THE IMPACT OF AN ENTREPRENEURSHIP EDUCATION PROGRAMME ON ENTREPRENEURIAL INTENTIONS

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ABSTRACT

We looked at the impact of an entrepreneurship education programme (EEP) provided to “real-life,” would-be entrepreneurs. The Shapero (1982) model was adapted to conduct an evaluation of the “Enterprise & You” project, an EEP which was run by the University of Northampton in the UK and funded by the European Social Fund (ESF). Questionnaires were administered to 52 participants before and after the programme to measure entrepreneurial intentions. The results show that perceived feasibility increased in programme participants by 36.44% and perceived desirability increased by 3.31%. We then discuss the findings and offer conclusions and ideas for future research.

INTRODUCTION

Entrepreneurship has essentially always existed in some form or another (Bridge et al., 1998). It played a vital role in the industrial revolution and affected changes in the socio-economic conditions of nations (Matlay, 2005). It is beneficial to an economy, a community, and to individuals, and is now recognised as creating jobs, wealth, and facilitating social adjustments (Jack and Anderson, 1999).

To illustrate its importance, it has been found that countries with more start-up businesses typically have a higher GDP (GEM, 2008); and new businesses provide a link to innovation (Schumpeter, 1934; Drucker, 1985), productivity, and increased competition (Plaschka and Welsch, 1990). Johannisson (1987) noted that innovation comes from small businesses and cannot be successfully planned by larger corporations.

Entrepreneurship also has been shown to translate across barriers of class, race, and gender (Aldrich et al., 1983; Waldinger et al., 1990; Hyrsky and Ali, 1996), and can increase the satisfaction and fulfilment of individuals (Scott and Anderson, 1994). It is no longer seen as marginal to an economy (Goffé and Scase, 1995), and has moved from being primarily a western phenomenon to one changing the economies of eastern European countries (Twaalfhoven and Muzkya, 1997).

There has been an “explosion” of entrepreneurship research over the last 20 years (Davidsson and Wiklund, 2001), and yet the field of entrepreneurship is characterized as highly fragmented (Gartner, 2001) and lacking theory development (Morris et al., 2001). It lacks a conceptual framework, is ill-defined, and has become “a broad label under which a hodgepodge of research is housed” (Shane and Venkataraman, 2000, p. 217). This is partially due to a lack of clear definitions of key terms used in entrepreneurship research, which has hindered the building of future research on previous studies. Therefore, we briefly discuss and define a few key terms used throughout this paper.

In this paper, entrepreneur is defined as a capital owner who, under conditions of uncertainty and risk, acts upon a perceived opportunity to make an entrepreneurial profit and avoid an entrepreneurial loss (based on Shane and Venkataraman, 2000). This definition means it is not necessary for an entrepreneur to start a business—they could also be part of an existing company.

The term entrepreneur has also been segregated into various types of entrepreneurs. In this paper, we designate a potential entrepreneur as someone who is not fully involved in entrepreneurial activity (e.g., does not own a business) but has a positive perception of their own capabilities and entrepreneurial opportunities (GEM, 2008).
The most accepted view (Alberti et al., 2004) of entrepreneurship defines it as the “scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited” (Shane and Venkataraman, 2000, p. 218).

The term entrepreneurship education is more commonly used in the US and Canada whereas in the UK the term enterprise education is used (Gibb, 1987). This difference in terms is more than semantic; enterprise education in the UK has typically meant a focus on developing entrepreneurial attributes as opposed to creating a new business (Garavan and O’Cinneide, 1994).

As the research described in this paper takes place in the UK, the term entrepreneurship education will be used to mean a focus on creating a business idea and learning the skills necessary to launch and grow a business. While there has been debate on whether entrepreneurship can be taught (Fiet, 2000), this research takes the approach given by Peter Drucker: “[Entrepreneurship] is not magic, is not mysterious, and it has nothing to do with genes. It is a discipline. And, like any discipline, it can be learned” (Drucker, 1985).

Entrepreneurship in the United Kingdom

The UK government has been promoting an “enterprise culture” or “enterprise economy” for over 20 years (Gavron et al., 1998). This was initiated primarily through various structural changes (Morris, 1991), which consisted of deregulation, privatisation, dismantling of the welfare state, and promoting self-employment (Carr, 2000a). Much of this was done to better compete with France, Germany, and the United States (Carr and Beaver, 2002; UK BERR, 2008).

In the last decade, there has been an increase of 750,000 new businesses in the UK and business survival rates are higher than before. The World Bank has ranked the UK second in Europe and as one of the world’s top ten countries when it comes to the ease of doing business. Productivity growth for small businesses is greater than that in large businesses. Product and service innovations are also higher among small businesses. These changes represent great opportunities and challenges for the UK in the future (UK BERR, 2008).

To meet these challenges, the UK government has implemented a series of strategies, the latest being the Enterprise Strategy in March 2008, designed to make the UK “the most enterprising economy in the world and the best place to start and grow a business” (UK BERR, 2008). These strategies have been implemented partly by an increase in UK government funding, and partly by linking European funding to enterprise support. This research will look at one example of a European funded enterprise support programme.

Entrepreneurship Education Programmes (EEP)

Given that entrepreneurship is the “engine that drives the economy of most nations” (Gorman et al., 1997, p. 56), an environment which encourages and allows for entrepreneurship to happen is “congenial to creating potential entrepreneurs” (Krueger and Brazeal, 1994, p. 99). Entrepreneurship education programmes (EEPs), defined by Fayolle et al. (2005, p. 702) as “any pedagogical programme or process of education for entrepreneurial attitudes and skills, which involves developing personal qualities,” have arisen and are growing in most nations, with the goal of increasing the quantity and quality of entrepreneurs (Matlay, 2005). Entrepreneurship education is in high demand by governments, students, and businesses (Jack and Anderson, 1999). This demand is being met by an increased supply of EEPs. These programmes are typically offered by Higher Education Institutions (HEI) and funded by governments.

While the first entrepreneurship course was offered in 1947 at Harvard University (Katz, 2003), it was not until 1971, when the University of Southern California (USC) launched its first course in entrepreneurship, that the concept of entrepreneurship education began to lay its firm roots (Kuratko, 2003). A decade later there were over 300 universities offering courses in entrepreneurship; by the 1990s the number had grown to 1,050 universities (Solomon et al., 1994).

An EEP consists of various components which are designed to meet the programme’s goals. Fayolle et al. (2005) suggest a scheme to assess the impact of an EEP. The framework is comprehensive enough to cover the major components of an EEP, and similar to those identified by other researchers (e.g., Alberti et al., 2004).
EEPs take place within institutional settings where the programme is offered. Additional support structures are nearly always put in place to achieve the outcome of an EEP, which can include tangibles such as a business incubator with office facilities, and links to banks and other financial institutions, including angel and venture funding. Support can also be provided from business professionals, mentors, and academics, while other organisations and individuals can provide a social network. In addition, intangible factors such as the internal culture or strategy of the institution can support an EEP.

Hynes (1996) contrasts entrepreneurship training with entrepreneurship education. Entrepreneurship training includes a systematic and planned effort to develop knowledge and skills through learning experiences which enable an individual to effectively perform a behaviour (Hynes, 1996; Fayolle et al., 2006). On the other hand, entrepreneurship education includes assimilating knowledge and skills which apply to a broader range of problems, as opposed to a narrow field of activity (Hynes, 1996).

Ronstadt (1987) pointed out in his continuum labelled “entrepreneurial know-how/entrepreneurial know-who” that entrepreneurial success depends on acquiring the “how to” skills, as well as having a network of individuals who provide support, guidance, and connections.

Liñán (2004) distinguishes four types of entrepreneurship education:

a) Entrepreneurial awareness education: the goal would be to increase the quantity of people with knowledge of entrepreneurship so they might consider self-employment as an option. It would not, however, seek to increase the supply of entrepreneurs. These are typically university-level courses.

b) Education for start-up: this type of EEP would prepare an individual to be the owner of a new business. It would centre on the aspects associated with start-up: how to obtain financing, how to network, how to comply with government laws and regulations, how to market, etc. These courses should attract an audience who is highly motivated; the goal of the course should be to increase their intentions of starting a business.

c) Education for entrepreneurial dynamism: this type focuses on promoting entrepreneurial behaviour for entrepreneurs in the early growth phase. The idea would be to raise the intention to develop dynamic entrepreneurial behaviours.

d) Continuing education for entrepreneurs: this type is designed to improve an existing entrepreneur’s abilities. It may be more difficult to attract entrepreneurs to this type of education due to its generality.

The chosen pedagogical methods and contents of EEPs “will be decisive factors of success for entrepreneurship education in the twenty-first century” (Fayolle et al., 2006, p. 711; Volkman, 2004). These methods and approaches should depend on the audiences and assessment of the programme (Alberti et al., 2004).

Relationships among Components of an EEP

The components of an EEP are interrelated and it is necessary, in order to design an effective EEP, to understand the nature of these relationships. The relationship between components of an EEP can be seen in Figure . There are essentially five components with eight relationships, some of which are reciprocal in nature (Alberti et al., 2004).

The first component consists of the objectives of an EEP, which depends on the intended audience (relationship 1). For example, an audience of students will most likely have the objective of seeking a degree or qualification.

The second component, assessment, will have to assess the objectives (relationship 2). If the objectives are fixed and explicit then a proper assessment can be used. In an audience of business executives, the assessment may include completion of a one-year business plan.

The contents of the EEP will depend on both its objectives (relationship 3) and audience (relationship 4). For example, if the objective is to teach marketing directors how to write a market plan, then the content could consist of dissecting a marketing plan.

Pedagogical approaches and methods should be considered after the content is explicit (relationship 5) and based on audience needs and characteristics (relationship 6).

Assessment will depend on both the content (relationship 7) and pedagogies (relationship 8). For example, if the content is based on the objective of learning a marketing plan, then assessment may include the writing of a marketing plan.
Evaluating an EEP

Alberti et al. (2004, p. 20) state that “the first and most important area for further investigation should lie in the effectiveness of entrepreneurship education, i.e., the extent to which different learning and behavioural objectives are met in training programmes.” Evaluation of an EEP may take a longer timeframe to determine its effects. For example, if the objective is to start a new business, then the timeframe may be one year or more in which assessment could take place. This would require longitudinal studies and relevant methodologies to evaluate a programme’s effectiveness (Matlay, 2005).

One of the most common ways to evaluate an EEP appears to be to assess the intentions an individual has of starting a business. In this area, the entrepreneurship literature typically uses measures of self-efficacy, or an amalgamation of specific behaviours which may vary over time (Fishbein and Ajzen, 1974), to measure the intention of starting a business.

Intention is a construct from social psychology (Bandura, 1986) that has been further adapted and tested in myriad ways by researchers in entrepreneurship (Shapero and Sokol, 1982; Bird, 1988; Boyd and Vozikis, 1994; Davidsson, 1995; Autio et al., 1997; Tkachev and Kolvereid, 1999). Intentionality is central to the process of entrepreneurship (Bird, 1988; Katz and Gartner, 1988; Krueger, 1993) and research has shown that intentions are the single best predictor of planned behaviours (Bagozzi and Yi, 1989).

Entrepreneurial intentions specifically mean the intention of starting a new venture or growing an existing venture (Bird, 1988). The intentions of entrepreneurs help form the “initial strategic template of new organisations and are important underpinnings of new venture development” (Bird, 1988, p. 442). In addition, starting a business is an intentional act, moving beyond a stimulus-response model (Krueger et al., 2000).

Researchers have looked at the influence of different variables on entrepreneurial intentions. For example, Davidsson (1995) and Kolvereid (1996b) have contended that mastery of vicarious experience and social influences may affect entrepreneurial intentions.

A related topic to intentions is self-efficacy, which is “a motivational construct that has been shown to influence an individual’s choice of activities, goal levels, persistence, and performance in a range of contexts” (Zhao et al., 2005, p. 1266). It is a part of social-cognitive theory and was elaborated on by Bandura (1986). He explains that “competent functioning requires both skills and self-beliefs of efficacy to use them [skills] effectively” (Bandura, 1986, p. 94). It can be defined as “people’s judgments of their capabilities to organise and execute courses of action required to attain designated types of performances” (Bandura, 1986, p. 94).
Self-efficacy research has produced consistent findings. For example, self-efficacy has been shown to be associated with work-related performance, including life insurance sales (Barling and Beattie, 1983); faculty research productivity (Taylor et al., 1984); coping with difficult career-related tasks (Stumpf et al., 1987); learning and achievement (Campbell and Hackett, 1986; Wood and Locke, 1987); and adaptability to new technology (Hill et al., 1987).

Entrepreneurial self-efficacy (ESE) is a construct that attempts to measure the perception of the relative strength (or weakness) an individual has of their capabilities to perform any task associated with being entrepreneurial, including starting a business. It has been used in an attempt to predict whether someone will become an entrepreneur (Chen et al., 1998).

Zhao et al. (2005) found that ESE had a greater impact on entrepreneurial intentions than all the other independent variables in their model. This supports the belief that EEPs can increase an individual’s intentions to start a business. Zhao et al. (2005) recommended, based on their findings, that an EEP incorporate as many different types of learning experiences which promote ESE as possible.

Chen et al. (1998) postulate that, among the reasons why an individual may not start a business, their self-efficacy may be more important than their skill level. One way for an EEP to increase self-efficacy in an individual is to have a supportive environment. This could include resources such as a network of individuals to provide specific expertise (marketing, accounting, etc.), and the inclusion of role models and one-to-one support. For example, Boyd and Vozikis (1994) found that when self-efficacy increased due to an entrepreneurial role model intentions to create a business were stronger. Chen et al. (1998) also concluded that the design of an EEP should include activities to increase an individual’s ESE which could include engaging students in “real-life” business situations to encourage risk-taking and innovation, as opposed to general management skills or more specific technical skills.

Models To Assess an EEP

Models to assess entrepreneurial intentions are being used to evaluate entrepreneurship education programmes as well. The two predominant, theory-driven models that have been used in the entrepreneurship literature are Ajzen’s (1987) theory of planned behaviour (TPB) and Shapero’s (1982) model of the entrepreneurial event. The TPB was borrowed from the social psychology field and adapted to measure entrepreneurial intentions while Shapero and Sokol’s (1982) model was developed specifically for the field of entrepreneurship.

Our research adapts the Shapero (1982) model as its theoretical framework for analysing entrepreneurial intentions (see Figure 2). The Shapero (1982) model has been shown to be more refined than the Ajzen model (Krueger, 1993). Krueger (1993) points out that the perceived desirability and perceived feasibility components offer a more parsimonious framework than does the Ajzen model. The statistical support for the Shapero model shows “that research into the processes of entrepreneurship (especially models based on intentions) will prove most fruitful” (Krueger, 1993, p. 19).
Other models based mainly on (entrepreneurial) self-efficacy have also been used (Chen et al., 1998; Zhao et al., 2005), but do not appear to be employed in assessing entrepreneurship education programmes.

**Shapero’s Model of the Entrepreneurial Event**

Shapero (1982) hypothesizes that an individual’s intention to start a business derives from perceptions of desirability, feasibility, and a propensity to act. Perceived desirability and perceived feasibility may partly originate from previous exposure to entrepreneurial activity (Shapero, 1975; Shapero and Sokol, 1982) and affect intentions (Krueger, 1993).

Perceived desirability is used as a measure to evaluate an individual’s attitude concerning the desirability of performing a behaviour (Ajzen, 1991). In terms of entrepreneurship, perceived desirability refers to the attractiveness of starting a business. The desirability could depend not only on the individual’s perception of the profitability of a business, but of more leisure time, greater prestige, or other subjective reasons.

Increasing perceived desirability requires increasing a person’s opinions, knowledge, and beliefs; communicating positive feelings about an action may increase the desirability of performing that action (Summers, 2000). Previous research has found that entrepreneurship activities that increase perceived desirability include meetings with successful entrepreneurs, guest speakers, videos, and outside mentors (Gartner and Vesper, 1994).

The perceived desirability of performing an action also increases (or decreases) depending on whether (and how much) a previous experience was positive (or negative). Negative past experiences will likely discourage positive perceptions of desirability (Shapero, 1982; Krueger, 1993; Summers, 2000).

Perceived feasibility is the perception of how capable an individual is to perform a task. In terms of entrepreneurship, perceived feasibility includes the perception an individual holds of how feasible it would be to create a new enterprise. Perceptions of feasibility drive career-related choices, which include self-employment (Krueger et al., 2000). While perceived feasibility is related to self-efficacy, Gist and Mitchell (1992) point out that “for a novel task like starting a business, however, the comprehensive summary judgment afforded by the self-efficacy construct may not be appropriate” (Summers, 2003, p. 3).

Finally, the propensity to act is the volitional aspect of being able to act on one’s own. Without the propensity to act it would be difficult to form intentions (Bagozzi and Yi, 1989). According to Shapero (1982), it acts as a “stable personality characteristic” (Krueger and Brazeal, 1994, p. 98). This propensity may depend on the level of one’s desire to take control of a situation by taking action. According to Bagozzi and Yi (1989), well-formed intentions require a significant propensity to act. Krueger (1993, p. 9) pointed out that “Shapero’s model could treat propensity to act as a moderator rather than a direct influence.”

Most research conducted on the impact of EEPs on entrepreneurial intentions has used samples of students participating in an entrepreneurship course in a university setting. These students are typically ages 18-30 and working toward an undergraduate or master’s degree in some area of business. For example, Peterman and Kennedy (2003) used a sample of school grade participants with an average age of 16, the oldest being 18 years old. Fayolle (2006) has done research in this area with samples of French students with an average age of 23. Zhao et al. (2005) had a sample of students which were also workings toward an MBA degree. Krueger (1993) used 126 undergraduate students and Chao et al. (1998) included university students in their sample. Souitaris et al. (2007) used a sample of science and engineering students in a UK and a French university. Most of these programmes are conducted as part of a university course.

However, no research has been found which attempts to measure the entrepreneurial intentions of a primarily “older” sample which does not attend university. Nor has any research been identified in which most EEP participants are employed full-time. In 2000, Krueger et al. noted that future research should test theory-driven, intentions models on samples that differ in age, experience, and ethnicity. This research will look at participants in an EEP who are employed full-time in the United Kingdom, are predominantly over the age of 30, and who are seeking to start a business. The objective of using a different sample in a different context will allow for comparison to previous research which has been conducted. This may lead to different types of EEPs being offered to participants according to age or other circumstances.
Older individuals may be less prone to risk-taking as they are typically more established in terms of personal (marriage, children) and career (earning more money, higher position in a company) goals. However, these individuals also may have more money to invest in a business. They may also have greater social networks and “life” experience. They may be more serious about the programme as it is not only a degree or qualification they are seeking (which would have less risk built into the programme) but starting a business. Therefore it should prove interesting to see whether (and how) entrepreneurial intentions vary according to age, gender, or other variables.

METHOD AND RESEARCH DESIGN

This research evaluates the entrepreneurial intentions of “real-life,” potential-entrepreneur participants in an EEP. This includes assessing their entrepreneurial intentions immediately before (T0) and after (T1) a seven-week EEP. The primary motive behind this research is to provide a better evaluation tool for use in EEPs, as well as the better construction of an EEP. The assumption is that entrepreneurship is a skill that, at least to a degree, can be taught. Given the importance of entrepreneurship and the many personal and economic benefits it can provide, effective training of potential entrepreneurs is a crucial task.

Our study addressed the following research question:

RQ: What impact does an entrepreneurship education programme have on the entrepreneurial intentions of its participants?

Our research used a quantitative method, including a questionnaire that was administered before and after the EEP. The questionnaire contained questions on participants’ background information (age, gender, ethnicity, etc.), assessed their current skills and knowledge, including their perceived desirability and feasibility of starting a business, and personal (business) goals. Questions in regards to perceived feasibility were in the form of “How confident are you . . . ?” to perform a given task, with an 11-point scale, ranging from not confident at all (0) to very confident (10). Questions about perceived desirability were similar, but were framed as positive statements, e.g., “If I see an opportunity, at least once I’ll have to take it,” followed by a similar scale.

We used the Shapero model, including the constructs “perceived feasibility” and “perceived desirability,” to measure their effects on entrepreneurial intentions. The one aspect of the Shapero model that has been removed is the “propensity to act” construct. Other researchers have conducted research without this construct, and assume the propensity to act to be a “moderating influence rather than a direct antecedent” (Krueger, 2003, p. 9).

Sample and Data

The University of Northampton and the European Social Fund (ESF) jointly funded the Enterprise & You (E&Y) project beginning in April 2006 and ending in December 2007. The project, costing c. £400,000 in total, aimed to assist 132 would-be entrepreneurs in five cohorts, who were seeking self-employment through the creation of a new enterprise. The programme was free, provided the participants were employed full-time and had a business idea. The project had a catchment area based on the three towns of Northampton, Bedford, and Milton Keynes in the UK. The E&Y programme was advertised widely in the local media, including newspapers, radio, and web sites. Applicants to the programme were short-listed against a person specification designed to ensure that met the conditions of the project funding. This included such factual items as age, address, employment details, education, and gender. They were then interviewed by the E&Y project manager before being granted a place on the programme. This interview included standard questions designed to try to assess the level of commitment to starting a new business. This selection procedure was new for a funded project delivered by the University of Northampton and was deliberately introduced to increase the positive outputs the project generated compared with previous enterprise skills development projects.

The E&Y programme took place at the University of Northampton (UN). For those participants who were prepared to initiate their businesses immediately, there was access to the UN’s Incubation Unit, which included physical and virtual facilities and a telephone helpline.

This research sampled 52 of the 132 participants in two cohorts of the E&Y programme. All participants lived in Northamptonshire in the UK. The majority were between the ages of 25-49, of British nationality, and 62% were female.

There were two main objectives of the E&Y programme: the development of a personal development plan (PDP) and a business plan (BP). By completing these goals, participants achieved a
qualification that contributed toward a Foundation Degree in Enterprise is offered by the University of Northampton. (It was optional as to whether participants wanted to continue on and get the full degree.)

The E&Y project consisted of 7 workshops each lasting 2-3 hours per session over a period of 20 weeks. The programme was designed to help participants from the initial stages of idea generation to business start-up, growth, and job creation. The workshops were delivered by a team comprising lecturers from Northampton Business School, local entrepreneurs, and independent specialists in business start up. The structure, content and teaching and learning methods used in the workshops were based on the project team’s experience of delivering similar workshops on other funded projects for women, ex-offenders, members of the ethnic minorities, and other disadvantaged groups. These projects had not been rigorously analysed to assess their effectiveness in changing participants’ perceived feasibility or desirability.

Hypotheses

In order to test Shapero’s model, we have developed the following hypotheses:

- **H1:** Perceived feasibility will increase from T0 to T1.
- **H2:** Perceived desirability will decrease from T0 to T1.

We hypothesize that, since the EEP is aimed at providing participants with the skills to start a business, perceived feasibility will increase from T0 to T1. We expect perceived desirability to be fairly high at T0 because of the nature of the sample—those seeking to start a business, i.e., with a desire already implanted. However, we hypothesize that perceived desirability will actually decrease from T0 to T1. This is because we are expecting that EEP participants will realize that starting a business will require more effort and input than previously anticipated; in short, there will be a sort of “halo effect,” often associated with starting a business, which will be lessened (or eliminated) as the programme progresses.

RESULTS

**Perceived feasibility**

We found H1—that perceived feasibility would increase from T0 to T1—to be confirmed. As seen in Table 1, perceived feasibility increased by 36.44% for all participants (p<0.0001). Interestingly, perceived feasibility for females increased more (44.50%) than for males (24.89%). Participants who were 35 years or younger had higher perceived feasibility scores than those over 35 when they began the programme, but did not increase as much from T0 to T1 (28.67%). The score of those over 35 increased the most—by 44.85%—but they also held the lowest score at both T0 and T1.

<table>
<thead>
<tr>
<th>Perceived feasibility</th>
<th>N</th>
<th>Mean (T0)</th>
<th>Mean (T1)</th>
<th>% Change</th>
<th>p-value</th>
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<tr>
<td>All</td>
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<td>5.38</td>
<td>6.71</td>
<td>24.89%</td>
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</tr>
<tr>
<td>Age ≤ 35</td>
<td>17</td>
<td>5.69</td>
<td>7.32</td>
<td>28.67%</td>
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<td>4.60</td>
<td>6.66</td>
<td>44.85%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Table 1. Perceived feasibility

**Perceived desirability**

Our second hypothesis, H2, was not confirmed by the data. There was an increase in perceived desirability from T0 to T1; however, this increase was only 3.31% and not significant. The increase was nearly the same for male and female, although the females scored slightly higher (7.32) than the males (7.16) at T0. Scores of those 35 or younger were also higher (relative to over 35’s) for perceived desirability at T0 and T1, but did not increase as much relative to the “older” group (1.29%). Interestingly, scores of those over 35 were also lowest for perceived desirability at T0 and T1.
## DISCUSSION

The feasibility result was significant and strongly suggests that the E&Y programme was achieving its objective of developing the capability of the would-be entrepreneurs on the scheme. This was to be expected given that, as noted above, the structure, content, and teaching and learning methods used in the workshops were based on the project team’s experience of delivering similar workshops on other funded projects for women, ex-offenders, members of the ethnic minorities, and other disadvantaged groups. Thus, to a large extent, the participants in the programme were getting a “known product.” Although, as noted above, the effectiveness of previous programmes had not been subject to rigorous examination, feedback had been gathered from previous project participants (using reaction validation questionnaires) and workshops had been evolved in response to this feedback.

The difference in the increases in terms of perceived feasibility between women and men is of interest. Although further research will be needed in this area to establish the reasons for this, we hypothesize that it might be due to the fact that men tend to be more “arrogant” about their ability to start a business than women, who tend to be less “confident.” Anecdotal evidence from the team delivering the workshops supports this potential explanation. However, we are not offering this as an explanatory factor at this stage and stress the need for further research in this area.

The difference in PD and PF is also interesting when looking at the results according to age group. The over 35 group scored the lowest on PD and PF but had the highest increase from T0 to T1 in both areas. We could attribute this to a few possibilities, all of which would need confirmation through future research. It is possible that those who are older are more self-aware in terms of acknowledging their own limitations, whereas those who are younger are still overly optimistic—in almost a naïve way; thus the older group may score themselves lower. It could also be the case that the older group is more established in terms of family and career, with more risk involved in starting a business. Thus perceived desirability would more likely be lower according to this reasoning. The younger group was very high in terms of perceived desirability, which may be attributed to their outlook on life, having more time to start a business, and with less risk involved. More research in this area could look at the further impacts age has on the effects of an EEP, and could mean that EEPs should be constructed by taking into account demographic factors.

The perceived desirability result was not significant and does not support our hypothesis that perceived desirability would decrease as participants found out more about the stages and effort involved in starting a new business. Indeed, there was a very slight and non-significant increase in desirability. We suggest there are two factors that account for this result. Firstly, the participants on the E&Y programme were selected from a larger population of applicants and had met the requirements of a person specification and selection interview designed for the scheme. Therefore, they were known to have a clear idea for a new business and a stated desire to turn their idea into reality. Thus, the desirability of starting a new business was expected to be very high at the start of the programme (see Table 2). The E&Y programme clearly reinforced the initial levels of desirability and, it can be hypothesized, validated the effectiveness of the project’s selection process. Secondly, it is relatively easy to set up a new business in the UK. As noted above, the World Bank has ranked the UK second in Europe and as one of the world’s top ten countries when it comes to the ease of doing business. There are relatively few barriers to setting up a new company in the UK and thus the desirability of doing so was not likely to be reduced by a sudden realisation that there were significant bureaucratic hurdles to overcome.
CONCLUSIONS

The data set used in this paper, and the research design, are unique in our experience. We deliberately set out to study the effectiveness of an EEP on a non-typical group (in terms of previous research). However, we believe that our sample is particularly useful as it examines adults in full-time employment. We argue that these are more representative of the “real people” who set up new businesses than students at university.

We believe that our results show that, at least in the UK, a structured EEP, delivered by expert and experienced staff to participants who have been carefully selected can result in significant improvements to the perceived feasibility of starting a new business. This supports Drucker’s (1985) view that “[Entrepreneurship] is not magic, is not mysterious, and it has nothing to do with genes. It is a discipline. And, like any discipline, it can be learned.” Furthermore, we suggest that a well thought out and managed selection process could be linked to maintaining levels of perceived desirability.

However, we do not suggest that this result can automatically be extended to EEP programmes run in other countries. The relative ease of setting up a new business in the UK is, in our view, a factor in the success of the E&Y EEP. Other countries have different bureaucratic regimes and we are certainly not arguing that “one size fits all.” More research in this area will lead to better-constructed and managed EEPs, which we hope will lead to an increase in entrepreneurship.

REFERENCES


