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Developing human capital in today's entrepreneurs

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Title

“Developing human capitals in today’s entrepreneurs: A practitioner perspective.”

Abstract

Purpose - Human capital is one of the three dimensions of intellectual capital and this paper examines the range of human capitals needed by the modern entrepreneur and the nature of the barriers to effectively supporting the development of these capitals.

Design/methodology/approach - A review of entrepreneurship literature and a qualitative investigation conducted on a sample of 10 experienced enterprise support practitioners representing a cross section of leading enterprise agencies in Scotland. Data were collected using semi-structured interviews and analysed using thematic analysis.

Findings - From the interviews 21 key human capitals were identified and clear agreement between the literature and practice was noted around what critical human capitals, also referred to in this paper as entrepreneurial capitals, are needed by today’s entrepreneurs. The study shows that the enterprise support network in Scotland is clearly well developed and ideally placed to support the development of human capital in the entrepreneur. However the study also identifies that barriers exist to the delivery of effective support for the development of human capital in the entrepreneur around focus, process and resource.

Research limitations/implications - The work is limited as the qualitative approach focuses on a specific social field and thus the findings cannot immediately be generalised to other domains. Also this paper focuses on a single component of intellectual capital and it is recognised that human capital, social capital and organizational capital are inextricably linked in the firm. These limitations can be addressed with future research.

Value/Originality - There is a lack of empirical data linking the development of human capital and entrepreneurship. This work has resonance for providers of enterprise support seeking to remain relevant to the entrepreneurial development needs of the entrepreneur.

Keywords - *entrepreneurship, enterprise support, intellectual capital, human capital.*

Article Type - Research paper

Introduction

The critical role of intellectual capital for the entrepreneur in the creation of competitive advantage is widely understood (Petty & Guthrie, 2000). Human capital is one of the three dimensions of intellectual capital (Massaro et al, 2018) and education and training are the most important forms of investment in human capital (Becker, 2009). Whilst measuring the return on investment of intellectual capital for the firm can be challenging (Fitz-enz, 2000) research suggests that both entrepreneurial activity and performance can undoubtedly be enhanced through education and training focussed on the development of entrepreneurial skills (Honig, 2004) and human capital (Duodo & Rowlinson, 2019). Scotland has a diverse range of support

services for entrepreneurs aimed at developing the necessary human capital i.e. the skills, qualities, attributes, behaviours and knowledge needed to build and develop a successful business. However as will be demonstrated there are clear barriers and challenges to this around focus, process and resources.

Entrepreneurship and enterprise education are well researched fields and there is also considerable research examining the form which intellectual capital takes in organisations (Marr, Schiuma & Neely, 2004; Subramaniam & Youndt, 2005; Pedro, Leitão & Alves, 2018). However, there is a gap in the area of intellectual capital relating to the entrepreneur and the SME (Cohen & Kaimenakis, 2007) which is under researched. Intellectual capital incorporates a set of valuable capacities which engender value creation for the firm (Nerdrum & Erikson, 2001) by acting as a catalyst for competitive advantage (Sánchez et al., 2000). Very few researchers have explored the topic of intellectual capital in the domain of entrepreneurship (Peña, 2002). This study contributes to the existing knowledge base within the field of entrepreneurship and adds to the debate surrounding the relevance and effectiveness of the current approach to supporting the development of human capital in entrepreneurs (Jones, 2019). In terms of value the long term benefits of even a marginal increase in the efficiency of enterprise support to business through targeted entrepreneurial learning cannot be overstated.

The research objectives of this study are firstly to critically appraise and evaluate the academic literature relating to the key intellectual capitals needed by the modern entrepreneur. In addition, this paper aims to investigate and explore the views of a cross section of professional enterprise support providers to determine what they consider to be the key capitals needed by today's entrepreneur and the barriers and challenges to supporting entrepreneurial development in the individual. Lastly, this research seeks to identify recommendations for improvements to the current approach to enterprise support for the development of human capitals in the entrepreneur. This paper provides a comprehensive review of the literature linking a key component of intellectual capital and entrepreneurship. The approach and methods applied in this study are then explained and new data is presented and analysed leading to recommendations and conclusions.

Literature Review

The motivations of the individual entrepreneur is a well-researched field of study (Carter & Jones-Evans, 2006) and it is widely accepted that many people start their own business to create life opportunities (Reynolds et al, 2002) or escape unemployment (Storey, 1994). Others are driven by factors such as the ambition to succeed (Crayford et al, 2012) or the desire to accomplish social objectives through entrepreneurial means (Austin et al, 2006). However regardless of the individuals' motivations for starting a business an effective process of developing new enterprises is critical to successful and sustainable economic development (Lichtenstein & Lyons, 2001). Central to any such approach is the need to identify and nurture critical intellectual capitals which will be of critical value to the entrepreneur (Burns et al, 2011).

Intellectual capital is a complex phenomenon with economic, social, and environmental components (Massaro et al, 2018) and involves knowledge which can often be non-verbal and intuitive (Henry, 2003). Intellectual capital has three dimensions; human capital, structural capital and relational capital which together lead to innovation and entrepreneurial behaviours (Allameh, 2018). Wright et al. (2001) state that intellectual capital can be viewed as value that is contained in a firm's capital components namely: people (or human capital), social networks

(or social capital), and information systems and processes (or organizational capital). Research shows a clear and strong link between human capital and social capital and entrepreneurial success (Berraies, 2019) and in many firms intellectual capital is routinely measured (Otcenášková & Bureš, 2018) although such measurement can be difficult (Inkinen, 2015).

In practical terms agencies supporting enterprise traditionally rely on entrepreneurial competencies as a means to drive entrepreneurial growth (Thompson, 2004; Mitchelmore & Rowley, 2010) however this approach does not recognise the value of building intellectual capital resources for other reasons which are not solely focussed on growing the economy (Käpylä, 2012). In the field of entrepreneurship competencies are often designed to ensure that the individual is able to perform their basic duties to a given standard (Fletcher, 1997; Murray et al, 2018). However this alone does not meet the development needs of the entrepreneur and their business (Matlay, 2008). What is also needed therefore is a clear focus on the development of important entrepreneurial attributes which are not business specific such as communication and networking skills (Williams Middleton, 2013; Nieminen & Lemmetyinen, 2015; Soetanto, 2017;) and self-confidence and the ability to take the initiative (NESTA, 2008). Varga & Schalk (2004) also advocate a mixture of business and non-business attributes which they refer to as “entrepreneurship capital” citing this as a critical success factor in business venturing. Each specific field necessitates the development of a broad range of capitals and entrepreneurship is no different (Fiet & Pankaj, 2008).

Bourdieu (1990) explores the concept of capital more fully and develops the notion of incorporated cultural capital which relates to the acquisition of specific skills, abilities, behaviours, practices and qualities which are seen as being of value in a given field (Frew, 2005). In the field of entrepreneurship it is generally accepted that entrepreneurial capital can be developed through entrepreneurial learning which according to Cope (2003) is defined as the higher-level learning that is fundamental to the entrepreneur both personally and in business terms. Kuratko (2003) claims that entrepreneurs can be taught by business practitioners and this can indeed yield meaningful results if carried out effectively. With traditional approaches to enterprise support training, coaching, mentoring and peer support are generally viewed as the central means of delivering entrepreneurial learning (Westhead & Storey, 1996; Nieminen & Hytti, 2016). However this requires the learning intervention to be correctly focussed and the entrepreneur themselves to be open to the discovery process which entrepreneurial learning offers (Rae, 1999).

The multifaceted nature of the work involved in establishing and running a business encourages the entrepreneur to develop a level of competence in a variety of areas (Lazear, 2005) and a strong work ethic (Baum & Locke, 2004; Curley & Formica, 2013). This logically leads to the creation of committed generalists rather than specialists (Lazear, 2004). In terms of specific attributes Matlay (2008) identifies the importance of developing within the entrepreneur a broad range of business skills such as business strategy, business risk, marketing, market research, finance, HR and business planning but also notes that a one size fits all approach is to be avoided. Individual entrepreneurs require a depth of business knowledge but also a broad range of useful skills such as problem solving (Rayner, 2006; Di Domenico et al, 2010), opportunity recognition (Ventresca, & Kaghan, 2008; Jusoh et al, 2011), risk management (Hébert & Link, 1989; Shane, 2000; Matlay, 2008; Jusoh et al, 2011) and resourcefulness (Sarasvathy & Dew, 2005; Desa & Basu, 2013). Other theorists also stress the importance for the entrepreneur of being alert to opportunity (Hébert & Link, 1989; Shane, 2000) whilst others highlight other important areas such as creativity (Ward, 2004; Ko & Butler, 2007), innovation and dynamism (Stevenson & Gumpert, 1985; Mulgan & Albury, 2003) and flexibility, focus

and endurance (Oosterbeek et al, 2009). For Crayford et al (2012) the critical capitals include perseverance and determination whilst research also supports the argument that anyone running a business also needs to be a good leader (Gupta et al, 2004; Thornberry, 2006), a good manager (Gold et al, 2010; Neck & Greene, 2011) and a strong team player (Shin & Zhou 2003; Gupta, MacMillan, & Surie 2004). For Fayolle et al (2006) factors such as confidence, self esteem and flexibility are identified as being of importance to the entrepreneur whilst Krueger & Dickson (1994) cite optimism and the ability to maintain a positive outlook as being key. This view is supported by Guth et al (1991) whilst Diamante & London, (2002) highlight the extent of the challenge facing the modern entrepreneur and the need to develop a range of digital skills, the importance of which is widely recognised (Hanna, Rohm & Crittenden, 2011).

Approach and Methods

For this project an emic position was taken which embraces the fact that the researcher, as an enterprise educator and enterprise support professional, is fully immersed in the subject area. An emic approach facilitates the examination of how people view the world and derive meaning from what they see. This study embraces the subjective nature of the insight gained from the subjects by adopting a relativist stance. An inductive approach was used to capture the views and insights of an appropriate sample and identify patterns in order to develop theories through observation. The chosen strategy employed was action research which recognises that the researcher is embedded within the field of study. Qualitative methods were used in order to facilitate the aim of this study as it provided an opportunity to answer the “why” questions around the key issues (Castles, 2004). The analytic method applied in this study is thematic analysis which provides a flexible and useful framework for analysing qualitative data. A cross sectional time horizon was applied. The question of credibility has been addressed through the selection of subjects with a proven track record of prolonged engagement with the subject area. The participants were selected using purposive sampling which ensured they possessed the credentials needed whilst still reflecting diversity.

Data Collection

The sample was composed of 10 enterprise support practitioners representing a cross section of key enterprise agencies in Scotland (Figure 2). A sample size of 10 was deemed to be a sufficient sample to ensure saturation of themes (Eisenhardt, 1989; Guest et al, 2006). Prior to inclusion in the study each subject was screened in order to establish that they possessed the necessary credentials to add value to the study. This included expertise in one or more of the following key areas; start-up, growth, youth enterprise, social enterprise or disadvantaged clients and evidence of prolonged experience in the field of enterprise support (a minimum of 5 years was deemed to be sufficient experience). A summary of the subjects’ individual experience and expertise has been provided (Figure 1). The sample investigated was selected in order to obtain descriptive data and anecdotal evidence relating to their personal working environment. The data was obtained through semi-structured interviews. All interviews for this study were carried out in line with the same interview protocol. The interviews took place within the interviewee’s place of work and lasted a maximum of 1 hour. Questions asked during the interview were a result of both pre-determined questioning and also arose from the responses given by the interviewee. Each interviewee was allocated a unique reference code (ESP1-10) in order to anonymise the data.

Figure 1: Summary of participants’ experience and expertise

Subject	Years in field	Areas of expertise
ESP1	8	<i>start-up, growth, youth enterprise, social enterprise, disadvantaged clients</i>
ESP2	9	<i>start-up, growth, youth enterprise</i>
ESP3	7	<i>start-up, growth</i>
ESP4	10	<i>youth enterprise, disadvantaged clients</i>
ESP5	19	<i>start-up, growth, youth enterprise, disadvantaged clients</i>
ESP6	12	<i>start-up, growth, youth enterprise, social enterprise, disadvantaged clients</i>
ESP7	10	<i>youth enterprise, start-up, disadvantaged clients</i>
ESP8	11	<i>start-up, disadvantaged clients</i>
ESP9	7	<i>start-up, social enterprise, youth enterprise.</i>
ESP10	8	<i>start up, growth</i>

Findings and analysis

From the interviews in order to address the research aims of this study a detailed picture of the nature and extent of enterprise support in Scotland and the associated challenges was developed. This narrative provided valuable insight and context for the study and the results of this questioning are summarised here.

The form of enterprise support in Scotland

In Scotland there is an extensive network of formal and informal business support providers actively involved in the development of entrepreneurial capital however research suggests that new and emerging firms in general are often unaware of the assistance that exists, are often reluctant to ask for advice and can be sceptical of the benefits of such assistance which indeed is not without limitations (Schaper, 2013). The marketplace in Scotland which business and enterprise support agencies operate is commonly referred to as the “enterprise network” or simply “the network”. The network is comprised of a diverse range of private, public and third sector organisations providing some form of business service or support such as local authorities, banks, training providers, further education providers and employment services each with their own specific and at times conflicting remit. As a result tensions are evident between key actors within the enterprise network who have an interest in shared clients.

Key influencing factors

Regional and Local Priorities

At a local level each region in Scotland has its own key sectors as laid out by each local authority in their individual economic development strategy. These could include areas such as engineering, electronics, tourism, financial services, software, plastics, distribution, biotechnology, healthcare, agriculture, renewables and food and drink. These priorities tie in with those outlined by Scottish Enterprise and ultimately influence the way in which finite resources are allocated which ultimately impacts on how accessibility to certain support services. This is further complicated by the fact that there may be further priorities to consider at a local level such as regeneration areas. The market is large and fluid and many clients find the current system confusing.

Stakeholder Influences

The enterprise network pulls together a variety of delivery partners (Figure 2) in order to maximise resources and give maximum benefit to the client. Each stakeholder is looking to satisfy their own specific aims, objectives, impacts and outputs and will exert influence on the other agencies or organisations around them in order to achieve their goals. The list of stakeholders is significant and includes providers or training and further education, the business community, donors, banks, local authorities, unemployment services and enterprise agencies. In such a busy market place resources are limited and competing agendas and roles can again confuse clients.

Local Enterprise Agency Objectives

One of the key influencing factors on my organisation is undoubtedly the local enterprise agency network collectively referred to as Business Gateway. Whilst the objectives of Business Gateway compliment those of the local enterprise agency much of the regional variation within the system is a result of pressure exerted by the local enterprise agency within that region. Each Gateway works within its own specified geographical boundaries and levels of service delivery and the range of available support interventions for enterprise varies considerably from region to region.

Nature of support

Within the enterprise network in Scotland support services can be defined as; universal, targeted or discretionary. Universal services are available to all on demand e.g. business start-up support and business information. Targeted services are tailored to meet the needs of specific businesses e.g. market development, technology support, financial investment. Lastly discretionary services have been developed to meet local economic circumstances and priorities e.g. key support for disadvantaged areas. Each support provider has access to their own specific range of interventions, services and products and there are clear and frequent issues around eligibility and exclusions.

The key players providing this support to enterprise within the enterprise network and their specific remits are as follows;

Figure 2: Key enterprise agencies in Scotland

Enterprise Agency	Remit
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<i>Scottish Enterprise and Highlands and Islands Enterprise</i>	SE and HIE are Scottish Government bodies tasked with playing a lead role in economic development by encouraging enterprise and business nationally across all sectors.
<i>Local Authority Economic Development</i>	These bodies have a remit for supporting sustainable economic development at a local level.
<i>Business Gateway</i>	Business Gateway is a publicly funded service contributing to the economic well-being of Scotland by providing access to free business support services.
<i>The Prince's Trust</i>	The Prince's Trust supports young people to start-up and grow in business, by providing essential funding and professional mentoring support.
<i>Entrepreneurial Spark</i>	Entrepreneurial Spark (ESpark) is the World's largest free business accelerator for early stage and growing ventures. ESpark provides a range of services for tenant firms.
<i>Scottish Institute for Enterprise</i>	<i>Scottish Institute for Enterprise</i> ; The Scottish Institute for Enterprise (SIE) works nationally to promote and support enterprise and entrepreneurship in Scotland's Higher Education students.
<i>Young Enterprise Scotland</i>	Young Enterprise Scotland (YES) offers a variety of training programmes and development opportunities to young people across Scotland.

Having carried out a comprehensive review of the literature, coding was used to highlight key themes and from this the following a number of research questions were developed;

THEME 1 - *What should be the aim of organisations supporting entrepreneurial development in entrepreneurs?*

THEME 2 - *What are the key human capitals (i.e. skills, qualities, attributes, behaviours and knowledge) needed by the modern entrepreneur?*

THEME 3 - *What are the key challenges and barriers to supporting the development of entrepreneurial capitals?*

THEME 4 - *How can these challenges be overcome in order to more effectively support entrepreneurial capital development in the individual entrepreneur?*

These themes were then used to construct a set of questions (Appendix 1) which would be used as the basis for semi structured interviews. The interviews themselves raised a number of questions and from the data obtained further reflection on the literature was carried out to ensure alignment between interview data and the literature and also to identify potential solutions. In the context of these themes the data were critically analysed in order to identify areas of agreement and conflict from the interviews and the literature. The results of this process are as follows;

THEME 1 - *What should be the aim of organisations supporting entrepreneurial development in entrepreneurs?*

The responses to this question are summarised (Figure 3) and can be grouped broadly into 3 distinct themes namely; to promote and support business start-up and growth, to develop entrepreneurial attributes and to create life opportunities;

Figure 3: Theme 1.1 - Promoting and supporting business start-up and growth

Subject	Item
ESP1	“help new and existing businesses develop”
ESP2	“support entrepreneurship”
ESP3	“improve business sustainability rates”
ESP5	“create innovative, competitive & sustainable businesses”
ESP6	“grow businesses”
ESP8	“increase the number of new businesses formed”
ESP9	“encourage people to consider starting their own business”
ESP10	“assist new and growing businesses”

In line with the views of Lichtenstein & Lyons (2001) from the interviews there was almost universal agreement with the idea that, to some degree, the aim of the enterprise support agency should be to promote and support business start-up and growth. Of the 10 interviewees 8 stated this view. Also noted from the study was a belief shared by Westhead & Storey (1996) that professional enterprise support is capable of adding value to new and growing businesses through appropriate and timely interventions.

Figure 4: Theme 1.2 - Developing entrepreneurial capital

Subject	Item
ESP1	“identify and address skill shortages”
ESP2	“provide training and development opportunities”
ESP4	“to teach core business skills and encourage and support entrepreneurial behaviour”.
ESP6	“improve digital literacy around e-business”
ESP7	“encourage learning of life skills”
ESP10	“help the client get ready for the world of business”

From the study there was consensus that developing entrepreneurial capitals in the individual should be a priority with 6 out of 10 of the subjects making this point. As proposed by Frew (2005) there was a clear belief that enterprise support providers should equip entrepreneurs with a range of business competencies (Matlay, 2008) and non business competencies (Lazear, 2005) to provide a broad mix of entrepreneurial capitals (Varga & Schalk, 2004).

Figure 5: Theme 1.3 - Creating life opportunities

Subject	Item
ESP1	“provide the best start for all young people”
ESP2	“narrow the employment gap”
ESP4	“provide opportunities for the most disadvantaged in society”
ESP5	“to change lives”
ESP7	“to support our communities”
ESP9	“to build a better society”
ESP10	“help clients realise their potential”

Strong support was also evident for the views of Storey (1994) and Reynolds et al (2002) that the enterprise support network should be concerned with creating life choices for the client with 7 out of 10 interviewees expressing similar views. There was also recognition that the benefits of entrepreneurship were not solely limited to the entrepreneur and that the wider community and society should also reap the rewards. This agrees with Lichtenstein & Lyons, (2001) who highlight the key role entrepreneurship plays in economic development.

In summary from the interviews broad consensus was noted for placing a focus within the enterprise network on supporting business venturing leading to greater opportunity for the client. Whilst there was also clear evidence of the belief in the need to develop entrepreneurial

attributes it is important that in line with (Honig, 2004) emphasis is placed on the development of meaningful skills and attributes.

THEME 2 - *What are the key human capitals (i.e. skills, qualities, attributes, behaviours and knowledge) needed by the modern entrepreneur?*

From the interviews 21 key entrepreneurial capitals were identified namely;

risk taking, resilience, collaboration, leadership, communication, problem solving, creativity, innovation, resourcefulness, agility, opportunity spotting, enthusiasm, management skills, technical skills, coachability, focus, work ethic, confidence, positive outlook, business knowledge and digital skills.

A summary of responses is as follows;

Figure 6: Key entrepreneurial capitals

Subject	Item
ESP1	“entrepreneurs need to be resilient”, “creativity and innovation are key”, “entrepreneurs need a strong work ethic”, “need to show enthusiasm for what they do”
ESP2	“innovation”, “spot the opportunity”, “business skills and knowledge”, “good communication skills are critical in business”
ESP3	“being able to work well with others is essential”, “need to be able to spot opportunities and take them”, “need to be able to cope with risk”
ESP4	“resourceful clients are more likely to succeed”, “entrepreneurs need to have leadership and management qualities”, “self-confidence is important”
ESP5	“an ability to stay focussed”, “every business owner needs some understanding of the digital world.”, “entrepreneurs need to be coachable”, “need for flexibility”
ESP6	“need for specific technical skills”, “digital skills”, “ability to stay positive”, “be passionate about their business”
ESP7	“able to work hard”, “creativity skills are needed”, “need to be able to do the basic job itself”, “to build and develop teams”
ESP8	“being able to deal with setbacks”, “risk taking ability”, “able to identify and solve problems”, “maintaining focus”
ESP9	“for anyone running a business in the modern world digital skills are critical”, “to be a leader”, “good communicator”, “confidence in one’s own ability”
ESP10	“clients need general business skills”, “to be open to taking advice”, “problem solving abilities”, “resourcefulness”

The responses to Theme 2 were critically analysed in order to identify areas of agreement and conflict from the interviews and the literature and a summary of this thematic linkage has been provided (Figure 7).

Figure 7: Thematic linkage between study and literature

Entrepreneurial Characteristic	Item	Reference
<i>risk taking</i>	“need to be able to cope with risk”, “risk taking ability”	(Hébert & Link, 1989), (Shane, 2000), (Matlay, 2008), (Jusoh et al, 2011)
<i>resilience</i>	“entrepreneurs need to be resilient”, “being able to deal with setbacks”	(Oosterbeek et al, 2009), (Crayford et al, 2012)
<i>collaboration</i>	“being able to work well with others is essential”, “to build and develop teams”	(Shin & Zhou, 2003), (Gupta, MacMillan, & Surie 2004)
<i>leadership</i>	“entrepreneurs need to have leadership and management qualities”, “to be a leader”	(Gupta et al, 2004), (Thornberry, 2006), (NESTA, 2008)
<i>communication</i>	“good communication skills are critical in business”, “good communicator”	(Williams Middleton, 2013), (Nieminen, & Lemmetyinen, 2015), (Soetanto, 2017)
<i>problem solving</i>	“problem solving abilities”, “able to identify and solve problems”	(Rayner, 2006), (Di Domenico et al, 2010)
<i>creativity</i>	“creativity and innovation are key”, “creativity skills are needed”	(Stevenson & Gumpert, 1985), (Hébert & Link, 1989), (Ward, 2004), (Ko & Butler, 2007)
<i>innovation</i>	“creativity and innovation are key”, “innovation”	(Stevenson & Gumpert, 1985), (Mulgan & Albury, 2003)
<i>resourcefulness</i>	“resourceful clients are more likely to succeed”, “resourcefulness”	(Sarasvathy & Dew, 2005), (NESTA, 2008), (Jusoh et al, 2011), (Desa & Basu, 2013)
<i>agility</i>	“be able to adapt to change”, “need for flexibility”	(Fayolle et al, 2006), (Oosterbeek et al, 2009)
<i>opportunity spotting</i>	“need to be able to spot opportunities and take them”, “spot the opportunity”	(Ventresca, & Kaghan, 2008), (Jusoh et al, 2011)

<i>enthusiasm</i>	“be passionate about their business”, “need to show enthusiasm for what they do”	(Stevenson & Gumpert, 1985), (Mulgan & Albury, 2003)
<i>management skills</i>	“general management skills”, “good management ability”, “entrepreneurs need to have leadership and management qualities”	(Gold et al, 2010), (Neck & Greene, 2011)
<i>technical skills</i>	“need for specific technical skills”, “need to be able to do the basic job itself”	(Fletcher, 1997), (Murray et al, 2018)
<i>coachability</i>	“entrepreneurs need to be coachable”, “to be open to taking advice”	(Westhead & Storey, 1996), (Rae, 1999)
<i>focus</i>	“an ability to stay focussed”, “maintaining focus”	(Crayford et al, 2012), (Oosterbeck et al, 2012)
<i>work ethic</i>	“entrepreneurs need a strong work ethic”, “able to hard work”	(Curley & Formica, 2013), (Baum & Locke, 2004)
<i>confidence</i>	“self-confidence is important”, “confidence in one’s own ability”	(Fayolle et al, 2006), (NESTA, 2008)
<i>positive outlook</i>	“ability to stay positive”, “positive attitude”	(Guth et al, 1991), (Krueger & Dickson, 1994)
<i>business skills</i>	“clients need general business skills”, “business skills and knowledge”	(Varga & Schalk, 2004), (Matlay, 2008)
<i>digital skills</i>	“every business owner needs some understanding of the digital world.”, “for anyone running a business in the modern world digital skills are crucial”, “digital skills”.	(Diamante & London, 2002), (Hanna, Rohm & Crittenden, 2011)

In summary, as can be seen from the study, there is clear agreement between theory and practice in relation to the range of entrepreneurial capitals needed by the modern entrepreneur. This demonstrates that there is an understanding within the enterprise network at an operational level of the need to develop a broad range of capitals within the individual entrepreneur which are both specific and non-specific to their field in line with the thinking of Varga & Schalk (2004). As Massaro et al (2018) identify the development of these capitals can be a complex process with economic, social, and environmental factors to consider which can adversely impact on this process leading to challenges and barriers.

THEME 3 - What are the key challenges and barriers to supporting the development of entrepreneurial capitals?

From the interviews the key issues fall broadly into 3 themes namely; focus, process and resource. A representative sample of responses is provided here.

Figure 8: Theme 3.1 - Focus

Subject	Item
ESP1	“Our focus is constantly being changed and it creates chaos and confusion in the network”.
ESP6	“At times it is hard to say what we are actually trying to achieve here. Products and eligibility criteria are not tailored to the actual needs of the market and the client”.
ESP7	“It is important to support key sectors but not at the exclusion of more than three quarters of the actual business types in the market”
ESP10	“There is a real lack of focus and strategy in the network”.

There is clear evidence from the study around a lack of focus and direction within the enterprise network leading to confusion and scepticism of the service as explained by Schaper (2013). From the interviews the point was frequently made that support products are not aligned to the needs of the market, there is a lack of clear direction and staff are confused about their role and key focus areas and the traditional approach to supporting basic competencies (Thompson, 2004; Mitchelmore & Rowley, 2010) is no longer effective.

Figure 9: Theme 3.2 - Process

Subject	Item
ESP1	“The current system moves far too slowly”
ESP2	“There is simply too much red tape in the system”.
ESP4	“The administration effort required to process support applications is unsustainable”.
ESP5	“The rules and exclusions around the allocation of support are confusing and limiting”.

A recurring theme throughout the interviews was that the current process of supporting enterprise is not working as it should (Jones, 2019) and the level of bureaucracy involved has reached a level which is no longer sustainable. The point was also consistently made that rules

around eligibility are excluding individual entrepreneurs who are deemed to be worthy of support.

Figure 10: Theme 3.3 - Resource

Subject	Item
ESP3	“In the end, it becomes a balancing act between a delivery of service, targets to achieve, and the time available to do it in”.
ESP5	“Most of the work we do with businesses is around providing generic advice and we don’t spend enough time developing skills in individual people because our time is limited”.
ESP6	“There are only 24 hours in a day, we all try to provide a high quality service but targets have an impact on what we can devote time to so we tend to give everyone more or less the same service”.
ESP7	“Consistency of service can be an issue. The experience and expertise of business advisers in the network vary. considerably in terms of qualifications, experience, knowledge and expertise”.

From the interviews there was universal agreement that the resources required to effectively develop entrepreneurial capitals within the individual client which are both business specific Matlay (2008) and non business specific (Lazear, 2005) are currently not available. There is clear evidence from the study around limitations relating to available time, staffing levels and staff development and available funding to support these.

THEME 4 - *How can these challenges be overcome in order to more effectively support entrepreneurial capital development in the individual entrepreneur?*

Figure 11: Theme 4.1 - Focus

Subject	Item
ESP2	“What is needed are sensible, achievable targets reflecting current and future thinking”
ESP4	“We need to help people whose potential is not being realised. All too often the focus is placed on high growth businesses but we need to be doing more for the clients who need the most help”

ESP5	“The decision makers need to listen to the opinions of the front-end delivery organisations and personnel”
ESP6	“The time has come to review and revise the focus of the enterprise network and the support provided taking into consideration what is actually happening in the grass roots of the economy”

A number of potential solutions to the challenge of focus emerged from the interview. There was strong support for the view that strategic decision makers within the enterprise network need to listen to the views of front line staff to realign the focus of enterprise support agencies and their products and services. In this way it will be possible to support the full range of entrepreneurs ensuring the support provided is aligned to the needs, expectations and goals of the entrepreneur (Reynolds et al, 2002; Storey, 1994; Crayford et al, 2012; Austin et al, 2006). Focus must therefore be placed at a strategic level on developing a wider and more meaningful range of enterprising capitals (Käpylä, 2012).

Figure 12: Theme 4.2 - Process

Subject	Item
ESP6	“We need to facilitate a faster processing time and release advisers to advise, rather than fill in forms”
ESP7	“Our systems and processes are overly bureaucratic and not fit for purpose. We need to change them”
ESP8	“Things take far too long as there are unnecessary delays in the process at every stage. We should remove red tape if it doesn't actually help us do what we're trying to do”

Excessive bureaucracy, it was stated, leads to unnecessary delays in the process which can adversely affect the client and their business and cause potential reputational damage to the enterprise agency (Schaper et al, 2013). Suggested solutions to this problem focussed on reviewing and improving current systems and processes in order to improve efficiency and reduce delays in service delivery.

Figure 13: Theme 4.3 - Resource

Subject	Item
ESP1	“if we had more advisers we could support our clients better”
ESP3	“we have access to a very limited range of

	support products”
ESP9	“we simply don’t have the time to spend with the clients”

Recurring themes throughout the interview were finite resources and specifically limitations in funding for business, available adviser time and also lack of investment in the training and development of enterprise support staff leading clear skills gaps and inconsistency in service delivery. The responses to this theme indicate that additional resources are required at an operational level in order to deal more effectively with both the level of demand on the service and also the specific needs of each individual client (Carter & Jones-Evans, 2006).

Discussion

This research investigates the close relationship between a key component of intellectual capital (human capital) and the field of entrepreneurship. The study revealed some interesting insights. Firstly, it is evident that human capital (both business and non business in orientation) is a valuable resource associated with successful entrepreneurship and provides the recipe for growth, innovation and competitive advantage (Lev, 2004). Decision makers should take into consideration that investing in the development of useful human capital through education and training is likely to be an enabler for the creation of competitive advantage leading to entrepreneurial success. Secondly, the study provides collaborative evidence of 21 specific human capitals which a cohort of experienced enterprise support practitioners consider to be most influential for successful entrepreneurship. These capitals include both hard and soft skills and both business specific and non-business specific skills. The results from the study point to a broad consensus around the challenges involved in developing these capitals in the context of entrepreneurship around focus process and resource. However there is also clear evidence from the interviews that these challenges are widely understood at an operational level and that solutions can be found to overcome this. Identifying and validating the key human capitals needed to run a successful business and targeting the development of these allows the practitioner to direct their support interventions more effectively in order to raise productivity and improve success rates for their clients (De Frutos-Belizón, Martín-Alcázar, & Sánchez-Gardey, 2019).

Recommendations

Based on the findings of the study the following recommendations are proposed;

Enterprise agencies should place a strategic and operational focus on the following core aims; to promote business start up and growth, to develop entrepreneurial capitals in the individual and to create life opportunities for the client. Enterprise agencies should set realistic, meaningful and achievable targets to support these core aims. Unrealistic targets demotivate professional enterprise support staff and drive the agenda away from the core aims proposed. There is a need for a widening of eligibility criteria for universal, targeted and discretionary support services. This will provide an opportunity to tailor each package of support to the individual entrepreneur making more effective use of resources and maximising impact in line with the core aims stated. A systematic reduction in bureaucracy and red tape around access to enterprise support is essential. This will free up valuable resources and encourage uptake of services within the business community. There is a need to transform attitudes towards

enterprise support and learning through the systematic and structured training of enterprise support practitioners. This will bring the support services up to a consistently high standard in order to meet the unique needs of the business community. Ongoing strategic partnership development is essential and this approach will reduce duplication and encourage the development of referral channels through strategic partnerships with key players which would make more effective use of available resources. There is a need to conduct large scale quantitative research of a longitudinal nature to evaluate the efficacy of specific entrepreneurial learning interventions on a large sample of entrepreneurs.

The results of this study pave the way for additional research. The approach applied in this paper would enable researchers to expand this study to collect relevant empirical evidence from a sample of real entrepreneurs in a large scale quantitative study. A scorecard approach could be used to test individual self-perceptions around the 21 key entrepreneurial capitals identified in this paper amongst a cohort of entrepreneurs.

Limitations

This study has some limitations. Firstly, the analysis is based on data gathered from a sample of 10 practitioners. Whilst the size of the sample is rather small this can be addressed in further studies which can be expanded in scale and scope. Secondly, the analysis is based on qualitative information and the qualitative approach focuses on a specific social field and therefore the findings cannot immediately be generalised to other fields. However, the use of semi structured interviews is a common research method in this research area. This work also does not investigate the views of entrepreneurs themselves. This also can be addressed with further research.

Conclusion

The challenge for the economy of Scotland is to significantly improve its economic performance thus helping the people of Scotland to create and sustain employment, improve prosperity and generate a high quality of life. Business and enterprise are seen as major drivers for the economy (Baumol, 2002; Leitch, 2006) and entrepreneurship education has been shown to be a key driver for economic development (Galvão et al, 2018). The key conclusion drawn from this study is that the enterprise network in Scotland is well defined and ideally positioned to support entrepreneurship however the current approach to enterprise support is constrained by institutional barriers and limitations around focus, process and resources. As a result the effectiveness of the professional enterprise support service in Scotland and its ability to support the development of entrepreneurial capitals can, at times, be reduced. In order to overcome this, in line with the thinking of Galvão et al (2018) entrepreneurship education urgently needs stronger support from public authorities and other key stakeholders in order to place support for enterprise at the top of the economic agenda and secure the resources needed to ensure efficient and effective delivery of that support by implementing recommendations such as those presented here.

References

Allameh, S. (2018), "Antecedents and consequences of intellectual capital", *Journal of Intellectual Capital*, Vol. 19 No. 5, pp. 858-874.

- Austin, J., Stevenson, H. & Wei-Skillern, J. (2006), "Social and Commercial Entrepreneurship: Same, Different, or Both?," *Entrepreneurship Theory and Practice*, 30(1), pp.1-22.
- Baum, J. R., & Locke, E.A. (2004), "The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth", *Journal of Applied Psychology*, 89(4), 587-598.
- Baumol, W. (2002), "The free market innovation machine: Analyzing the growth miracle of capitalism", Princeton, NJ: Princeton University Press.
- Becker, G.S. (2009), "Human capital: A theoretical and empirical analysis, with special reference to education", University of Chicago press.
- Berraies, S. (2019), "The effect of enterprise social networks use on exploitative and exploratory innovations", *Journal of Intellectual Capital*, Vol. 20 No. 3, pp. 426-452.
- Bourdieu, P. (1990), "The logic of practice", Stanford, CA: Stanford University Press.
- Burns, A., Acar, W. & Datta, P. (2011), "A qualitative exploration of entrepreneurial knowledge transfers", *Journal of Knowledge Management*, Vol. 15 No. 2, pp. 270-298.
- Carter, S., & Jones-Evans, D. (2006), "Enterprise and small business: Principles, practice and policy". Pearson Education.
- Castles, J. (2004), "Persistence and the Adult Learner: Factors Affecting Persistence in Open University Students", *Active Learning in Higher Education*, 5(2), 166-179.
- Cohen, S. and Kaimenakis, N. (2007), "Intellectual capital and corporate performance in knowledge-intensive SMEs", *The Learning Organization*, Vol. 14 No. 3, pp. 241-262.
- Cope, J. (2003), "Entrepreneurial Learning and Critical Reflection: Discontinuous Events as Triggers for 'Higher-level' Learning", *Management Learning*, Vol 34, Iss 4.
- Crayford, J., Fearon, C., McLaughlin, H. & Van Vuuren, W. (2012) "Affirming entrepreneurial education: learning, employability and personal development", *Industrial and Commercial Training*, Vol. 44 Issue: 4, pp.187-193.
- Curley, M. & Formica, P. (2013), "The Experimental Nature of New Venture Creation", *Capitalizing on Open Innovation*, 2.0., London: Springer.
- Dainow, R. (2013), "Training and education of entrepreneurs: the current state of the literature," *Journal of Small Business & Entrepreneurship*, 3:4, 1023.
- De Frutos-Belizón, J., Martín-Alcázar, F. & Sánchez-Gardey, G. (2019), "Conceptualizing academic intellectual capital: definition and proposal of a measurement scale", *Journal of Intellectual Capital*, Vol. 20 No. 3, pp. 306-334.
- Desa, G. & Basu, S. (2013), "Optimization or Bricolage? Overcoming Resource Constraints in Global Social Entrepreneurship", *Strategic Entrepreneurship Journal*, 7(1), pp.26-49.

- Di Domenico, M.L., Haugh, H. & Tracey, P. (2010), "Social bricolage: theorizing social value creation in social enterprises," *Entrepreneurship Theory and Practice* 34 (4), 681–703.
- Diamante, T. & London, M. (2002), "Expansive leadership in the age of digital technology", *Journal of Management Development*, Vol. 21 No. 6, pp. 404-416.
- Duodu, B. & Rowlinson, S. (2019), "Intellectual capital for exploratory and exploitative innovation", *Journal of Intellectual Capital*, Vol. 20 No. 3, pp. 382-405.
- Eisenhardt, K. (1989), "Building Theories from Case Study Research", *The Academy of Management Review*, 14(4), p.532.
- Fayolle, A., Gailly, B. & Lassas-Clerc, N. (2006), "Effect and counter-effect of entrepreneurship education and social context on students' intentions," *Estudios de Economía Aplicada*, Vol. 24 No. 2, pp. 509-523.
- Fiet, J.O. & Patel, P.C. (2008), "Small Bus Econ", 30: 215.
- Fitz-enz, J. (2000), *The ROI of Human Capital*, Amacom, New York, NY.
- Fletcher, S. (1997), "Analysing competencies", London: Konan Page.
- Galvão, A., Ferreira, J. & Marques, C. (2018), "Entrepreneurship education and training as facilitators of regional development", *Journal of Small Business and Enterprise Development*, Vol. 25 No. 1, pp. 17-40.
- Gold, J. Thorpe, A. & Mumford, A. (2010), "Leadership and Management Development", 5th edition, London: CIPD.
- Guest, G., Bunce, A. & Johnson, L. (2006), "How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability", *Field Methods*, 18: 59.
- Gupta, V., I. C. MacMillan, & G. Surie (2004). "Entrepreneurial Leadership: Developing and Measuring a Cross-Cultural Construct," *Journal of Business Venturing* 19(2), 241– 260.
- Guth, W.D., Kumaraswamy, A. & McEarlean, M. (1991), "Cognition, enactment, and learning in the entrepreneurial process". In: Churchill, N.C., Bygrave, W.D., Covin, J.G. (Eds.), *Frontiers of Entrepreneurship Research*, Babson College, Babson Park, MA.
- Hanna, R., Rohm, A., & Crittenden, V. L. (2011), "We're all connected: the power of the social media ecosystem", *Business Horizons*, Vol. 54, pp. 265-273.
- Henry, L. (2013), "Intellectual capital in a recession: evidence from UK SMEs", *Journal of Intellectual Capital*, Vol. 14 No. 1, pp. 84-101.
- Honig, B. (2004). "Entrepreneurship education: Toward a model of contingency-based business planning", *Academy of Management Learning and Education*, 3(3), 258–273.

- Inkinen, H. (2015), "Review of empirical research on intellectual capital and firm performance", *Journal of Intellectual Capital*, Vol. 16 No. 3, pp. 518-565.
- Jones, C. (2019), "A signature pedagogy for entrepreneurship education", *Journal of Small Business and Enterprise Development*, Vol. 26 No. 2, pp. 243-254.
- Jusoh, R., Ziyae, B., Asimiran, S., & Kadir, S. A. (2011). "Entrepreneur Training Needs Analysis: Implications On The Entrepreneurial Skills Needed For Successful Entrepreneurs", *International Business & Economics Research Journal (IBER)*, 10(1).
- Käpylä, J. (2012), "Towards a critical societal knowledge management", *Journal of Intellectual Capital*, Vol. 13 No. 3, pp. 288-304.
- Ko, S., & Butler, J.E. (2006), "Prior knowledge, bisociative mode of thinking and entrepreneurial opportunity identification" , *International Journal of Entrepreneurship and Small Business*, 3(1), 3-16.
- Krueger, N., & Dickson, P.R. (1994), "How believing in ourselves increases risk taking: Perceived self-efficacy and opportunity recognition", *Decision Sciences*, 25(3), 385-400.
- Kuratko, D. (2003), "Entrepreneurship education: emerging trends and challenges for the 21st century", *Coleman Foundation White Paper Series*, Coleman Foundation, Chicago, IL.
- Lazear, E. P. (2004), "Balanced Skills and Entrepreneurship." *American Economic Review*, 94 (2): 208-211.
- Lazear, E.P. (2005), "Entrepreneurship", *Journal of Labor Economics*, 23: 649-80.
- Leitch, S. (2006), "Leitch Review of Skills, Prosperity for all in the global economy – World class skills. Final report", London: HM Treasury. Online. Available.: http://www.hm-treasury.gov.uk/media/6/4/leitch_finalreport051206.pdf (accessed 27 April 2008).
- Lev, B. (2004), "Sharpening the intangibles edge", *Harvard Business Review*, Vol. 82 No. 6, pp. 109-116.
- Lichtenstein, G.A., & Lyons, T.S. (2001), "The Entrepreneurial Development System: Transforming Business Talent and Community Economies," *Economic Development Quarterly*, 15(1), 3-20.
- Marr, B., Schiuma, G. & Neely, A. (2004), "Intellectual capital – defining key performance indicators for organizational knowledge assets", *Business Process Management Journal*, Vol. 10 No. 5, pp. 551-569.
- Massaro, M., Dumay, J., Garlatti, A. & Dal Mas, F. (2018), "Practitioners' views on intellectual capital and sustainability", *Journal of Intellectual Capital*, Vol. 19 No. 2, pp. 367-386.
- Matlay, H. (2008), "The impact of entrepreneurship education on entrepreneurial outcomes", *Journal of Small Business and Enterprise Development*, Vol. 15 Issue: 2, pp.382-396.

Mitchelmore, S. & Rowley, J. (2010) "Entrepreneurial competencies: a literature review and development agenda", *International Journal of Entrepreneurial Behavior & Research*, Vol. 16 Issue: 2, pp.92-111.

Mulgan, G., & Albury, D. (2003), "Innovation in the public sector", (Working Paper, Version 1.9). Strategy Unit, UK Cabinet Office. Retrived from http://www.sba.oakland.edu/faculty/mathieson/mis524/resources/readings/innovation/innovation_in_the_public_sector.pdf.

Murray, A., Crammond, R.J., Omeihe, K.O., & Scuotto, V. (2018), "Establishing successful methods of entrepreneurship education in nurturing new entrepreneurs", *Journal of Higher Education Service Science and Management*, 1(1).

Neck, H., and P. Greene (2011). "Entrepreneurship Education: Known Worlds and New Frontiers," *Journal of Small Business Management* 49(1), 55–70.

Nerdrum, L. & Erikson, T. (2001), "Intellectual capital: a human capital perspective", *Journal of Intellectual Capital*, Vol. 2 No. 2, pp. 127-135.

NESTA, (2008), "Developing entrepreneurial graduates: putting entrepreneurship at the centre of higher education," [online], [accessed: Nov 2017], available: [https://scholar.google.co.uk/scholar?q=NESTA,\(2008\),Developing+entrepreneurial+graduates:+putting+entrepreneurship+at+the+centre+of+higher+education,+September.&hl=en&as_sdt=0&as_vis=1&oi=scholart&sa=X&ved=0ahUKEwjrhfWG3KPaAhXCaFAKHZmHD1gQgQMIJzAA](https://scholar.google.co.uk/scholar?q=NESTA,(2008),Developing+entrepreneurial+graduates:+putting+entrepreneurship+at+the+centre+of+higher+education,+September.&hl=en&as_sdt=0&as_vis=1&oi=scholart&sa=X&ved=0ahUKEwjrhfWG3KPaAhXCaFAKHZmHD1gQgQMIJzAA).

Nieminen, L. & Lemmetyinen, A. (2015), "A value-creating framework for enhancing entrepreneurial learning in networks", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 9 No. 1, pp. 76-91.

Nieminen, L. & Hytti, U. (2016), "Commitment to an entrepreneurship training programme for self-employed entrepreneurs, and learning from participation", *Education + Training*, Vol. 58 No. 7/8.

Oosterbeek, H. VanPraag, M. & Ijsselstein, A. (2009), "The impact of entrepreneurship education on entrepreneurship skills and motivation", *European Economic Review*, 54 (2009), pp. 442-454.

Otcenášková, T. & Bureš, V. (2018), "Self-assessment of intellectual capital in an organisation", *Journal of Intellectual Capital*, Vol. 19 No. 2, pp. 387-406.

Parliament UK, (2014), "Small Businesses and the UK Economy". [online].

Pedro, E., Leitão, J. & Alves, H. (2018), "Intellectual capital and performance", *Journal of Intellectual Capital*, Vol. 19 No. 2, pp. 407-452.

Peña, I. (2002), "Intellectual capital and business start-up success", *Journal of Intellectual Capital*, Vol. 3 No. 2, pp. 180-198.

Petty, R. & Guthrie, J. (2000). "Intellectual capital literature review: measurement, reporting and management", *Journal of Intellectual Capital*, 1, 2, 155–76.

Rae, D. (2000) "Understanding entrepreneurial learning: a question of how?", *International Journal of Entrepreneurial Behavior & Research*, Vol. 6 Issue: 3, pp.145-159.

Reynolds, P.D., Bygrave, W.D., Autio, E., Cox, L.W., & Hay, M. (2002), "Global entrepreneurship monitor", Babson College, London Business School, Ewing Marion Kauffman Foundation.

Sánchez et al. (2000), "Management of intangibles. An attempt to build a theory", *Journal of Intellectual Capital*, Vol. 1 No. 4, pp. 312-27.

Sarasvathy, S.D. & Dew, N., (2005), "New market creation through transformation", *Journal of Evolutionary Economics* 15 (5), 533–565.

Schaper, M., Volery, T., Weber, P., & Gibson, B. (2013), "Entrepreneurship and Small Business: 4th Asia Pacific Edition". Milton Qld, Australia: Wiley.

Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science* 11 (4), 448–469.

Shin, S. J., & J. Zhou (2003), "Transformational Leadership, Conservation, and Creativity: Evidence from Korea," *Academy of Management Journal* 46(6), 703–714.

Soetanto, D. (2017), "Networks and entrepreneurial learning: coping with difficulties", *International Journal of Entrepreneurial Behavior & Research*, Vol. 23 No. 3, pp. 547-565.

Stevenson H.H., & Gumpert D.E. (1985), "The heart of entrepreneurship", *Harvard Business Review* , (pg. 9-24) March.

Storey D.J. & Johnson, S. (1987), "Regional variations in entrepreneurship in the U.K.", *Scottish Journal of Political Economy*, vol. 34 (pg. 161-173).

Storey, D. (1994), "Understanding the Small Business Sector", LondonRoutledge.

Subramaniam, M. & M. A. Youndt. (2005), "The influence of intellectual capital on the types of innovative capabilities", *Acad. Management J.*

Thompson, J.L. (2004), "The facets of the entrepreneur: identifying entrepreneurial potential", *Management Decision*, 42(2), 243-258.

Thornberry, N. (2006). "Lead Like an Entrepreneur: Keeping the Entrepreneurial Spirit Alive within the Corporation", Fairfield, PA: McGraw Hill.

Varga, A., & Schalk J. (2004), "Knowledge spillovers, agglomeration and macroeconomic growth: an empirical approach", *Regional Studies* , 2004, vol. 38 (pg. 977-989).

Ventresca, M.J. & Kaghan, W., (2008), "Routines, going concerns, and innovation: towards an evolutionary economic sociology", In: Becker, M.C. (Ed.), *Handbook of Organizational Routines*. Edward Elgar Publishing, Cheltenham, pp. 52–86.

Ward, T.B. (2004), "Cognition, creativity, and entrepreneurship" , Journal of Business Venturing, 19(2), 173–188.

Westhead, P. & Storey, D.J. (1996), "Management training and small firm performance: why is the link so weak?", International Small Firm Journal, Vol. 14 No. 4, pp. 13-24.

Williams Middleton, K. (2013), "Becoming entrepreneurial: gaining legitimacy in the nascent phase", International Journal of Entrepreneurial Behavior & Research, Vol. 19 No. 4, pp. 404-424.

Wright, P. M., Dunford, B. B. and Snell, S. A. (2001). "Human resources and the resource based view of the firm", Journal of Management, 27, 701–21.

Appendix 1: Interview Question Set

Identifying Code	
Years in the field of enterprise support	
Areas of enterprise support expertise	

1. *What experience do you have of providing professional enterprise support?*
2. *What do you believe to be the main objectives of the enterprise support professional?*
3. *What form does enterprise support take in Scotland?*
4. *What do you feel are the main challenges facing the modern entrepreneur?*
5. *In light of these challenges, what do you feel are the key entrepreneurial capitals (i.e. skills, qualities, attributes, behaviours and knowledge) needed by the modern entrepreneur?*
6. *What do you feel are the main challenges facing the enterprise support professional seeking to support development of these entrepreneurial capitals?*
7. *How could these challenges be overcome?*
8. *Is there anything of relevance that you would like to add?*