of training, from the more traditional approach between 1995 and 1999 to a more mixed approach between 2000 and 2004 with increased variety of courses and an increasing use of ICT and electronic platforms within curriculum delivery (Matlay, and Carey 2007). New innovative and experimental programmes have been developed which aim to increase efficiency, relevance, and practical value of entrepreneurship education on offer (Smith et al. 2006; Matlay, and Carey 2007; Kwong et al. 2012). Many of these programmes aim to encourage interaction with entrepreneurs with greater emphasis on participation, responsibility and decision making. There is also increasing used of synergistic learning, which focuses on learning through cooperation, co-learning, consultation, and collective action.

The practical difficulty, however, is to sustain the interest of entrepreneurial alumni and to carry their interest from university to a work environment. After working for a few years, such entrepreneurial aspirations may be lost as a result of a change in circumstances (Kwong et al. 2012). Whilst many universities provide some form of enterprise training for their student population, relatively few have considered extending this provision to their alumni community (Carter, and Collinson 1999). Such an approach often neglected the 'entrepreneurs-in-waiting' type graduates whose aspirations need to be continuingly updated and regenerated beyond university. Studies have thus argued for the introduction of continuing post-experience education for alumni (Donckels 1991), most notably on providing a more practical grounding for graduates, including financial management and business communications skills, to help cope with the transition, and the often hazy division, between employment and self-employment (Matlay 2008; Carter, and Collinson 1999). It is found that nearly

two thirds of entrepreneurial alumni would like to attend short courses on financing business start-ups and also on business planning, whilst half would like to receive special training (Carter, and Collinson 1999). However, universities should also take note of the very different requirements of these alumni compared with the traditional student catchments. Most of these ‘entrepreneurs-in-waiting’ are working for others in order to accumulate experience, develop professional networks and raise finance. This means they require a very different educational provision, most notably their preference for courses outside the normal business hours including the evenings and weekends (Carter, and Collinson 1999). Alternatively these courses can be delivered in blocks mimicking other executive education programmes such as the MBA (Nixon et al. 1997). Studies have also found that these entrepreneurial alumni also prefer the more flexible multimedia delivery approach, including the extensive use of online delivery (Carter, and Collinson 1999). One possible way to connect these experiences with continuous study is through a degree in work based learning. Such a degree would require alumni to create their personal development plan. This fits with calls for employees, employers and educational establishments to engage with such activities to help individuals to identify knowledge and experience deficiencies, and to attend courses and events organised both by the universities and elsewhere in order to address such deficiencies (Rodrigues 2006). Whilst work-based learning degrees are becoming increasingly popular (Raelin 1997), an entrepreneurship stream of such a degree can be created to allow alumni to follow a specific pattern that is likely to enable them to accumulate the knowledge and experience required to start a business. The development of a personal development plan would enable alumni to keep track of the additional training required, their current level of such training, and help them identify what relevant training is provided. It is hoped that, through such a course of

study, the alumni would continuously refresh their entrepreneurial aspirations, and at the same time develop a portfolio of skills that would enable them to start their own business in the long run. As studies found that some alumni would prefer such training to be accredited (Carter, and Collinson 1999), a degree in work based learning would also enable them to achieve such qualifications whilst working towards starting a business.

The study also found that there was some evidence that potential rapid entrepreneurs felt that they had greater support. Once in the workplace it is possible that universities can provide social support for entrepreneurs-in-waiting, which may be just as important in encouraging entrepreneurial activity amongst alumni (Carter, and Collinson 1999), to create a community, which includes access to support in more practical terms, including free access to: libraries; specialised scientific equipment; and staff consultation (Carter, and Collinson 1999). Such support could be just as important for potential rapid entrepreneurs, because as noted above although they are more confident of success it is not clear that such confidence is any more justified and without the professional networks and support the entrepreneurs-in-waiting may have built up, the university may have a key role to provide in fulfilling these needs, rather the very basic services often provided in incubators such as photocopying and conference suites (Chell, and Allman 2003).

Conclusions

This paper has examined the entrepreneurial intentions of business students at a UK higher education establishment, with particular regard paid to the timeframe within which students intend to become entrepreneurs. As found in previous studies the students displayed strong desires and considerable preferences for entrepreneurial

careers, but when the issuing of timing was considered most students were not looking for rapid involvement. In fact the most favoured path to entrepreneurship was to work for others first and then become an entrepreneur at a later stage. However, a considerable group of students did intend to become entrepreneurs within the next three years. Two main groups of students positively disposed to entrepreneurial careers were identified. The first preferred fairly immediate engagement upon graduation, so were 'potential rapid entrepreneurs' the others wanted to work for others for three to ten years being rather 'entrepreneurs-in-waiting'. Whilst both groups are equally enthusiastic about starting a business, there are some notable differences between them. Our study found that the main difference is not in terms of perceived capability, but attitudinal. Despite being slightly more experienced in terms of parental role models and level of qualifications being studied for, our study found minimal evidence that potential rapid entrepreneurs are more skilful, or perceive fewer problems relating to start up, than those who "wait-and-see". Despite this, potential rapid entrepreneurs are more certain of their ability to succeed than those who prefer to wait. When examining their attitude towards starting a business, it is found that potential rapid entrepreneurs are more likely to feel that they are naturally selected as leaders. There are also signs that potential rapid entrepreneurs were driven to entrepreneurship by their dislike of employment. Such a desire to avoid employment is so strong that they feel they are obliged to take on more stress and responsibilities in order to start up a business within a relatively short timeframe. However, it is unclear whether this greater confidence of potential rapid entrepreneurs can be justified. One potential danger of plunging straightaway into entrepreneurship is the focus of short-term cost reduction practices rather than boundary spanning innovative activities, which many argued would hinder the growth potential of the

business in the long run (Capelleras et al. 2010). On the other hand, our findings suggest that entrepreneurs-in-waiting place more value on acquiring the skills and resources they need under others, perhaps reflecting the different understanding of what constitutes entrepreneurship where innovation and the development of new products is emphasised to a greater extent.

The results of the paper show the difficult balancing act that those providing enterprise education face. In order to create more graduate entrepreneurs it is essential that positive student attitudes are created. Those looking to become entrepreneurs, as compared to those for whom an entrepreneurial career is doubtful, show a greater preference for working for themselves. There is also greater confidence that an entrepreneurial career will be pursued at some point where potential start-up initiation is expected in the near future. This means even before the end of their studies students themselves are aware that if not moving into entrepreneurship almost immediately the probability that any entrepreneurial ambitions will be fulfilled declines substantially (Carter, and Collinson 1999). At the same time it is essential that over-confidence is not generated, otherwise those less prepared may enter entrepreneurship before they have the full set of skills that they will require. Whilst it is possible that as serial entrepreneurs a new venture failure will provide a good learning experience, this is by no means certain (March 1991; Shepard 2003).

Resources already available in many universities may be the answer to some of these issues. For potential rapid entrepreneurs the availability of incubators attached to universities could provide access to trusted advisors in the form of their university tutors, which will help to overcome some of the problems of inexperience (Chell, and Allman 2003; Rodrigues 2006). For the entrepreneurs-in-waiting, refresher courses may help reignite entrepreneurial aspirations (Carter, and Collinson

1999), but perhaps there is no need for entrepreneurs to leave their employers, with intrapreneurship and eventually spinout companies offering a method of tapping into their entrepreneurial potential. It is therefore important that an entrepreneurial environment is created at the workplace that would allow for creative and innovative practices to be undertaken, but also that enterprise educators ensure their courses are relevant (and seen to be by students) for both corporate and SME environments (Heinonen 2007). For example, providing students with an understanding of the nature and skills required by internal spinoff structures of existing enterprises.

With regard to those who prefer to "wait-and-see", our study also argues that, whilst the number of entrepreneurship courses being run in universities has increased greatly in the past 20 years (Kuratco 2005), the embracement of a "go-out-and-do-it-now" approach in most of these courses alienates those who prefer to take a more cautious approach towards entrepreneurship. Instead, we urge those designing and running enterprise courses to adapt their courses to also cater for their needs by providing continuous support until they feel ready to start a business. As those who 'wait-and-see' are less confident of their probability of succeeding, enterprise education needs to be taught in a way that does not scare students away from the pursuit of entrepreneurial activities to avoid diminishing students' intentions of becoming entrepreneurs (Shepherd 2004).

The study is limited by the depth to which the decisions of students with regard to the career paths can be examined. Qualitative follow up studies will help provide a greater understanding of why students favour differ approaches, or why they have greater perceived behavioural control when at first it appears they may not have the required experience. The findings are of course based around a single group of students studying on courses in a single higher education establishment in the UK.

Comparative studies in other institutions and cultures would be required to confirm the findings or determine whether factors such as the courses studied or the backgrounds of the students generate the results found here. Like most studies of entrepreneurship the biggest limitation of the study is the cross sectional nature of the data. As noted in the introduction to this paper recalled alumni experiences may not accurately reflect their choices made at earlier stages, but actual outcomes and their reasons are just as important element to study. However, as noted by others, such as Chell and Allman (2003), to best understand the choices made and the outcomes of these choices a longitudinal approach is more appropriate, and it is only with such studies that a real understanding of the impact of entrepreneurship education can be truly established.

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Table 1 – Characteristics of sample

	Male	Female	All
Gender	57.6%	42.4%	139
Under 21 years of age	52.5%	54.2%	74
Chi square	0.041	[1]	(0.839)
First year of undergraduate study	38.8%	39.0%	54
Second year of undergraduate study	22.5%	28.8%	35
Third year of undergraduate study	12.5%	16.9%	20
Masters or other postgraduate studies	26.3%	15.3%	30
Chi square	2.907	[3]	(0.406)
Parents started a business	53.8%	61.0%	139
Chi square	0.731	[1]	(0.393)
N	80	59	139

Notes: Degrees of freedom are shown in squared brackets and p-values in parenthesis

Table 2 – Agreement that activities represent entrepreneurship by intended date of involvement

	Doubtful entrepreneurs	Entrepreneurs-in-waiting	Potential rapid entrepreneurs
Innovation Exploration Activities			
Inventors bring new products to market	5.8	6.4[a]	5.7[b]
R&D activity in large firms	4.6	4.7	4.7
University research	4.1	4.1	4.5
Market Exploitation Activities			
Providing goods to those in deprived areas	4.9	4.6	4.9
Opening a shop	4.3	4.3	3.8
Cost Reduction activity			
Managers reducing costs in large firms	3.7	4.1	4.4[a]
Organisational Restructuring Activity			
Corporate mergers and takeovers	4.6	4.9	4.6

Notes: a. Mann-Whitney tests indicate a significant difference at the 5 per cent level with those expecting to take over 10 years to become an entrepreneur (doubtful entrepreneurs); b. significant difference with those expecting to take between 3 and 10 years to start a business (entrepreneurs-in-waiting)

Table 3 – Perceived behavioural control, attitude towards entrepreneurship, and social norms, by intended data of involvement

	Entrepreneurs-in-waiting	Potential rapid entrepreneurs	U-test	p-value
Perceived Behavioural Control				
Perceived certainty of success of start-up	4.6	5.1	-1.980	(0.048)
Perception of knowledge required for start-up	2.9	3.3	-1.162	(0.245)
Perceived difficulty of starting a business	2.7	3.0	-0.923	(0.356)
Attitude towards Entrepreneurship				
Preference for self-employment	5.5	5.7	-0.542	(0.588)
Social Norms				
Important others support self-employment	4.7	5.2	-1.461	(0.144)
Importance of others opinions	4.3	4.0	-0.679	(0.497)

Table 4 – MANOVA analysis of variables relating to the Theory of Planned Behaviour

	Level of Study[a]	Contrasts Level 1 v Above	Contrasts Level 2 v Above	Contrasts Level 3 v Masters	**Type of Latent Entrepreneur**[a]	Contrasts Doubtful v Others	Contrasts In Waiting v Rapid	**Interaction**[a]	Levene's /Box Test[b]
Perceived certainty of success of start-up	0.860 (0.464)	-0.256 (0.310)	0.206 (0.535)	0.432 (0.331)	5.122 (0.007)	-0.781 (0.010)	-0.595 (0.063)	0.622 (0.712)	1.500 (0.140)
Perception of knowledge required for start-up	0.286 (0.835)	0.015 (0.956)	-0.018 (0.960)	-0.434 (0.365)	0.868 (0.422)	-0.167 (0.603)	-0.417 (0.225)	1.899 (0.086)	0.863 (0.578)
Perceived difficulty of starting a business	1.133 (0.338)	0.369 (0.112)	-0.108 (0.722)	0.229 (0.573)	2.505 (0.086)	-0.518 (0.060)	-0.355 (0.224)	0.930 (0.476)	0.906 (0.537)
Preference for self-employment	0.843 (0.473)	-0.314 (0.345)	-0.565 (0.196)	-0.146 (0.803)	9.978 (0.000)	-1.731 (0.000)	-0.276 (0.509)	0.624 (0.711)	1.172 (0.313)
Important others support self-employment	0.017 (0.997)	-0.017 (0.954)	-0.019 (0.961)	-0.107 (0.840)	7.576 (0.001)	-1.247 (0.001)	-0.646 (0.089)	0.620 (0.714)	0.715 (0.723)
Importance of others opinions	0.839 (0.475)	-0.377 (0.262)	-0.384 (0.383)	0.624 (0.290)	0.033 (0.967)	-0.083 (0.834)	0.062 (0.884)	1.577 (0.159)	0.751 (0.688)
Overall - multivariate	0.853 (0.636)				2.754 (0.002)			1.056 (0.383)	0.961 (0.625)

Notes: a. F-tests based on the Pillai-Bartlett trace; b. tests of group variance homogeneity

Table 5 – Personal estimation of likelihood towards entrepreneurship and employment

	Entrepreneurs-in-waiting	Potential rapid entrepreneurs	U-test	p-value
Likelihood of pursuing a career as self-employed	5.3	6.1	-2.977	(0.003)
Likelihood of pursuing a career as an employee	5.0	4.3	-2.001	(0.045)
Likelihood of working for others first before becoming self-employed	5.3	4.5	-2.239	(0.025)
Likelihood of spending the entire career on different entrepreneurial ventures	4.2	4.8	-1.530	(0.126)

Table 6 – Factors' importance in choosing future career path by intended date of involvement

	Entrepreneurs-in-waiting	Potential rapid entrepreneurs	U-test	p-value
Leadership				
I enjoy having authority over other people	4.9	5.2	-1.286	(0.198)
Perceive themselves to usually be leaders	4.2	4.9	-2.093	(0.036)
Perception of capability to be a good leader	5.7	6.0	-1.425	(0.154)
Stress and Responsibilities				
I prefer having a non-stressful job	4.5	3.6	-2.398	(0.016)
I prefer not taking on too much responsibility	3.2	2.7	-1.808	(0.071)
I prefer not working long hours	4.5	3.7	-1.972	(0.049)
Financial				
I prefer job security and stability	5.4	5.1	-0.721	(0.471)
I prefer pay based on performance and effort	5.6	5.7	-0.210	(0.833)
I prefer to keep a large portion of profits	5.4	5.1	-0.905	(0.366)
I prefer being able to build great wealth	5.9	6.2	-1.383	(0.167)
Need for achievement				
I prefer having opportunities for career progression and promotion	6.3	6.4	-0.009	(0.993)
I prefer having a challenging and interesting job	6.4	6.4	-0.149	(0.882)
I prefer being able to achieve something and get recognition	6.2	6.1	-0.810	(0.418)
Social				
I prefer to participate in a social environment	5.4	5.1	-1.142	(0.254)

Figure 1 – Framework of entrepreneurial types, behaviours and activities

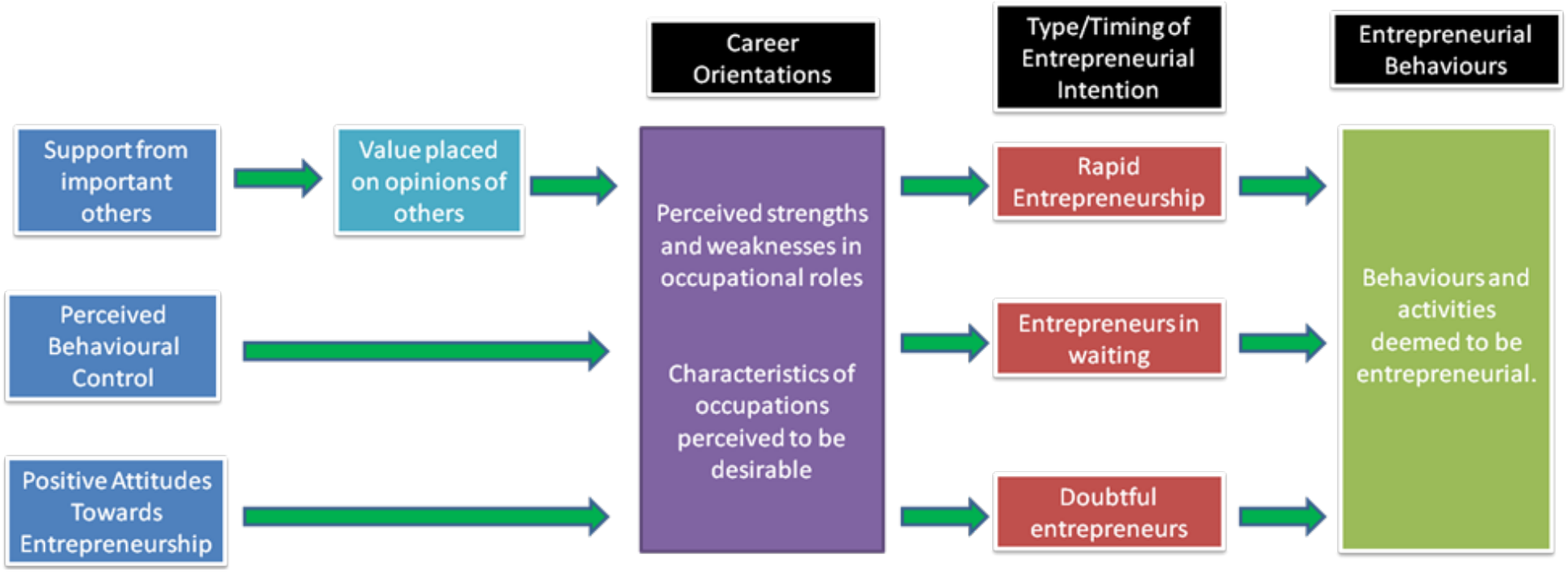

Figure 2 – Time scale of becoming an entrepreneur