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An Examination of Students' Entrepreneurial Learning through Extracurricular Enterprise Activities

Preedy, Sarah

AN EXAMINATION OF STUDENTS' ENTREPRENEURIAL LEARNING THROUGH EXTRACURRICULAR ENTERPRISE ACTIVITIES

By

SARAH PREEDY

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Abstract

Sarah Preedy

AN EXAMINATION OF STUDENTS' ENTREPRENEURIAL LEARNING THROUGH EXTRACURRICULAR ENTERPRISE ACTIVITIES

Extracurricular enterprise activities have steadily increased over the past decade within universities (Rae *et al*., 2012), as has the domain of entrepreneurial learning research (Wang and Chugh, 2014) yet limited empirical research examines links between the two phenomena. This thesis connects educational theory, entrepreneurial learning theory and entrepreneurial education research to examine the role that extracurricular enterprise activities may have within the entrepreneurial learning processes of students at United Kingdom Higher Education Institutions.

Utilising a social constructionist paradigm of enquiry this thesis critically examines perceptions of the value of extracurricular enterprise activities from an educator and student perspective. A semi-structured survey (n=55) and in depth interviews with students (n=23) and enterprise educators (n=3) across 24 UK universities explored what extracurricular enterprise activities students engaged in, their motivations for engagement and the perceived value of extracurricular enterprise activities in relation to entrepreneurial learning processes.

Findings suggest that extracurricular enterprise activities not only provide value in the experiential and social learning opportunities afforded for participants, but the positioning of these activities outside of the main curriculum enables students to develop their autonomous learning capabilities. The results contribute to an emerging body of literature examining self-directed learning activities and entrepreneurial learning (Van Gelderen, 2010; Tseng, 2013). The thesis concludes that while experiential and social learning opportunities occupy a central role within entrepreneurial learning processes of university students, self-directed learning activities are increasingly important, and emphasis should be placed upon enabling students to self-direct their entrepreneurial learning processes.

For policy and practice, this research provides additional scrutiny of the proposition that extracurricular enterprise activities positively enhance learning through examining what extracurricular enterprise activities students choose to engage in and the benefits they perceive they attained. This research also provides an enhanced understanding of how students interpret and apply the theoretical concept of entrepreneurial learning. Research examining entrepreneurial learning is important in enabling a more effective understanding of the entrepreneurial process yet studies examining student perceptions of entrepreneurial learning remain limited (Mueller and Anderson, 2014; Wang and Chugh, 2014). Finally, this thesis presents the central role of self-directed learning activities to students' entrepreneurial learning processes and provides recommendations for enhancing entrepreneurial education.

Keywords: Extra-curricular activities, Entrepreneurial Learning, Experiential Learning, Social Learning, Self-directed Learning.

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List of Abbreviations (by order of appearance)

UK – United Kingdom
HEI – Higher Education Institution
NACUE- National Association of College and University Entrepreneurs
HE – Higher Education
QAA – Quality Assurance Agency
SDL – Self-Directed Learning
HEAR – Higher Education Achievement Report
NCEE – National Centre for Entrepreneurship in Education
US – United States
CV – Curriculum Vitae
NSS – National Student Survey

Chapter One – Introduction

The central proposition of this thesis is to explore the phenomenon of entrepreneurial learning through extracurricular enterprise activity within United Kingdom (UK) universities. This chapter outlines the rationale for the study, the aims and objectives, before detailing the current policy and educational landscape in which the research problem resides. The contribution the study offers for policy and practice will also be summarised alongside an outline of how the remainder of the thesis will be structured.

1.1 Rationale for the study

Over the past 30 years, there has been a significant rise in the global provision of enterprise and entrepreneurship education (Kuratko, 2005; Jones and Matlay, 2011; Vanevenhoven and Drago, 2015). Traditionally, entrepreneurial education programmes have tended to be more widespread in 'developed' countries (Fuchs *et al.,* 2008; Matlay, 2008; Kabondo and Okpara, 2010) but are rapidly emerging in 'developing' countries also (Lautenschlager and Haase, 2011; Mwasalwiba *et al*., 2014).

Enterprise and entrepreneurship education has become well established in the UK, and in line with global trends, provided in the form of degree modules and programmes ranging from undergraduate to PhD level (Kuratko, 2005; Rae *et al.,* 2012; Neck *et al.,* 2014). However, a vast range of pedagogical approaches are utilised across these programmes reflective of cohort sizes, resource allocation and the philosophical grounding of curriculum design (Jones and Matlay, 2011; Blenker *et al.,* 2014). There is disagreement in the academic and educator community on how best to teach enterprise and entrepreneurship education (Gibb, 2002; Neck and Greene, 2011; Johannisson, 2016). As enterprise and entrepreneurship education draws upon a wide range of disciplines this further encourages a variety of teaching methods and models (Fayolle, 2013; Rideout and Gray, 2013). There is also a continuing struggle within enterprise education research to pin down clear

outcomes of enterprise and entrepreneurship education. Generally research presents enterprise and entrepreneurship education as having a positive impact on entrepreneurial intentions but longer term outcomes have proved difficult to evidence (Souitaris *et al.,* 2007; Bae *et al.,* 2014; Nabi *et al.,* 2017)

Alongside in curricular provision has been a growing suite of co and extracurricular enterprise activities designed to enhance students' entrepreneurial knowledge, skills and capabilities (Rae *et al.,* 2012). Extracurricular activities are defined as academic or non-academic activities that are not a required part of the curriculum, do not involve academic credit, and participation is optional (Bartkus *et al.,* 2012). Extracurricular entrepreneurial activities are those extracurricular activities that have an enterprise or entrepreneurship element, this may include: business competitions, guest lectures, workshops and networking events (Lilischkis *et al*., 2015; Vanevenhoven and Drago, 2015), raising awareness of entrepreneurship activity, assisting students in setting up businesses or promoting entrepreneurship as a future career (Rae *et al.,* 2012; Pittaway *et al.,* 2015).

There has been a global rise in the provision of extracurricular enterprise activities (Lilischkis *et al.,* 2015; Vanevenhoven and Drago, 2015) but due to their positioning outside of the main curriculum they often face sustainability and resourcing issues (Rae *et al.,* 2012; Lilischkis *et al.,* 2015). Extracurricular enterprise activities are perceived as valuable for enhancing learning from doing, social learning and transformative learning (Pittaway *et al.,* 2011; QAA, 2012; Cordea, 2014; Pittaway *et al.,* 2015) and it is argued should be better integrated with curriculum activity (QAA, 2012; Lilischkis *et al*., 2015) particularly in encouraging students to reflect upon their learning through participation (QAA, 2012).

In conjunction with the increase in the provision of enterprise and entrepreneurship education, the discipline has witnessed a significant rise in academics conducting

enterprise education research (Blenker *et al.,* 2014; Wang and Chugh, 2014). Learning is pivotal to the entrepreneurship process at any stage, from nascent entrepreneurs to established (Smilor 1997; Harrison and Leitch, 2005) thereby research examining entrepreneurial learning is important in enabling a better understanding of the entrepreneurial process (Minniti and Bygrave, 2001; Rae and Carswell, 2001; Cope, 2005a). However, as the entrepreneurial learning research domain is relatively new and there is no single unified theory of learning (Philips and Soltis, 2009) it faces challenges of fragmentation and incoherency (Harrison and Leitch, 2005; Wang and Chugh, 2014). Enterprise education research has also been criticised for its perceived disconnect from the theories and concepts of the education discipline (Fayolle, 2013). The majority of studies examine entrepreneurial learning from the perspective of nascent and established entrepreneurs (Rae 2000; Rae and Carswell, 2001; Cope, 2003; Young and Sexton, 2003; Taylor and Thorpe, 2004; Cope, 2010) and studies examining HE students entrepreneurial learning remains limited (Mueller and Anderson, 2014; Wang and Chugh, 2014). The rationale for conducting this research derives from the observation that although extracurricular enterprise activities have steadily increased over the past decade (Rae *et al*., 2012; Lilischkis *et al.,* 2015), as has the domain of entrepreneurial learning research (Wang and Chugh, 2014), limited empirical research examines links between the two phenomena. If learning is pivotal to the entrepreneurship process at any stage, from nascent entrepreneurs to established (Smilor 1997; Harrison and Leitch, 2005) then do extracurricular enterprise activities offer a platform for entrepreneurial learning? While debate continues regarding how best to teach enterprise and entrepreneurship education could the often overlooked role of extracurricular enterprise be a facet of 'what works' in enterprise and entrepreneurship education? This study connects educational theory, entrepreneurial learning theory and entrepreneurial education research to examine the role

that extracurricular enterprise activities may have within entrepreneurial learning processes. The research aim of this study is therefore:

To explore the phenomenon of entrepreneurial learning, through extracurricular enterprise activity, within UK universities.

From this aim is formulated the following objectives:

Examine how students perceive the theoretical concept of entrepreneurial learning.

Identify what motivates students to become involved in extracurricular enterprise activities at UK Higher Education Institutions (HEIs).

Critically examine the benefits of engaging in extracurricular enterprise activities.

Critically examine links between engagement in extracurricular enterprise activities and entrepreneurial learning.

1.2 Entrepreneurship and Higher Education

Entrepreneurship is a concept that has been subject to differing theoretical frameworks including; economic (Schumpeter, 2004), psychological (McClelland, 1965; Rotter; 1966; Carland *et al.,* 1988) and organisational (Gartner, 1989). Traditionally, entrepreneurship has been perceived as a set of inherent personality traits, an approach which popularised entrepreneurial profiling to assist in distinguishing 'entrepreneurs' from 'non entrepreneurs'. McClelland (1961), Rotter (1966) and Timmons *et al.,* (1985) identified character traits specific to entrepreneurs and concluded that entrepreneurial individuals had; a desire to do well for the purposes of personal accomplishment, a strong locus of control, and high levels of determination, drive, initiative, persistence, tolerance of ambiguity, risk taking and decisiveness.

Such ‘trait’ approaches were gradually discredited as empirical studies by researchers such as Brockhaus (1980) found there were no significant differences between entrepreneurs, managers or the general population. Gartner’s (1989) study represented a turning point in entrepreneurship research whereby the focus shifted from ‘who’ the entrepreneur is to ‘what entrepreneurs do’. Gartner’s work criticised the methodology of trait theory studies that used diverse samples and had concluded entrepreneurs held a wide range of often contradictory traits. Gartner’s most important contribution was to emphasise the importance of context in the development of an individual’s entrepreneurial capabilities.

Globally, there have been political, social, cultural and educational drivers for developing the entrepreneurial capacity of a nation’s citizens. Within Europe, policy reports such as the Entrepreneurship 2020 Action plan (European Commission, 2013), the New Skills Agenda for Europe (European Commission, 2016) and the 2016 European Commission Entrepreneurship Competence Framework (Bacigalupo *et al.,* 2016), all aim towards a common understanding of entrepreneurship and promote entrepreneurial education as an avenue to improve individuals’ entrepreneurial capabilities. Throughout Europe, there is an increasing emphasis upon the role universities have in encouraging numbers of skilled and enterprising graduates (Gibb, 2010; Rae *et al.,* 2012; Wilson, 2012).

The drive to develop the entrepreneurial capacity of nations has generated various university initiatives promoting enterprise among both staff and students (Gibb, 2002; Hannon, 2007; Rae *et al.,* 2010; Taylor, 2012) including an emphasis upon enterprise and entrepreneurship education (Carey and Matlay, 2011). Enterprise and entrepreneurship education has received greater support across university departments as universities are increasingly focused upon encouraging skilled and enterprising graduates regardless of subject discipline (Gibb *et al*., 2012; QAA, 2012; Wilson, 2012; BIS, 2013). Students face a

competitive global graduate job market and can expect to make frequent employment changes within a lifetime (Gibb and Hannon, 2006). Entrepreneurial education has been argued to assist graduates in becoming more employable (Gibb and Hannon, 2006) which in turn bolsters the economic productivity of nations (World Economic Forum, 2009; QAA, 2012; Abreu and Grinevich, 2013; UUK, 2013; BIS, 2014).

Aside from policymakers; academic communities, charities and students have all formed their own enterprise networks in the UK to supplement existing government support. Many initially sprung from government initiatives but have subsequently emerged as independent and self-funded organisations, such as: Enterprise Educators UK and the National Centre for Entrepreneurship in Education. Student specific networks such as the National Association of College and University Entrepreneurs (NACUE) have become an independent student voice for entrepreneurial education in over 80 UK universities (NACUE, 2016). Such organisations champion the benefits of entrepreneurial education and often join together to spearhead national events including conferences and training symposiums designed to promote enterprise and entrepreneurship education within UK Higher Education (HE) (Enterprise Alliance, 2014).

However, a significant challenge facing UK universities has been ensuring a stable funding base for their activities, entrepreneurial or otherwise, as funding from government and research councils has steadily reduced (Rae *et al*., 2012; Gibb and Haskins, 2013; HEFCE, 2014). UK HEIs now receive less public money in a time when they are facing significantly increased competition for students from international HEIs (British Council, 2012; Gibb, 2013) alongside an emergence in private sector and online HE providers (Gibb 2013; McGettigan, 2013). Remain campaigners have highlighted that post-Brexit UK universities also face a suite of further challenges to their economic and educational activities, such as; potential reductions in research funding, restrictions upon student and staff mobility and reduced collaboration with European universities (Corbett, 2016). At the time of writing, it

remains to be seen the outcome of the leave vote but the ability of UK HEIs to be entrepreneurial in outlook and delivery appears more pertinent than ever for the survival of the institutions themselves and their contribution to the national economy.

In response to financial challenges, many UK universities have adopted an entrepreneurial outlook to place themselves as a partner with industry and government, expanding and diversifying their knowledge exchange through science parks, business incubation spaces and technology transfer offices and thereby enhancing "third stream income" (Rae *et al.,* 2012; Wilson, 2012). Many universities have also restructured activities in acknowledgment of the increased purchasing power of the student body (McCulloch, 2009). Revised funding structures in the UK since 2010 have compounded universities reliance upon student fees for funding rather than government grants (Gibb and Haskins, 2013; McGettigan, 2013; HEFCE, 2014). Subsequently, increasing importance is placed upon the measurement of student satisfaction in the UK, with exercises such as the National Student Survey (Lomas, 2007; Woodall *et al*., 2012) which under recent legislation will now also constitute a metric for the Teaching Excellence Framework (Douglas *et al.,* 2015). Critics have argued that measures as discussed above, fuelled by a marketised HE sector, may erode academic integrity (Collini, 2012; Mautner, 2012) and subvert universities delivering education for public and social benefit (Campaign for the Public University, 2012; Mwasalwiba *et al*., 2014). However, while the drivers for industry interaction are in the most part economic, it is increasingly apparent that government, industry and universities may also use their combined resources to address wider societal goals (Thorp and Goldstein, 2010; McGettigan, 2013).

This section has summarised the impetus for HE entrepreneurial education within the wider educational and policy landscape. Although there is difficulty in generalising

enterprise activity across universities as HEIs are not homogenous, they each have their specific identities and set of circumstances (Lilischkis *et al.,* 2015), it appears that global shifts regarding the 'traditional role' of the university and a marketised HE sector has stimulated the impetus for universities to become more entrepreneurial which has been paralleled by a growth in entrepreneurial education (Rae *et al.,* 2012; Young, 2014). The rise in entrepreneurial degree modules and programmes in the UK has been further encouraged by government research concerning inefficiency at UK universities and a drive to increase students' enterprise and employability skills (Lambert Review, 2003; Wilson, 2012; QAA, 2012; BIS, 2013). The remainder of this section will detail the growth of enterprise and entrepreneurship education in the UK alongside its critiques and challenges.

1.2.1 Entrepreneurial education

The terms "enterprise" and "entrepreneurship" are often used interchangeably (Jones and Iredale, 2010) yet the two concepts within educational practice are distinct (QAA, 2012). Enterprise education aims to develop enterprising skills, behaviours and attributes that can be used in a variety of contexts (Jones and Iredale, 2010; Gibb and Price, 2014), whereas entrepreneurship education primarily focuses upon the knowledge, skills and behaviours needed for running and growing a business (Jones and Iredale, 2010; QAA, 2012).

The Quality Assurance Agency (QAA) in their 2012 guidelines on enterprise and entrepreneurship education provides a clear distinction between the two:

Entrepreneurship education, defined as developing competencies specific to setting up a new venture or business,

Enterprise education defined more broadly as developing competencies necessary to generate and realize ideas (QAA, 2012).

However, within HE environments there is often still confusion in distinguishing enterprise, entrepreneurship and even employability activities from one another due to an overlap in aims and objectives (Sewell and Pool, 2010; Henry, 2013). New QAA guidelines on enterprise and entrepreneurship education are currently being formulated with a review that began in 2016 gathering evidence from universities on the impact of the 2012 guidance documents. At the time of writing, the definitions in the 2012 QAA publication remain widely used by enterprise educators and thus have been used as the basis for distinguishing between enterprise and entrepreneurship education in this study. For the purposes of brevity, from now onwards enterprise and entrepreneurship education will be termed 'entrepreneurial education', an approach which has precedence in the work of other enterprise education researchers such as Higgins *et al.,* (2013) and Lackéus (2013). 'Entrepreneurial education' as a term acknowledges both the similarities and the differences between enterprise and entrepreneurship education without substituting one term for the other.

While it is generally accepted that entrepreneurship can be taught there remains contention around how (Neck and Greene, 2011). Entrepreneurial education can be split into; education 'about' entrepreneurship which teaches fundamental business theory usually through didactic teaching methods such as lectures and seminars (Hills, 1988; Gibb, 2002; Pittaway and Edwards, 2012), education 'for' entrepreneurship which is centred around skills development and gaining practical experience (Gibb, 2002; Honig, 2004), and education 'through' entrepreneurship which acknowledges the subjective nature of knowledge and the importance of reflection in the simulation of entrepreneurial activity (Gibb, 2002; Laukkanen, 2000). Traditionally, entrepreneurial education has comprised of variants of 'about' forms of education (Gibb, 2002; Rae *et al*., 2010; Pittaway and Edwards, 2012) and there remains entrepreneurial programmes that focus

predominantly upon ‘about’ forms that arguably do little to expose students to ‘the entrepreneurial lifeworld’ (Jones and Iredale, 2010; Pittaway and Edwards, 2012). For example the formulation of a business plan has been, and remains on some programmes, a popular form of assessment method yet it has faced criticism for ineffectively preparing graduates for venture creation (Honig, 2004; Neck and Greene, 2011).

The literature suggests that enterprise and entrepreneurship can be difficult to teach due the complexity and variability of the entrepreneurial process (Gibb, 2002; Mueller and Anderson, 2014; Johannisson, 2016). Educators face the challenge that they must meet prescribed academic standards and ensure students pass their assessments but also employ innovative teaching methods (Carey and Matlay, 2011; Pittaway and Edwards, 2012; European Commission, 2013; Lackéus, 2014). Increasingly, entrepreneurial education aims to educate ‘for’ and ‘through’ enterprise with emphasis upon creating entrepreneurial mind sets and enhancement of skills and abilities (QAA, 2012). Experiential learning opportunities whereby tutors act as facilitators to student learning are seen as optimal to encourage education ‘for’ and ‘through’ enterprise (Honig, 2004; Löbler 2006; Pittaway and Cope 2007b; QAA, 2012; Higgins *et al*., 2013; Lilischkis *et al.,* 2015) but educators may face curriculum constraints such as large class sizes and inappropriate teaching spaces (Honig, 2004; Carey and Matlay, 2011; Henry, 2013). The creation of a venture while at university can be particularly difficult to align with curriculum standards and can also involve considerable administrative burden for educators (Lackéus, 2013).

Different countries, and the educational institutions within them, have different traditions and expectations of entrepreneurial education (Rae *et al*., 2010; Jones and Matlay, 2011; Penaluna *et al*., 2012) which may affect the programmes on offer, the teaching learning and assessment practices, and the engagement of staff (Piperopoulos, 2012; Pittaway and Edwards, 2012; Blenker *et al.,* 2014). The current theoretical frameworks for entrepreneurial education are varied and it is argued lack coherent philosophical

grounding (Fayolle, 2013; Rideout and Gray, 2013). However, certain learning models have provided focus in particular Kolb's (1984) model of experiential learning has been influential in shaping entrepreneurial education pedagogy (Politis, 2005; Fayolle, 2013; Rideout and Gray, 2013).

The role of reflection has gained prominence in the discussion and design of entrepreneurial education (Neck and Greene, 2011; Higgins *et al.,* 2013). Reflection within entrepreneurial education is perceived to trigger higher level learning (Rae and Carswell, 2001; Cope, 2005a) and assist students in processing learning within situations of uncertainty (Neck and Greene, 2011) but has been critiqued for not being effectively integrated into entrepreneurial educational design (Higgins *et al.,* 2013; Hagg and Kurczewska, 2016). This is complicated by the differing levels of experience held by individual students, as practicing entrepreneurs may be more likely to reflect-in-action (Schon, 1983) based on prior experience whereas a student, with limited entrepreneurial experience, may need to reflect-on-action to develop their knowledge as they cannot draw upon a wealth of prior experience (Hagg and Kurczewska, 2016).

There are evidently tensions in teaching such a practical subject and the requirements of an academic environment (Carey and Matlay, 2011) and some scholars question whether entrepreneurship is teachable within current university settings (Lautenschlager and Haase, 2011; Johannisson, 2016). Concerns have been expressed about the appropriateness of those teaching entrepreneurship (Gibb, 2002; Wilson, 2008; Thorp and Goldstein, 2010; European Commission, 2013) as some educators may either rely too heavily upon anecdotal evidence (Gibb, 2002; Thorp and Goldstein, 2010) or academic theory instead of practical opportunities for students (Higgins *et al.,* 2013; Lilischkis *et al.,* 2015). Entrepreneurial education programmes have also been critiqued for being designed to appeal to a broad range of students which can be impersonal and non-specific to the varying motivations of each learner (Klapper and Refai, 2015).

Provision of entrepreneurial education has been further criticised for a silo mentality with University Business Schools often dominating the development and provision of programmes (Lilischkis *et al.,* 2015; Klapper and Refai, 2015; Preedy and Jones, 2015). Business Schools are not necessarily the most appropriate department to centralise enterpreneurial curriculum as teaching can become constrained by a single disciplinary focus (Katz, 2003; Hannon, 2007; Thorp and Goldstein, 2010), funding structures can prevent efforts to embed entrepreneurial education across different academic departments and delivery may rely upon groups of motivated individuals rather than being strategically embedded throughout HE institutions (Henry, 2013; Lilischkis *et al;* 2015; Preedy, 2015). Despite critiques and challenges, entrepreneurial education is continually evolving, informed by the latest insights from enterprise education research, and increasingly enterprise curriculum is geared towards 'for' and 'through' approaches whereby skills and techniques are taught but the onus is on application and practice (Neck and Greene, 2011).

There has been significant interest in examining the impact of entrepreneurial education with prior research often focused upon the relationship between entrepreneurial education and development of entrepreneurial knowledge and skills (Martin *et al.,* 2013), cultivation of positive attitudes towards entrepreneurship (Souitaris *et al.,* 2007; Cardon *et al.,* 2009; European Commission, 2013) and intention to start a business (Souitaris *et al.,* 2007; BIS 2013). All of which suggest a relationship between engaging in entrepreneurial education and the venture creation process (Martin *et al.,* 2013; Nabi *et al.,* 2017). However, several studies have also found the opposite, that entrepreneurial education may in fact reduce entrepreneurial intention among HE students (Mentoor and Friedrich, 2007; Oosterbeek *et al.,* 2010; Joensuu *et al.,* 2013).

Many studies have also been inconclusive in finding a link between entrepreneurial education and more effective entrepreneurs (Matlay, 2006; Pittaway and Cope, 2007a; Fayolle and Gailly, 2009; Jones and Matlay, 2011; Lilischkis *et al.,* 2015). A recent meta-analysis of entrepreneurial education outcomes within HE, which reviewed 159 articles published between 2004-2016, presents the evidence in the literature that entrepreneurial education can have a positive impact upon HE students, in terms of raising their entrepreneurial intentions, but evidencing longer term impact such as start-up numbers, business survival rates and societal contribution is problematic (Nabi *et al.,* 2017). An individual's social, cultural and economic circumstances will affect outcomes such as the transition from entrepreneurial intention to behaviour (Bae *et al.,* 2014) as will their prior knowledge and experience (Fayolle and Gailly, 2015). Subsequently, drawing links between entrepreneurial education and specific outcomes is difficult as studies struggle to account for the diversity of intervening variables on the entrepreneurial process (Nabi *et al*., 2017).

1.3 Expected Contribution

The expected contribution of this study for policy and practice is outlined below:

For practice, this research will enable an improved understanding of how students interpret and apply the theoretical concept of entrepreneurial learning. The links between learning and entrepreneurial success are extensively supported in the literature (Minniti and Bygrave, 2001; Rae and Carswell, 2001; Cope, 2005a). Research examining entrepreneurial learning is important in enabling a more effective understanding of the entrepreneurial process (Minniti and Bygrave, 2001; Cope, 2005a) yet studies examining student perceptions of entrepreneurial learning remain limited (Mueller and Anderson, 2014; Wang and Chugh, 2014). This study examines student perceptions of their entrepreneurial learning, through engagement in extracurricular enterprise activities, enabling an improved understanding of students entrepreneurial learning processes and

how differing pathways to engagement in entrepreneurial learning has the potential to enhance teaching and learning effectiveness through highlighting 'what works' in enterprise education (Jones and Matlay, 2011; Klapper and Refai, 2015). This study thereby the potential to inform the design and delivery of entrepreneurial education (Jones and Matlay, 2011).

For policy and practice, this study will also provide empirical evidence of students (dis)satisfaction with their entrepreneurial progress at university particularly pertinent with the increasing emphasis within the HE sector on the student experience (Lomas, 2007; Cook-Sather *et al.,* 2014). Prior research indicates that provision of extracurricular enterprise activities is increasing both in the UK and globally and that these activities are viewed as beneficial to participants (Rae *et al*., 2012; Lilischkis *et al*., 2015; Pittaway *et al.,* 2011). Despite the increasing emphasis upon students shaping their educational experience they often remain the 'missing perspective' in education research (Tymon, 2013) with studies instead centred upon the educator's perspective (Politis *et al.,* 2010; Jones and Matlay, 2011). This study goes beyond prior literature, which has focused predominantly on mapping extracurricular enterprise activities from an educator perspective (Rae *et al.,*2012; Lilischkis et al., 2015; Vanevenhoven and Drago, 2015), to critically examine the benefits of extracurricular enterprise activities, as perceived by participants and staff, thereby contributing to existing debate on the value of extracurricular activities (Rae *et al.,* 2012; QAA, 2012, Lilischkis *et al.,* 2015).

In the UK, with the introduction of the Higher Education Achievement Record (HEAR), which is a record of university students' extracurricular achievements; participation in extracurricular activities is now certificated. Although participation in the HEAR is currently voluntary both on the part of students and institutions, it represents a metric for

participation in extracurricular activities and further indicates that extracurricular activities are increasingly valued at universities. Empirical research has found links between the rise in tuition fees in England and students heightened expectations of their university experience (Douglas *et al.,* 2015). Obtaining 'value for money' is a concern for students yet a 2016 report on the Student Academic Experience Survey found that only 37% of students perceive they get 'value for money' compared to 53% in 2012 (Neves and Hillman, 2016). This study will critically examine the benefits of extracurricular enterprise activities and thereby provide evidence regarding whether extracurricular activities may be a mechanism for offering students this additional 'value for money'.

For the researchers own practice, the findings from this study will inform the design and delivery of future teaching and learning activities. Examination of student perceptions will enable the researcher to reflect upon their meaning within their own context and identify avenues to improve practice as an enterprise educator.

The below figure depicts the positioning of the research topic within existing areas of enquiry. The study examines how extracurricular enterprise activities, which are a subset of a wider offering of enterprise and entrepreneurship activities within UK HEIs, may contribute to students' entrepreneurial learning processes.

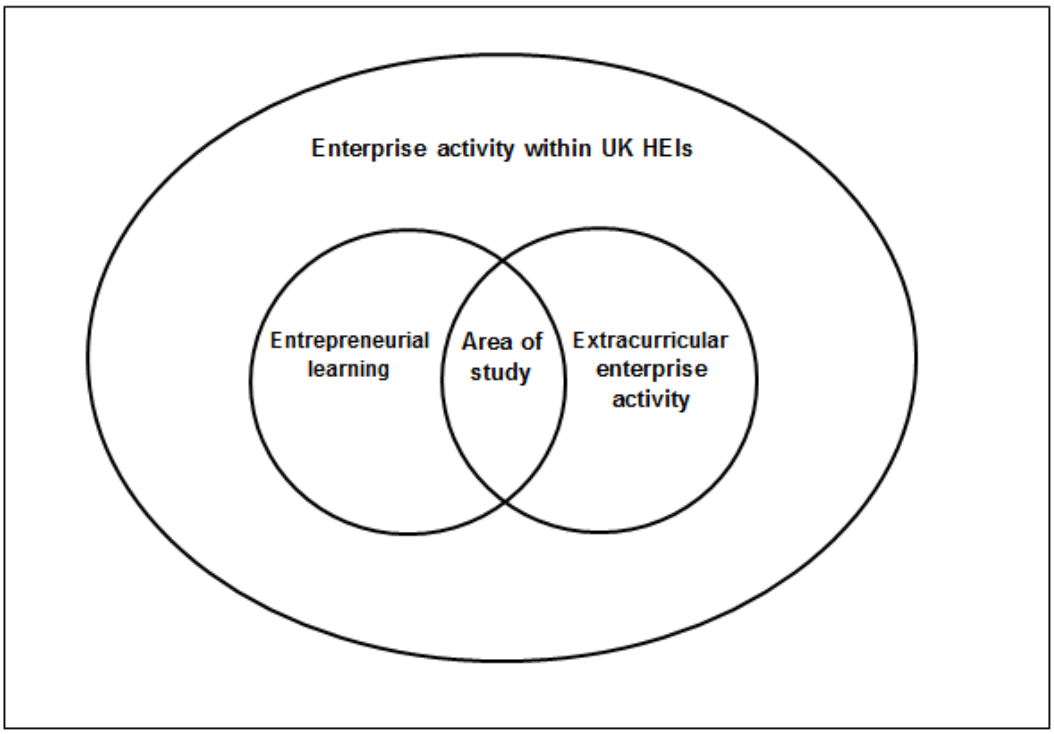

Figure 1. Positioning of research topic (Authors own)

1.4 Thesis Structure

Chapter 1 has introduced the thesis topic, research rationale, the aims and objectives of the study and the proposed contribution. Chapter 2 will review the theories that underpin the research, providing a theoretical literature review of learning and specifically entrepreneurial learning alongside discussion of existing empirical studies. Chapter 3 reviews empirical research regarding extracurricular (enterprise) activities at UK universities and presents the research questions which are a refinement of the initial aims and objectives presented in Chapter 1. Chapter 4 outlines the methodological approach of the thesis, the sampling technique, methods utilised and briefly discusses methodological strengths and limitations. Chapter 5 presents the findings from the analysis of the data sectioned by emergent themes. Chapter 6 brings together the findings into a discussion that relates empirical evidence to the extant literature. Chapter 7 concludes the thesis with an overview of the study's contribution, implications for policy and practice, a review of thesis limitations and areas for further enquiry.

Chapter Two – Learning Theory

What constitutes learning differs according to audience and context. Learning can be perceived as the acquisition of new knowledge, skills and capabilities (Säljö, 1979; Cannon and Newble, 2000; Reynolds *et al.,* 2002) or measurable change in behaviour resulting from experience which may be incremental or transformative (Mumford, 1995). This chapter reviews the literature regarding learning more generally before concentrating on the theoretical construct of entrepreneurial learning. Discussion will explore how entrepreneurial learning is interpreted in differing contexts and what theoretical frameworks are utilised to further understand the phenomena.

2.1 What is learning?

There are both learning and educational philosophies; the former focused on how learners learn (Vygotsky, 1978; Kolb 1984), and the latter on how educators educate (Watson, 1913; Skinner, 1938). Learning is considered to be:

"when people can demonstrate that they know something that they did not know before (insights and realisation as well as facts) and/or when they can do something they could not do before (skills)" (Honey and Mumford, 2006 : 1)

Learning paradigms can be broadly categorised into three main strands; behaviourist, cognitive and constructivist (Tusting and Barton, 2003). Behaviourist theories propose that behavioural modification techniques whereby students are rewarded for completion of tasks, whilst non achievement or noncompliance is punished, will encourage learning (Watson, 1913; Skinner, 1938). As learning is considered an aspect of conditioning adjusting one's environment in a particular manner will result in behaviour that can be controlled and even predicted (Watson, 1913). 'Success' in this context is dependent on achievement of pre-determined outcomes and a learner's internal dialogue is not considered (Tusting and Barton, 2003).

Cognitivism focuses upon the cognitive capabilities of the individual learner rather than their environment. An individual's existing knowledge is considered important but mediated by cognitive abilities such as their short and long term memory (Gagne, 1985). Both behaviourist and cognitivist approaches view knowledge as objective (Tusting and Barton, 2003) whereas constructivist approaches highlight the role that the individual has in constructing their own knowledge (Baxter Magolda, 1992). Each individual is considered to have a learning history (Dewey, 1938) influenced by specific experiences and accumulated knowledge (Lave and Wenger, 1991; Holman *et al.,* 1997; Biggs, 1999) and their differing capabilities, understandings and preconceptions (Lave and Wenger, 1991; Wilson and Peterson, 2006). Constructionists further highlight the role of social environment with learning considered to be socially, culturally and economically contextual shaped by the circumstances and community in which it is developed (Brown and Duguid, 1991; Wenger, 1998).

Educational paradigms have been divided into adult learning (andragogy) and child learning (pedagogy) (Tusting and Barton, 2003). Adult learners are considered to be more likely to be driven by internal rather than external motivation as their engagement in learning is usually voluntary (Smith, 1983). Adult learners also think contextually to apply knowledge (Brookfield, 2000) and critically reflect upon how they know what they know (Smith, 1983; Tusting and Barton, 2003). This is compared to child learners whom rely on a teacher to direct their learning around a subject, often abstract from their limited life experiences, and are primarily motivated by external motivations such as rewards (Biggs, 1999).

The differences between andragogic and pedagogic educational paradigms are summarised in Table 1. However, andragogy has been critiqued for representing an ideal, rather than realistic, state for adult learners (Brookfield, 1994) and for possibly creating false distinctions as each individual will learn differently regardless of age (Hanson, 1996).

Pedagogy – Educating Children (Biggs,1999)	**Andragogy – Educating Adults** (Knowles, 1980)
Educator is responsible for the content and materials	Learners can shape content and materials by linking prior knowledge and experience to the process
Educator has authority	Educator is an enabler and collaborator
Educators develops knowledge	Educator facilities knowledge and skills development
Learner is dependent	Learner is facilitated to be independent
Learner is externally motivated	Learner is intrinsically motivated

Table 1. Comparing pedagogy and andragogy as educational frameworks (Adapted from Knowles, 1980 and Bhoyrub *et al.,* 2010)

Recently, the educational paradigm of heutagogy has become particularly influential within tertiary education (Hase and Kenyon, 2000; Bhoyrub *et al.,* 2010). Heutagogy differs from andragogy in that educators are purely facilitative rather than directive (Ashton and Newman, 2006). The focus is upon development of individual capabilities, such as learning how to learn, rather than the transfer of knowledge and skills, thereby learners need to have a high degree of self-efficacy (Hase and Kenyon, 2000; Bhoyrub *et al.,* 2010). Heutagogical approaches are seen to empower students with the autonomy they are given (Ashton and Newman, 2006) and subsequently prepare them to respond to a competitive and fast-paced global job market that values self-leadership (Hase and Kenyon, 2000; Ashton and Newman, 2006).

Although, HE education is technically delivered to andragogical learners, it may be framed by pedagogical, andragogical and/or heutagogical educational designs. Increasingly, approaches that encourage a student centered rather than teacher centered approach are found within HE programmes. This research is not intended to specify the 'ideal' educational design and instead recognises that learning is context specific and individuals will learn in different ways uniquely constructing knowledge even when all given the same material. The following section will outline those educational theories most pertinent within HE education, considering; where, how, why and with who may learning occur and how can learning be measured.

2.1.1 Where can learning occur?

Learning is most often associated with classroom settings but it is a process which is not restricted to formal educational settings and may be influenced by one's every day personal and professional experiences (Coombs, 1985). The myriad of situations in which learning can occur is recognised in this research and is a part of the rationale for examining extracurricular activities in particular. To acknowledge that learning is not always restricted to official curricula activity.

Learning may happen informally or incidentally, as a by-product of an activity with another intended outcome (Marsick and Watkins, 1990). Learning of this variety may happen without educators or learners themselves being aware of it and as such is hard to measure or evaluate. Conversely, individuals may intentionally pursue learning outside of any institutional structures in order to form and engage in their own learning objectives (Candy, 1991). Whether learning is formal, informal, incidental or intentional, it may also occur individually or collectively (Wang and Chugh, 2014), the latter a social process whereby individuals coordinate their actions to work on a shared concern (Capello, 1999). Individuals may learn collectively, within communities of practice such as a work office or a sports team, with their learning directly affected by the extent to which they are able to participate in that community through mechanisms such as increased responsibility (Lave and Wenger, 1991).

Participants in this study will be continuously learning to varying degrees from their environment and experiences. Some will intentionally pursue learning while others may absorb information subconsciously. The extent to which their learning will be pursued either as an individual or collectively will depend on the availability of networks and resources. The literature has highlighted the diversity of settings in which learning may occur.

2.1.2 How can learning occur?

Learning may occur incrementally or transformatively (Mumford, 1995). Argyris and Schon (1974; 1978) discussed 'single' and 'double' loop learning. Single loop learning is the process whereby an individual makes a mistake or faces an obstacle and modifies their actions to rectify and/or avoid a future mistake. This leads to incremental adjustments to ones behaviour and is effective in addressing routine issues. Double loop learning uses self-awareness to instead address the underlying causes of the obstacle or the mistake made, such as assumptions or motives, and thereby gain a deeper, often transformational, understanding of one's own knowledge and how to improve (Argyris and Schon, 1974; 1978). Transformative learning is what results from double loop learning processes whereby individuals change or adjust their perspectives as a result of the learning process (Mezirow, 1991). This may reflect changes in how they understand themselves, in their belief systems, lifestyles or behaviours (Mezirow, 1991; 1997). This level of learning usually happens infrequently and is often triggered by a crisis or an accumulation of problems (Mezirow, 1991; 1997).

Figure 2 conceptualises Mezirow's work on how transformative change can result from reflection on an experience. In order to foster transformative learning, educators encourage learners to become aware and critical of their underlying assumptions often through project and group work. The educator acts as facilitator to the learner, whom is engaged in processes of critical reflection, to encourage the construction and reconstruction of their own points of reference.

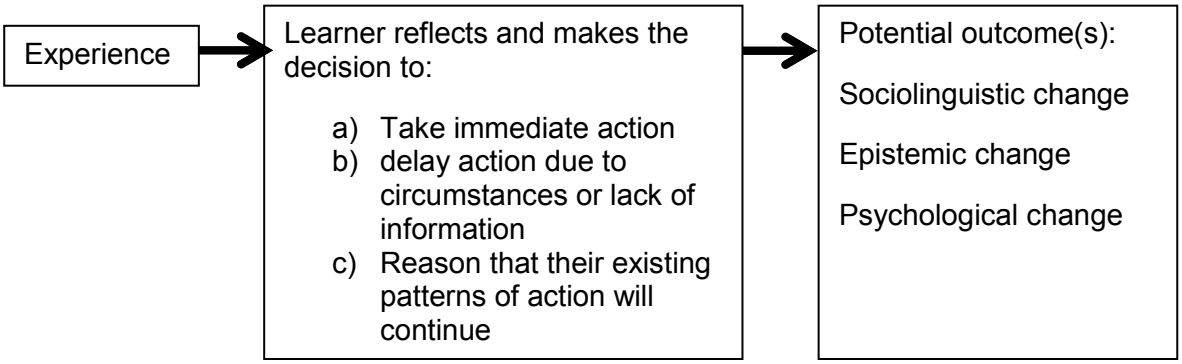

Figure 2. The transformational learning process (adapted from Mezirow, 1997).

Transformative learning theory develops upon earlier work by Kolb (1984) to place emphasis upon how learners reformulate meaning from their experience using processes of critical reflection. Kolb's (1984) experiential learning theory presents learning as an active process of experimentation and reflection. Individual reflection is a key aspect of constructivist models of learning (Schon, 1983; Kolb, 1984; Boud *et al.,* 1985;) and draws upon prior work by Dewey (1933; 1938) whom proposed learning was a messy and dynamic process dependent on each individual's unique processes of reflection. Experience is the active aspect of learning with reflection considered to be a conscious process that develops learning into knowledge (Dewey, 1933; Freire, 1970; Boud *et al.,* 1985).

Constructivist approaches highlight the importance of prior learning and experience to the learning process (Dewey, 1938; Kolb, 1984; Lave and Wenger, 1991; Holman *et al.,* 1997; Biggs, 1999). However, aspects of transformative theory do not align neatly with constructivism, as the theory assumes 'ideal' conditions of learning where learners have access to accurate and complete information to assess arguments objectively (Mezirow, 1991).

2.1.3 Why does learning occur?

Intrinsic and extrinsic motivations influence an individual's decision to learn. Adult learners, which are the sample in this study, are considered to be more likely to be driven by intrinsic rather than extrinsic motivations as their engagement in learning is usually

voluntary (Smith, 1983), compared to child learners whom are in compulsory education and are primarily motivated by external motivations such as rewards and punishments (Biggs, 1999). Motivations may also be mediated by factors such as desirability to perform the behaviour, perceived ease of performing the behaviour, disposition to act on one's own decisions and influence of significant others and subjective norms (Krueger *et al.,* 2000)

Each individual is unique in the combination and strength of motivations that may shape their engagement in learning activities. Their motivations may not always lead to immediate actions (Ryan and Deci, 2000) and can change over time (Elfving, 2008).

2.1.4 With whom may learning occur?

Learning is often considered a social process (Vygotsky, 1978; Pavlica *et al*., 1998; Wenger, 1998) with an individual's social relationships influencing the learning process. Each person's learning process is individualized and shaped by contextual factors including social interactions and participation in the world (Gherardi, 2000; Brown and Duguid, 2001). Social interaction can enhance learning performance, empirical studies have shown that peer led learning can advance learning outcomes regardless of discipline (Terenzini *et al.,* 1996; Astin, 1999).

Social learning theory focuses upon the gains for an individual within a social context but what about how groups learn together? The theory of "communities of practice" (Lave and Wenger, 1991) is an anthropological perspective which proposes that:

"communities of practice sprout up everywhere – in the classroom as well as on the playground, officially or in the cracks. And in spite of curriculum, discipline, and exhortation, the learning that is most personally transformative turns out to be the learning that involves membership in these communities of practice" (Wenger, 1998 : 6).

Key features of communities of practice are their shared history, goals and beliefs, common culture and sustainable membership. Community members are part of a

sustained and continuously reproducing group whose actions have meaningful contribution to a shared enterprise (Lave and Wenger, 1991; Wenger, 1998).

Such collective learning environments can enhance development of social capital. People often learn from one another through observation and modelling behaviour (Bandura, 1977). An individual may seek the guidance of another whom they perceive to have a more knowledge or ability than themselves (Vygotsky, 1978). Social capital provides the theoretical construct for networking (Anderson and Jack, 2002), it facilitates networks (Putman, 2000; Anderson and Jack, 2002) which are intangible and invisible (Gabbay and Leenders, 1999) but valuable for the accrued resources that can benefit the whole group and individuals within it (Bourdieu and Wacquant, 1992; Field, 2003). Such networks can stimulate learning development through access to information and resources (Greve and Salaff, 2003; Taylor and Thorpe 2004; Lévesque *et al.,* 2009).

2.1.5 Measuring learning

Methodologically, educational research faces significant challenges in terms of measuring outcomes. There has been a strong positivist tradition in educational research where studies measure 'success' as changes in behaviour or skill often through pre and post tests on a specific learning topic (Biggs, 1999). Objectivist measures in evaluative studies of HE learning environments have been used to measure how much students learn and to what extent the university has contributed to that learning (McGrath *et al.,* 2015). In the UK, the recently introduced 'Learning Gain in HE' project commissioned by a steering group composed of The Higher Education Funding Council for England, The Department for Business, Energy and Industrial Strategy and the Higher Education Academy define learning gain as an increase in performance over time (McGrath *et al.,* 2015). Pre and post tests at the start and then end of the academic year are used to indicate whether a student has enhanced their performance in content, knowledge or skill over that period and thereby demonstrated learning gain (McGrath *et al*., 2015).

However, causal relationships are difficult to establish between teaching activities and learning outcomes because of the complexity of factors and influences upon the learning process (Boud *et al.,* 1985; Jarvis, 1987). Qualitative methods whereby students are asked to reflect on their own learning either through interviews, focus groups or reflective portfolios are proposed as an alternative to standardized pre and post intervention testing but have been criticised for small sample sizes and producing data that is difficult to compare when participants have such freedom to express their perceptions (McGrath *et al.,* 2015). As empirical studies have found difficulties in drawing a correlation between what students think they learnt and what they actually attain (Philips and Soltis, 2009) this does suggest that reliance on self-reported data would be problematic. However, positivist measurement methods can face their own criticisms of subjectivity as they involve an outsider making a judgement on another's learning and may create artificial scales to quantify learning (Jarvis, 1987).

There appears to be no perfect measure. As learning processes are invisible to an outsider, and it is often not straight forward to accurately articulate one's own learning, measuring learning can be problematic (Honey and Mumford, 2006). Learning may not also be realised by an individual when it comes to application as the transferability of learning from one situation to another is dependent on numerous factors, for example the quality of teaching (Philips and Soltis, 2009). How learning is measured also depends on how the markers of 'success' are defined which will differ according to audience and context. This difficulty of measuring learning is acknowledged in this study and as such the research does not seek to measure learning outcomes but instead to examine and explore learning benefits as identified by participants.

2.2 Entrepreneurial learning

Entrepreneurial learning as a research domain transcends disciplines and subsequently its theoretical foundations remain fluid (Harrison and Leitch, 2005; Jones and Spicer, 2005). This can lead to difficulties in categorising research findings and providing definitions (Harrison and Leitch, 2005) alongside methodological challenges (Pittaway and Cope, 2007b; Blenker *et al.,* 2014). Established educational theory has thus far provided a useful basis for discussions of entrepreneurial learning and this section will summarise the educational frameworks that have been utilised within entrepreneurial learning research.

Learning is considered pivotal to the entrepreneurship process at any stage, from nascent entrepreneurs to established (Smilor 1997; Harrison and Leitch, 2005) and studies regarding entrepreneurial learning have grown rapidly over the last 30 years (Wang and Chugh, 2014; Blenker *et al.* 2014). The research domain of entrepreneurial learning which brings together educational, organisational learning and entrepreneurship research is a relatively new field (Harrison and Leitch, 2005; Wang and Chugh, 2014) which faces challenges of fragmentation and incoherency and in particular a lack of consensus on what entrepreneurial learning actually constitutes (Wang and Chugh, 2014). As there is no single unified theory of human learning (Phillips and Soltis, 2009) difficulty follows in establishing a conceptualisation of entrepreneurial learning and a theoretical framework for its examination (Rae and Wang, 2015).

Research projects are often shaped according to researchers' epistemological and ontological position regarding the nature of learning (Wang and Chugh, 2014). Entrepreneurial learning is also enacted and facilitated by learners and educators and the prior knowledge and experience of both will affect the educational process (Klapper and Refai, 2015). Behaviourist, cognitivist and constructivist approaches have all contributed to the research field of entrepreneurial learning (Wang and Chug, 2014). Subsequently, there are a myriad of perspectives upon what constitutes entrepreneurial learning and how it can

be measured. The remainder of this section will outline the perspectives found in the literature and highlight the most prominent theoretical frameworks underpinning research into entrepreneurial learning.

2.2.1 Defining entrepreneurial learning

Table 2 summarises an array of conceptions of entrepreneurial learning which holds contrary to criticisms levelled that alternative conceptions of entrepreneurial learning are lacking (Fayolle, 2013). Indeed rather than too few conceptions, the issue appears instead to be the wide diversity of conceptions shaped according to different ontological and epistemological perspectives. However, there is common ground that exists among the diversity of conceptions, namely that; entrepreneurial learning is an individualised and dynamic process (Minniti and Bygrave, 2001; Rae and Carswell, 2001; Harrison and Leitch, 2005; Politis, 2005; Cope, 2010), influenced by prior knowledge and experience (Rae, 2000; Minniti and Bygrave, 2001; Politis, 2005), intrinsic and extrinsic motivations (Cope and Watts, 2000; Rae and Carswell, 2001; Cardon *et al.,* 2009), cognitive and effectuation abilities (Young and Sexton, 1997; Shane and Venkataraman, 2000; Sarasvathy, 2001; Corbett, 2005) and social environment (Taylor and Thorpe, 2004; Rae, 2005).

Central to the entrepreneurial learning process is the identification and exploitation of opportunities (Kirzner, 1973; Shane and Venkataraman, 2000; Corbett, 2005; Politis, 2005; Rerup, 2005) resulting in the development of entrepreneurial knowledge, skills and capabilities (Young and Sexton, 1997; Rae, 2000; Morris *et al.,* 2013) although what these constitute specifically remains contentious (Wang and Chug, 2014). Ultimately, the entrepreneurial learning process has the potential to lead to personal, professional or economic transformations in the form of personal growth, value creation or acquisition of entrepreneurial resource (Rae, 2004; Rae and Wang, 2015).

What factors may stimulate the entrepreneurial learning process?	How is entrepreneurial learning interpreted?	In what contexts may it occur?	What are the possible outcomes of engaging in entrepreneurial learning?
Prior knowledge and experience (Minniti and Bygrave, 2001; Davidsson and Honig, 2003; Honig, 2004; Cope, 2005a; Corbett, 2005; Politis, 2005; Rerup 2005)	**Processual** (Minniti and Bygrave, 2001; Harrison and Leitch, 2005; Politis, 2005; Cope, 2010)	**Entrepreneurial education** (Honig, 2004; Löbler, 2006; Neck and Greene, 2011; Higgins *et al.,* 2013; Jones and Penaluna, 2013; Fayolle and Gailly, 2015)	**Opportunity recognition** (Shane and Venkataraman, 2000; Minniti and Bygrave, 2001; Rae and Carswell, 2001: Corbett, 2005; Politis, 2005)
Cognitive abilities and capabilities (Shane and Venkataraman, 2000; Sarasvathy, 2001; Young and Sexton, 2003; Lévesque *et al.,* 2009)	**Dynamic** (Minniti and Bygrave, 2001; Rae and Carswell, 2001; Cope, 2005a; Harrison and Leitch, 2005; Politis, 2005; Cope, 2010)	**During the venture creation process** (Deakins and Freel, 1998; Rae, 2000; Rae and Carswell, 2001; Cope, 2005a; Corbett, 2005; Politis, 2005; Pittaway and Cope, 2007b; Cope, 2010)	**Entrepreneurial behaviours and decision making** (Gartner, 1989; Minniti and Bygrave, 2001; Rae and Carswell, 2001; Corbett, 2005; Politis, 2005)
Critical Incidents (Deakins and Freel, 1998; Cope and Watts, 2000; Cope, 2003; Shepherd, 2003; Cope, 2010; Ucabasaran *et al.,* 2013)	**Experiential** (Rae, 2000; Rae and Carswell, 2001; Young and Sexton, 2003; Politis, 2005; Cope, 2005).	**Throughout an entire individuals life** (Minniti and Bygrave, 2001; Rae and Carswell, 2001; Rae, 2004; Cope, 2005a)	**Acquisition of entrepreneurial knowledge, skills and competencies** (Vesper and Gartner, 1997; Young and Sexton, 1997; Deakins and Freel, 1998; Rae, 2000; Minniti and Bygrave, 2001; Honig, 2004; Politis, 2005; Jones and Penaluna, 2013; Morris *et al.,* 2013)
Intrinsic Motivations (Rae and Carswell, 2001; Cope, 2005a; Cardon *et al.*, 2009; Lackéus, 2014)	**Social process** (Taylor and Thorpe, 2004; Rae, 2005; Cope *et al.,* 2007)	**In observation of and collaboration with others** (Taylor and Thorpe, 2004; Pittaway and Cope, 2007b; Lévesque *et al.,* 2009; Rae, 2010; Hamilton, 2011; Sieger *et al.*, 2014)	**Acquisition of entrepreneurial resource** (Davidsson and Honig, 2003; Harrison and Leitch, 2005; Jones *et al.,* 2010)

Table 2. Literature Review summary of entrepreneurial learning (Author's own)

A strong theme within the literature is approaching entrepreneurial learning from a constructivist perspective in recognition of the subjective nature of knowledge and the learning process (Wang and Chugh, 2014; Nabi *et al*., 2017). The constructivist stance is that the entrepreneurial learning process is shaped by an individual's levels of prior knowledge and experience (Minniti and Bygrave, 2001; Rae, 2004; Cope, 2005a; Politis, 2005) and their motivations; intrinsic or extrinsic (Rae and Carswell, 2001; Cardon *et al*., 2009) which are dynamic and constantly evolving (Cope, 2005a; Rae, 2005; Jones and Matlay, 2011). Constructivists also emphasise the social nature of entrepreneurial learning and how social relationships may influence entrepreneurial activities (Cope, 2005a; Pittaway and Cope, 2007b; Jones *et al.,* 2010).

The social, cultural and educational influences upon an individual will shape aspects of their entrepreneurial process. For example, how an individual perceives themselves as an entrepreneur can motivate them to engage or continue to engage in entrepreneurial activity (Farmer *et al.,* 2011). A passion to be an entrepreneur may positively enhance the entrepreneurial learning process through aiding entrepreneurs in identifying opportunities (Shane *et al.,* 2012; Lackéus, 2014) overcoming obstacles (Cardon *et al.,* 2009) and continuing activities in the face of adversity (Bird, 1988; Smilor, 1997). However, the difficulty in comparing individual motivations to engage in entrepreneurial activity has been acknowledged in prior studies as motivation levels may depend on the nature of the opportunity and individual perceptions of its potential yields (Venkataraman, 1997; Shane *et al.,* 2012).

The breadth of interpretations of entrepreneurial learning necessitates a wide range of potential measurements to ascertain whether learning has occurred. Isolating the factors influencing and resulting from an individual's entrepreneurial learning processes remains problematic (Mitchelmore and Rowley, 2010; Morris *et al*., 2013). Entrepreneurial learning

is often perceived in the literature to be correlated with venture creation (Minniti and Bygrave, 2001; Rae and Carswell, 2001). The creation of a venture represents a tangible outcome and is also favoured by policymakers as a marker of 'successful' entrepreneurial learning (BIS, 2014). However, a range of outcomes could indicate entrepreneurial learning; such as increased effectiveness in opportunity recognition (Kirzner 1973; Shane and Venkataraman, 2000; Politis, 2005), enhanced future intent to become an entrepreneur (Bird, 1988; 1992; Rae, 2000) and improved entrepreneurial skills and competencies (Vesper and Gartner, 1997; Young and Sexton, 1997; Morris *et al*., 2013). Competencies refer to the characteristics that result in effective performance and include skills, abilities and attributes (Boyatzis, 1982).

Such competencies can include; identifying opportunities, creativity, motivation, perseverance, self-awareness, self-efficacy, mobilising resources and financial literacy and economic literacy (Jones and Penaluna, 2013; Morris *et al.,* 2013; Bacigalupo *et al.,* 2016). The ability to identify and exploit opportunities is a common theme across the entrepreneurial learning literature (Kirzner, 1973; Shane and Venkataraman, 2000; Corbett, 2005; Politis, 2005; Rerup, 2005). Opportunity recognition can be defined as "the cognitive process (or processes) through which individuals conclude that they have identified an opportunity" (Baron, 2006:107). As such it is an individualized process, often linked to levels of prior knowledge and experience (Shane, 2003; Politis, 2005).

It is recognized that the learning processes of students are often markedly different from practicing entrepreneurs (Mueller and Anderson, 2014; Hagg and Kurczewska, 2016). Studies have found that starting a business within a university environment exposes individuals to different pressures, resources and behaviours than engagement in entrepreneurial activity outside of a university environment (Honig, 2004; Politis *et al.,* 2010). However, the same learning outcomes are often anticipated from students as from

practicing entrepreneurs such as business creation or growth (Deakins and Freel, 1998; Minniti and Bygrave, 2001) and competitive advantage and/or acquisition of resource (Davidsson and Honig, 2003; Harrison and Leitch, 2005). However, attributing venture creation or growth directly to entrepreneurial education is fraught with methodological difficulties and underestimates the plurality of influences upon the entrepreneurial learning process (Nabi *et al.,* 2017).

There are various conceptual models of entrepreneurial learning but the remainder of this section will frame discussion of entrepreneurial learning with specific reference to experiential, social and self-directed learning models. It is recognised that no single theory will apply to every learner and the theories considered in this chapter are intended as a guiding framework. The following section will examine the applicability of these models within the context of HE student's entrepreneurial learning.

2.2.2 Experiential learning

Experiential learning theory is concerned with how one learns, particularly how knowledge is created through experience (Kolb, 1984). The key assumption of experiential learning theory is that one of the most effective forms of learning is learning by doing (Kolb, 1984). Learning is viewed as a process whereby knowledge is created through the transformation of experience (Kolb, 1984) aided by individual's unique processes of reflection (Schon, 1983; Kolb, 1984; Boud *et al.,* 1985; Brookfield, 1994). Theory and practice interact with one another and learning comes from resolving conflicts and integration between involvement and detachment (Kolb, 1984). Experiential learning is not technically considered a constructivist learning theory but instead described as a "holistic integrative perspective on learning that combines experience, perception, cognition and behaviour" (Kolb, 1984: 21). However, Sutherland (1998) argues that "in all six of Kolb's characteristics there would seem to be, a priori, a fit with constructivism" (Sutherland, 1998: 85).

Experiential learning theory has thus far served as a useful base on which to build entrepreneurial learning theory in prior empirical research (Minniti and Bygrave, 2001; Cope, 2005a; Corbett, 2005; Politis, 2005). Although Kolb's model has been criticised for oversimplifying the complexity of the learning process through presenting a stepwise approach (Race and Pickford, 2007), it has become a particularly dominant perspective within the entrepreneurial learning research in large part due to the practical nature of entrepreneurship (Cope, 2003, Politis, 2005; Neck and Greene, 2011; Wang and Chugh, 2014; Pittaway *et al.,* 2015).

Figure 3, Politis' (2005) conceptual framework of entrepreneurial learning, positions experiential learning at the heart of the entrepreneurial learning process. Politis proposes that, like experiential learning, entrepreneurial learning is dynamic, processual and individualised reliant on individual transformation of experience into knowledge (Politis, 2005). Politis extends Kolb's assumptions regarding experiential learning to emphasise not only the importance of prior knowledge and experience but also individual's future career aspirations. This provides an added layer of complexity to consideration of the entrepreneurial learning process by including intentions.

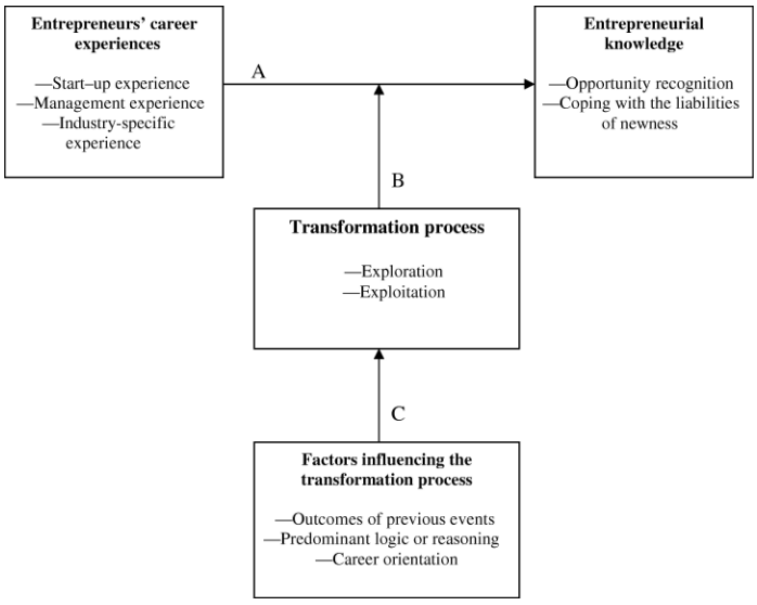

Figure 3. A Conceptual Framework of entrepreneurial learning as an experiential process (Source Politis, 2005).

According to Politis (2005), the learning outcomes of the entrepreneurial learning process are the ability to recognise opportunities but also to cope with the liabilities of newness (Politis, 2005). Politis' conceptualisation of entrepreneurial learning mirrors discussions within the wider literature that entrepreneurial learning is most effective through real life entrepreneurial experience, both observation and participation (Deakins and Freel, 1998; Cope and Watts, 2000; Rae 2000; Minniti and Bygrave, 2001; Rae and Carswell, 2001; Rae, 2005) with reflection crucial in providing an individual with knowledge that they can bring forward to new situations (Deakins and Freel, 1998; Rae, 2004; Taylor and Thorpe, 2004; Binks *et al*., 2006; Löbler 2006; Pittaway and Cope 2007b; Cope, 2010).

Reflection is particularly important during periods of failure or uncertainty. While learning from uncertainty and failure has been recognised in prior empirical work as an important element of the entrepreneurial learning process (Cope and Watts, 2000; Rae and Carswell, 2001; Cope, 2010), not all individuals will learn from an entrepreneurial failure as they may choose not to confront what happened (Scott and Lewis, 1984; Shepherd, 2003; Cope, 2010), refuse to take responsibility for poor choices (Shepherd, 2003) or only take forward what fits into their pre-existing beliefs (Sitkin, 1992; Baumard and Starbuck, 2005; Huovinen and Tihul, 2008). Learning from failure has been identified as most effective if a positive lesson is learnt highlighting the importance of reflection to the learning process (Sitkin, 1992).

The academic interest in experiential learning as a model for entrepreneurial learning is reflected in enterprise education pedagogy. Increasingly, entrepreneurial education is designed to embed learning by doing and processes of reflection often through project based activities, live consultancy projects and reflective portfolios (Löbler, 2006; Pittaway and Cope 2007a; Neck and Greene, 2011). However, enterprise education has been criticised for not providing adequate opportunities for experiential learning due to

restrictions of a curriculum setting and a lack of innovative teaching techniques (Pittaway and Edwards, 2012; Henry, 2013; Lackéus, 2014; Johannisson, 2016).

2.2.3 Social learning

A strong theme within the literature is that entrepreneurial learning is a contextual phenomenon influenced by an individual's social interactions (Rae and Carswell, 2001; Cope, 2005a; Pittway and Cope, 2007b; Jones and Iredale, 2010) and subsequently social learning theories have become a lens through which to examine entrepreneurial learning, in particular models of social capital and co-participation. Empirical studies have found that entrepreneurs often learn from other entrepreneurs seeking guidance of another whom they perceive to have a superior entrepreneurial understanding or ability (Rae, 2002; Taylor and Thorpe, 2004; Cope, 2005a; Hamilton, 2011). Role models can be particularly influential, for example, if an individual has an entrepreneurial family member then this can increase entrepreneurial intention (Hamilton, 2011; Sieger *et al*., 2014).

Prior studies have highlighted the importance of the building and maintaining of networks in entrepreneurial learning activities (Greve and Salaff, 2003; Cope *et al*., 2007), with increased quantity and quality of an entrepreneur's network linked to levels of entrepreneurial effectiveness (Greve and Salaff, 2003; Cope *et al*., 2007). An individual's network may be quite small in the nascent stages of entrepreneurship (Chell and Baines, 2000; Cope *et al.,* 2007) and an entrepreneur will often seek to expand their networks in order to amass strategic alliances and useful connections (Greve and Salaff, 2003). Such networks may enhance the entrepreneurial learning process through the development of social capital (Greve and Salaff, 2003; Cope *et al.,* 2007). Networks can provide entrepreneurs with the sources of knowledge, support, sense of community and potential finances required to set up or maintain their venture (Anderson and Jack, 2002; Field, 2003; Greve and Salaff, 2003; Cope *et al*., 2007). However, for some individuals networks can be exclusive rather than inclusive (Chell and Baines, 2000). For example, individuals

from higher socio-economic backgrounds can be more likely to enhance their social capital and form fruitful entrepreneurial networks (Anderson and Miller, 2002).

Individuals may also learn entrepreneurially through collective mechanisms (Taylor and Thorpe, 2004). Entrepreneurs often partner with each other, formally or informally, thereby co-participating in a shared learning experience (Taylor and Thorpe, 2004; Binks *et al*., 2006; Löbler 2006; Pittaway and Cope, 2007b; Pittaway and Thorpe, 2012). These relationships become an aid to learning, for example, prior studies have noted the positive impact that social interaction and discussion following a failed episode has in helping an entrepreneur reflect upon and recover from a failure (Shepherd, 2003; Cope, 2010). However, Wang and Chugh's (2014) literature review on entrepreneurial learning highlighted the challenge of integrating individual learning with collective learning objectives especially given the individualistic nature of entrepreneurs, and raised a future research question – how does learning occur within an entrepreneurial cluster, community or network? (Wang and Chugh, 2014). This is relevant to this study as the collective nature of extracurricular enterprise activities, particularly those that are student led, will be examined alongside individual entrepreneurial learning processes.

2.2.4 Self-Directed learning

Heutagogical frameworks are an emerging area within enterprise education design (Jones, 2016). Heutagogy, as an educational framework, proposes that the learner should be at the centre of their own learning process (Bhoyrub *et al.,* 2010) and aligns with constructivist approaches proposing that educators act as facilitators and that the educational experience should be holistic recognising that students learn both inside and outside the classroom (Hase and Kenyon, 2000; Bhoyrub *et al.,* 2010).

Self-directed learning (SDL) is a heutagogical educational approach designed to enable individuals to take responsibility for their own learning. Under SDL approaches, students

set their own learning goals, identify appropriate learning resources and implement and evaluate learning strategies (Knowles, 1975; Garrison, 1997). The individual, and not an educator, has the primary responsibility for the learning process but the educator may guide or structure aspects such as providing resources or setting assessment criteria (Brockett and Hiemstra, 1991; Hiemstra, 1994). Examples of resources for SDL include self-help books, distance learning programmes and online courses, all of which could be sought independently by the learner or signposted by an educator (Hiemstra, 1994). Self-directed learning is believed to promote deep-level processing because learners have the freedom to choose what they learn and how they learn it (Knowles, 1975). Studies have also shown that individuals retain information better if they have been instrumental in their own learning (Galbraith, 1991).

Despite the label 'self-directed', SDL is not the isolated pursuit of knowledge. Learning often occurs within a social context, in peer groups and with mentors whom may enhance SDL outcomes through access to resources (Brookfield, 1986; Candy, 1991; Garrison, 1997). These may be physical groups but can include virtual communities where discussions are conducted on public forums enabling information to be shared anytime and anywhere. Self-directed learning is both affected by the individual characteristics of the learner, such as their attitudes, beliefs and prior learning, and by social networks which can enhance self-directed learning outcomes through access to resources (Brookfield, 1986). Within a HE environment, all learners have voluntarily chosen to study and to varying extents will be self-directed learners.

Self-directed learning as an educational approach appears to align with the focus within entrepreneurial education upon the development of students' autonomous and leadership behaviours (Gibb, 2002) and yet research examining self-directed learning and entrepreneurial learning within a HE environment is scarce. There have been two studies of note, Van Gelderen (2010) proposed self-management and autonomy are critical

elements of HE entrepreneurship education and may be cultivated through self-directed learning activities and Tseng (2013) explored the conceptual relationship between self-directed learning and entrepreneurial learning, in a practitioner context, with self-directed learning proposed as a conduit to enhanced entrepreneurial performance. Studies that examine the role of self-directed learning activities within entrepreneurial learning processes, within the HE setting, remains a gap within the literature.

2.3 Summary

An extensive literature review has found that entrepreneurial learning is framed by two main educational theories; experiential learning and social learning (Wang and Chugh, 2014). Kolb's (1984) experiential learning cycle has been highly influential upon the entrepreneurial learning literature which has been reflected in entrepreneurial education design with experience and reflection increasingly at the heart of curriculum activities. Figure 4 conceptualises findings from the literature review to depict the process of entrepreneurial learning within a higher education environment. Prior knowledge and experience influence the entrepreneurial learning process but are also produced by it. Central to an interpretation of entrepreneurial learning is the process of opportunity recognition and exploitation that may result in personal and/or economic transformation. Entrepreneurial education feeds into each stage of the entrepreneurial learning process in providing knowledge, framing learning experiences through experiential and social learning opportunities and supporting opportunity recognition and exploitation.

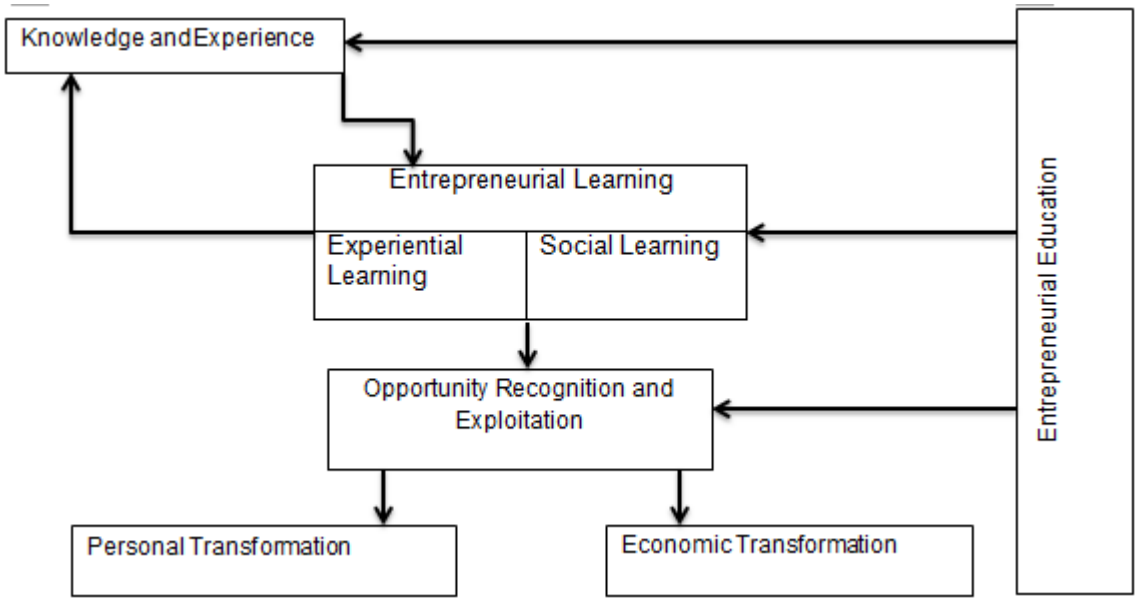

Figure 4. Interaction between entrepreneurial education and entrepreneurial learning (Author's own)

As yet few studies examine the links between engagement in self-directed learning activities and entrepreneurial learning. Subsequently, self-directed learning does not feature in Figure 4 which conceptualises the existing literature. The following chapter will outline the literature on extracurricular (enterprise) activities and what role they have within current HE entrepreneurial education including atypical activities, drivers and challenges.

Chapter 3 – Extracurricular Activities

Extracurricular activities differ from in curricular activities in that they usually occur outside of scheduled teaching time and are not part of the official curriculum (Clegg *et al.,* 2010). Such activities may be cultural, sport-based, academic or employability focused (Clegg *et al.,* 2010; Milner *et al.,* 2016). Co-curricular activities, such as workshops and field trips, differ from extracurricular activities as they are aligned with the curriculum and are usually part of a course requirement (Bartkus *et al.,* 2012). Extracurricular activities may have some crossover with co-curricular and curricular activities but are distinct in their purely voluntary nature (Clegg *et al.,* 2010).

Extracurricular activities can be initiated by staff or students (Chia, 2005; Clegg *et al.,* 2010), they may be individual such as participation in competitions or running for a student body position (Chia, 2005) or they can be collective such as sports clubs and hobbyist groups (Marsh, 1992). Although activities are voluntary they may still be closely associated with a student's subject of study, such as a group for Medicine students to discuss latest knowledge in their discipline (Bartkus *et al.,* 2012). Equally, they can be completely separate from an individual's degree programme. Table 3 outlines atypical extracurricular activities divided by individual and collective activities and draws upon prior mapping exercises of extracurricular activities in HE environments by Clegg *et al*., (2010), Bartkus *et al*., (2012) and Milner *et al*., (2016).

Individual activities	**Collective Activities**
Competitions	Sports Clubs
Student Government elected office	Volunteering and community related activities
Individual sports (i.e. running)	Cultural, political and religious groups
On and offline personal reading	Special interest groups

Table 3. Atypical Extracurricular activities (Authors own).

However, the availability of extracurricular activities varies from one institution to the next, as does the recognition of activities by educators and the student body. As participation is voluntary, extracurricular activities do not usually involve a grade or academic credit

(Bartkus *et al.,* 2012). Milner *et al*'s (2016) study of 852 students in Northern Ireland found that only 28% of students agreed that their degree programmes encouraged them to record their extracurricular activities. The UK 2016 report on the Student Academic Experience Survey found that only one in three students felt that staff helped them explore their own areas of interest. Alongside institutional barriers, some students may face other barriers to entry such as finances, time, and caring responsibilities. Not all students are full-time, unemployed, campus-based and without family commitments and therefore may struggle to engage in additional activities (Watson, 2011; Milner *et al.,* 2016).

Extracurricular activities are seen to be valuable to the student experience in particular for enhancing individual's employability skills and prospects (Watson, 2011; Milner *et al.,* 2016). Extracurricular activities are also seen to be beneficial to students' learning, in particular the development of interpersonal and 'soft' skills (Watson, 2011; Bartkus *et al.,* 2012; Milner *et al.,* 2016). The more active an individual is with the activities, such as taking on a leadership role, then arguably the more likely they are to develop such skills (Rubin *et al.*, 2002).

3.1 Extracurricular entrepreneurial activities

The breadth and depth of extracurricular entrepreneurial activities available at one HEI to another is diverse and crucial is recognition that participation in activities is highly contextualised (Rae *et al.,* 2012; Lilischkis *et al.,* 2015; Pittaway *et al.,* 2015). However, the following quotation draws together commonalities found in the literature to provide a definition of extracurricular entrepreneurial activities:

"activities such as business plan contests, entrepreneurship clubs and start-up training that are offered by Higher Education Institutions but do not belong to regulated or accredited degree or other formal study programmes" (Lilischkis *et al.,* 2015: 39).

Extracurricular entrepreneurial activities include; business competitions, events and networking (Jones and Jones, 2011; Lilischkis *et al.,* 2015; Vanevenhoven and Drago,

2015), assisting students in setting up businesses, promoting entrepreneurship as a future career (Rae *et al.,* 2012; Pittaway *et al*., 2015) and peer to peer education in entrepreneurship basics (Lilischkis *et al*., 2015). Vanevenhoven and Drago's (2015) review of enterprise education at 321 HEIs in 60 countries found 258 institutions offered extracurricular entrepreneurial activities and the most popular were; guest speaker events, business plan competitions and student enterprise clubs. They calculated that on average students had four types of opportunities outside the curriculum on offer to them.

The mapping of extracurricular entrepreneurial activity at UK HEIs has largely been conducted by organisations such as the National Centre for Entrepreneurship in Education (NCEE) and NACUE with annual surveys of in curricular and extracurricular entrepreneurial education at England's HEIs undertaken by the NCEE between 2006-2010. These surveys have shown a rise in the number of extracurricular enterprise activities on offer at UK HEIs year on year (Rae *et al.,* 2012). However, responsibility for the coordination and tracking of enterprise support may fall to a few key individuals rather than communicated across whole institutions meaning measurement of activity can depend upon which member of staff is consulted for the study and this may lead to under or over representation of activity (Hannon, 2007; Gibb, 2010; Penaluna *et al.,* 2012).

Extracurricular enterprise activities can provide added value to the student (Gedeon, 2014, Mwasalwiba *et al.,* 2014; Vanevenhoven and Drago, 2015) and are considered particularly useful in providing opportunities to apply learning outside the classroom (Cordea, 2014; Vanevenhoven and Drago, 2015). The informality and flexibility of the extracurricular format enables content to be shaped according to emerging trends and the targeting of a broad range of participants in a way that the formal curriculum is restricted from doing (Lilischkis *et al.,* 2015). The practical experience that such activities allow participants is seen as particularly valuable (Jones *et al.,* 2015; Lilischkis *et al.,* 2015) as activities enable

students to experiment and learn from doing either alone or in groups (Pittaway *et al.,* 2011; 2015).

Although many UK universities do offer extracurricular entrepreneurial activities that are open to students across the entire institution ranging from undergraduate to postgraduate, this has not been the case traditionally with provision often centred within university Business Schools (Rae *et al*., 2012; Lilischkis *et al*., 2015; Preedy and Jones, 2015). The centralising of activities within Business Schools has been critiqued for not being inclusive and activities should be available to students across all degree programmes (Lilischkis *et al*., 2015; Preedy and Jones, 2015).

The design, delivery and continuity of extracurricular entrepreneurial activity faces numerous challenges. These additional activities can be costly and time consuming to implement and run (Rae *et al.,* 2012; Lilischkis *et al.,* 2015). Engagement can be an issue as students are primarily focused on completing assessed work from their degree programme (Rae *et al.,* 2010; Lilischkis *et al;* 2015) and funding can be short-term and fragile, with universities often needing to self-generate income to fund activities especially if supportive organisations or corporate sponsors reduce spending (Hannon 2007; Rae *et al*., 2012). As extracurricular enterprise activities are often initiated and run by small groups or individuals, sometimes restricted to the Business School, this can mean they are vulnerable to being disbanded particularly if these groups become overworked, leave an institution, or struggle to obtain institution wide backing (Lilischkis *et al.,* 2015; Preedy, 2015; Preedy and Jones, 2015).

3.2 Student led extracurricular enterprise activities

An emergent area of enquiry and empirically investigated in the work of Pittaway *et al.,* (2011; 2015), has been student led extracurricular enterprise activities. This is where students join together in groups to plan, design, implement, monitor and evaluate their own extracurricular enterprise activities. Definitions of student led enterprise groups can encompass; enterprise societies which are initiated and led by students (Edwards, 2001; Pittaway *et al.,* 2011; Pittaway *et al.,* 2015), corporate sponsored groups such as Enactus which can be heavily guided by staff and have an employability focus (Pittaway *et al.,* 2011; Pittaway *et al.,* 2015), and investment clubs of which their primary role is as a trading platform (Pittaway *et al.,* 2011). Pittaway *et al*.,'s work defined such groups of students engaged in student led extracurricular enterprise activities as:

"informal, non-accredited student-led societies or clubs whose main goal is to attract students who are interested in learning about enterprise and developing enterprising skills to either start their own businesses or to become more enterprising people" (Pittaway *et al.,* 2011: 39).

Student led extracurricular enterprise activities are a global wide phenomenon with a particular proliferation within United States (US) universities with estimations that in the top 50 research universities there are between two to five student led entrepreneurship clubs per institution (Pittaway *et al*., 2011). This may be attributable to the significant levels of funding available to enterprise activities through donors in the US, or a propensity for students to become heavily involved with extracurricular activities and student led initiatives at US universities (Thorp and Goldstein, 2010). In the UK, there has been a steady rise in the number of student led enterprise groups within universities and colleges. NACUE estimated in 2011 there were only 30 groups, rising to 64 by 2013 and then to 87 by 2016 (NACUE, 2016). Despite growth in numbers, there is limited empirical research on the phenomenon (Pittaway *et al*., 2011; Rae *et al*., 2012; Pittaway *et al*., 2015) which may be symptomatic of the limited literature regarding extracurricular entrepreneurial activities more generally or a product of the fact student led extracurricular enterprise activities are a

relatively newly recognised phenomenon (Pittaway, 2009; Pittaway *et al*., 2011). This study acknowledges this gap within the literature and examines the potential student led enterprise groups may have, as a subset of a wider offer of extracurricular enterprise activities available at UK HEIs, in enhancing entrepreneurial learning.

There exists, detailed in Table 4, several global and national organisations that support student led extracurricular enterprise activity. The support from these organisations is diverse, ranging from; providing a forum for students to network, regional, national and international conferences, and offering funding for venture creation.

Group	**Timeline**	**Activities**	**Geographical remit**
ENACTUS	1975 – Present	Creation of student teams to work on community development projects. Regional and national competitions.	Global
European Confederation of Junior Enterprises (JADE)	1992 – Present	Creation and management of own non-profit businesses. Regional and national conferences.	Mainly Western Europe
Erasmus Centre for Entrepreneurship	2013 – Present	Networking events. Entrepreneurship training programmes. Incubation space.	Mainly Western Europe
National Association of College and University Entrepreneurs (NACUE)	2008 – Present	National conferences Networking events Advice and training for enterprise societies Access to funding Regional and national competitions.	UK

Table 4. Student led extracurricular enterprise support organisations; years of operation, activities and scope (Author's own).

Two notable studies on student led enterprise groups and learning have been written by Pittaway *et al.,* (2011; 2015) whose empirical research proposed that student led enterprise groups may promote social learning and provide opportunities for experiential learning (Pittaway *et al.,* 2011; Pittaway *et al.,* 2015). Although social learning, through group activities and projects, is an important aspect of most entrepreneurship education programmes (Pittaway and Edwards, 2012), student led enterprise groups arguably offer a

platform for voluntary peer to peer learning that sits outside of the often politicised environment of in curricula group work and assessment (Cheng and Warren, 2000).

Figure 5 conceptualises the literature regarding extracurricular enterprise activities within a HE environment. Extracurricular enterprise activities have several key drivers; student demand, policymaker support and enterprise educators but also face barriers of low engagement levels, siloed delivery and financial sustainability. Activities have been split into those that are staff led and those that are student led with differing delivery methods but similar learning outcomes ; experiential and social learning opportunities.

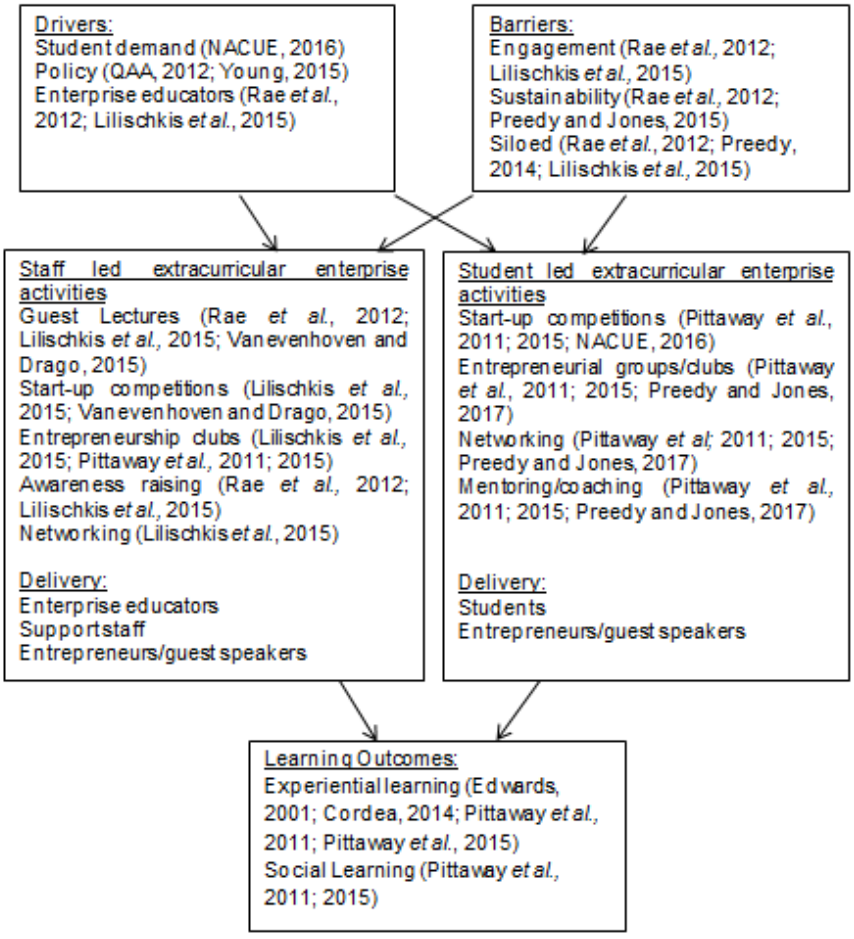

Figure 5. Extracurricular enterprise activities; drivers, barriers, atypical activities and learning outcomes (Authors own).

3.3 Research Questions

Chapters 2 and 3 have reviewed the literature most pertinent to addressing the aims and objectives of the study. This enabled the formulation of specific research questions, outlined as follows:

Research Question 1 - How do HE students interpret and apply the theoretical concept of entrepreneurial learning? Entrepreneurial learning is a subjective concept with continuing debate regarding what it consists of and how it can be measured (Harrison and Leitch, 2005; Wang and Chugh, 2014). There has been limited investigation regarding students' awareness and perception of the concept. This study will develop understanding of how HE students may interpret the theoretical concept of entrepreneurial learning in their individual contexts.

Research Question 2 - What types of extracurricular enterprise activities do HE students choose to engage in? This will build upon prior work which has mapped extracurricular enterprise activities at UK HEIs (Rae *et al.,* 2012). As the HE environment is rapidly evolving, this study provides an updated insight into the types of extracurricular enterprise activity university students may engage in.

Research Question 3 - What motivates students to become involved in extracurricular enterprise activities? Sources of motivation are complex, often closely linked with an individual's personal beliefs and goals which in turn can be mediated by cognitive abilities such as knowledge, skills and abilities (Locke, 2000). Intrinsic and extrinsic motivations influence both individual learning processes (Smith, 1983) and propensity to engage in entrepreneurial activity (Shane and Venkataraman, 2000; Rae and Carswell, 2001; Shane *et al.,* 2012). The difficulty in comparing individual motivations to engage in entrepreneurial activity has been acknowledged in prior studies as motivation levels may also depend on contextual factors such as; market conditions (Shane *et al.,*

2012), available networks (Aldrich and Zimmer, 1986) and the nature of the opportunity and individual perceptions of its potential yields (Venkataraman, 1997; Shane *et al.,* 2012). Due to this inherent complexity, this study seeks to identify and analyse common motivations across participants rather than seeking to find relationships between motivations and actions.

Research Question 4 - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities? The number of extracurricular enterprise activities has grown steadily over the past decade at UK HEIs (Rae *et al.,* 2012). The consensus of prior research is that extracurricular enterprise activities are beneficial to those who participate (Pittaway *et al.,* 2011; Rae *et al*., 2012; Cordea, 2014; Pittaway *et al.,* 2015). This study contributes to this research with recent data and critically examines the benefits students may derive from engagement in extracurricular enterprise activities. In particular, what are the learning benefits? Do students perceive extracurricular enterprise activities as a platform for entrepreneurial learning? The role that extracurricular activities may have in enhancing entrepreneurial learning has been largely overlooked in the current literature (Pittaway *et al* 2011; 2015; Preedy, 2015). This study evaluates extracurricular enterprise activities potential as a platform for entrepreneurial learning within the HE environment.

3.4 Summary

This chapter has outlined the phenomenon of extracurricular enterprise activities and how they reside within the wider provision of entrepreneurial education at UK HEIs. In particular, this chapter provided contextual knowledge to inform investigation of Research Questions 2, 3 and 4. It was found that extracurricular activities are context specific, subject to numerous influences upon their implementation and resourcing from the HEIs they are based within (Rae *et al.,* 2012; Preedy and Jones 2015), but have been shown in empirical

studies to enhance the student experience in terms of; developing skills (Jones *et al.,* 2015), enhancing employability prospects (Watson, 2011; Milner *et al.,* 2016), promoting social learning processes (Pittaway *et al.,* 2011; 2015) and providing opportunities for experiential learning (Jones and Jones, 2011; Pittaway *et al.,* 2011; 2015).

Chapter 2 outlined the educational frameworks for the exploration of entrepreneurial learning and provided an overview of the theoretical construct of entrepreneurial learning. This chapter outlined the practical construct of extracurricular enterprise activities and what prior research has been undertaken in this area. The following chapter will describe the methodological approach taken to examine the links between entrepreneurial learning and extracurricular enterprise activities.

Chapter Four – Methodology

The field of entrepreneurship is multiparadigmatic with differing perspectives on what entrepreneurship constitutes and how it can be understood (Karatus-Ozkan *et al.,* 2014; Hlady-Rispal and Jouison-Lafitte, 2014). Historically, the field has suffered from a lack of methodological diversity (Neergaard and Ulhoi, 2007; Kevill *et al.,* 2015) and many entrepreneurship studies do not explicitly discuss their research design and methodological approach (McDonald *et al.,* 2015). Positivist approaches to entrepreneurship research have dominated, particularly within North American research (McDonald *et al.,* 2015), with criticism levelled against qualitative research regarding research rigour and relevance (Hindle, 2004: Karatus-Ozkan *et al.,* 2014).

However, there is a growing body of entrepreneurship research considering context in the exploration and examination of entrepreneurship (Hlady-Rispal and Jouison-Lafitte, 2014). This research, in a similar vein to prior studies regarding entrepreneurial learning (Rae and Carswell, 2001; Rae, 2003; Cope, 2010; Blenker *et al.,* 2014) is framed by an interpretivist philosophical position with methodology and methods designed to understand the phenomenon rather than to generalise from it. The subjective and dynamic nature of entrepreneurial learning processes (Rae and Carswell, 2001; Cope, 2005a) encourages a methodological approach that has the flexibility to explore the topics' complexities and contradictions (Downing, 2005).

An inductive methodological approach was taken to reflect the ontological stance of the researcher, that reality is multiple and subjective and cannot be a priori through hypotheses (Berger and Luckmann, 1967). This research recognises that individuals will learn in different ways, uniquely constructing knowledge even when all given the same material. Learning is considered socially, culturally and economically contextual (Brown and Duguid, 1991; Wenger, 1998) shaped by the circumstances and community in which it is developed. The methodological approach also acknowledges the researcher's influence

upon the research process which aligns with the epistemological stance of the research that the researcher and research are interlinked and their beliefs will be influential upon each stage of the research process (Charmaz, 2006).

Qualitative research has been traditionally underrepresented in entrepreneurship research (Hindle, 2004; Bygrave, 2007; Drakopoulou-Dodd *et al.,* 2014; McDonald *et al.,* 2015) but in recent years has seen an increase in the number of qualitative research papers published in entrepreneurship journals globally (Hlady-Rispal and Jouison-Lafitte, 2014; McDonald *et al.,* 2015). It is argued that qualitative research can enable a depth and richness to research findings and the examination of complex and emergent phenomena (Hindle, 2004; Neergaard and Ulhoi, 2007; Drakopoulou-Dodd *et al.,* 2014; Hlady-Rispal and Jouison-Lafitte, 2014). For these reasons, this study employed qualitative research methods to produce rich descriptive data and explore an emergent area of enquiry (Walsham, 1993; Macpherson *et al.,* 2000). This study did not aim to find 'absolute truths' but instead to identify 'truths' within localized contexts and any trends that may emerge from the data (Kuhn, 1970; Ogbor, 2000).

The remainder of this chapter will discuss the rationale and operationalization of the philosophical position, methodology and methods that were utilised in the study. The internal and external validity of the research, the ethical position, and the limitations of the methodological approach will also be outlined.

4.1 Philosophical Position

The philosophical position of the research is interpretivist, reality is perceived as subjective, socially constructed by its participants and therefore subject to interpretation (Heidegger, 1962). Each individual has a different 'reality' therefore reality is considered multiple with knowledge and 'truth' subjective (Howell, 2013). Figure 6 depicts the philosophical basis of

the research; what philosophical position frames the entire study, the paradigm of enquiry, the ontological position and the epistemological position of the researcher. Each aspect will be discussed in the following narrative.

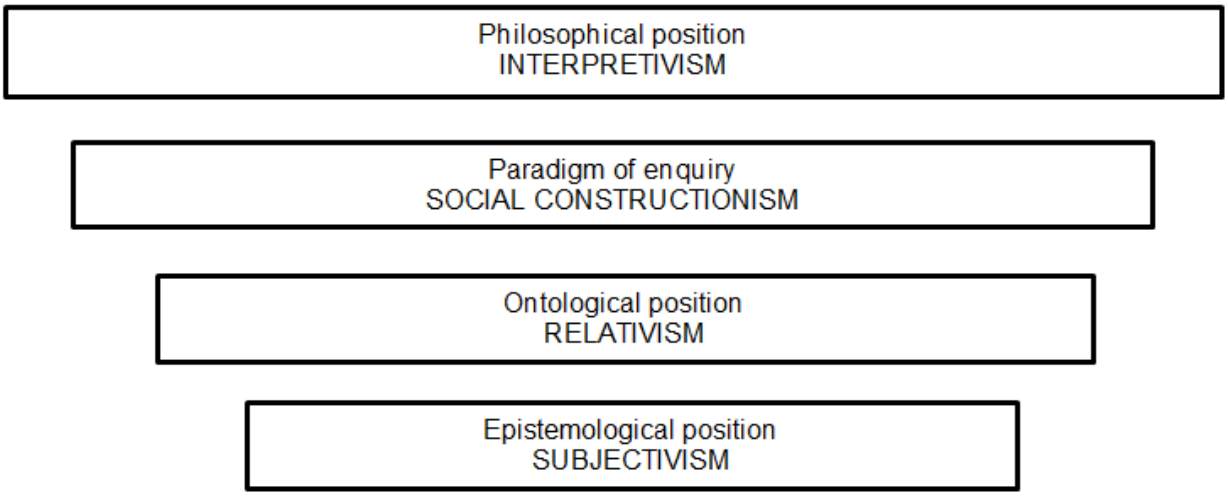

Figure 6. Philosophical basis of the research (Author's own).

4.1.1 Paradigm of enquiry

A paradigm is a way of viewing the world and what can be known about it, it is an "accepted model or pattern" (Kuhn, 1970: 23). This research adopted a social constructionist paradigm of enquiry rejecting the positivist stance that reality is singular and that social phenomena can be objectively measured (Popper, 1989). Instead, the study acknowledged the importance of context and the proposition that reality is constructed upon shared experiences and human perceptions (Howell, 2013). Knowledge is considered to be mediated by individuals' preconceptions and pre-understandings (Husserl, 1969) and meaning is developed through social agreement (Berger and Luckmann, 1967). This is particularly pertinent for entrepreneurship research as the entrepreneurial process is considered complex and dynamic thereby the flexibility afforded by a social constructionist paradigm can assist in uncovering such complexities (Lindgren and Packendorff, 2009; Refai *et al.,* 2015).

There is an established body of work that examines entrepreneurship from a social constructionist approach (Chell, 2000; Rae and Carswell, 2001; Cope, 2005a; Rae, 2005; Drakopoulou-Dodd *et al.,* 2014). Such authors emphasise the significance of social context to an entrepreneur and their entrepreneurial process exploring the role of social learning and the development of social capital in the entrepreneurial process (Davidsson and Honig, 2003; Taylor and Thorpe, 2004; Cope *et al.,* 2007; Pittaway and Cope, 2007b; Hamilton, 2011).

The utilisation of a social constructionist paradigm aligns with the philosophical position of the research that interpretation is necessary when studying social beings (Heidegger, 1962) and is also consistent with a relativist ontology and subjectivist epistemology, both of which underpin the research (Figure 6), which propose that multiple realities exist which are socially constructed and bound to the contexts by which they were constructed (Lincoln and Guba, 2000).

4.1.2 Ontological Standpoint

Ontology, in the philosophical context, is the study of what exists. Positivist approaches propose that reality can be discovered and understood, that it is objective and singular (Popper, 1989). The ontological position of this research is relativist; that reality is socially and locally constructed (Guba and Lincoln, 1989; Charmaz, 2006; Saunders *et al.,* 2012) and multiple differing according to the perspective it is observed from (Lincoln and Guba, 1985).

Such an ontological approach raises the question - if reality is multiple and subjective and can only be studied from multiple and subjective viewpoints then how do we find anything out at all? This research does not intend to explain or predict, there is not considered to be an objective truth to find nor hypotheses to prove, but instead the aim is to enhance understanding of the phenomenon explored within its given context.

4.1.3 Epistemological standpoint

Epistemology refers to what knowledge is and how it can be acquired. The epistemological stance of the research is that findings are created as the research unfolds because research and researcher are linked (Charmaz, 2006). The researchers' prior knowledge, their assumptions and interpretations will affect each stage of the research process (Heidegger, 1962; Guba and Lincoln, 1989). The researcher is not value free as they will have their own assumptions and interpretations regarding the phenomenon they observe (Charmaz, 2006).

Therefore the phenomenon under study is socially constructed by the researcher themselves. This stance aligns with the philosophical and ontological perspectives outlined above, reality is multiple and subjective and it follows that the way it can be studied is also multiple and subjective. This is particularly pertinent for this research topic as 'enterprise' is a socially constructed concept in itself whose surrounding discourse is subjective and negotiated (Lindgren and Packendorff, 2009). As enterprise activity is a social phenomenon it is inextricably linked with the social context it operates within and the researcher is considered a part of that context (Charmaz, 2006).

4.2 Methodological Approach

An inductive methodology was chosen to align with the philosophical positioning of the researcher and research but also to address the aim of the study which was to explore the social phenomena of extracurricular enterprise activities rather than make deductions or predictions. Figure 7 outlines the chosen methodological approach, methods and mode of analysis.

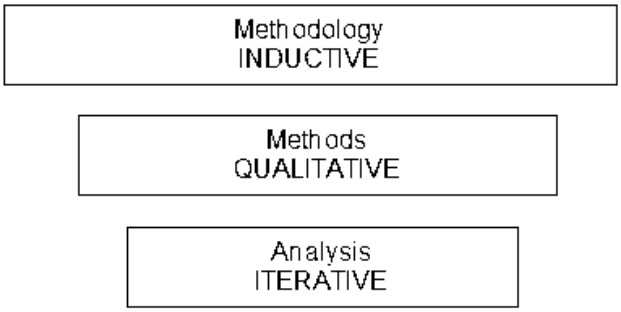

Figure 7. Methodological approach of the study (Author's own).

The methodology shapes all aspects of why and how data is collected and analysed (Howell, 2013). An inductive methodological approach, rejects positivist approaches that seek to find 'truth' through proving or disproving hypotheses and instead seeks understanding to emerge from the data as it is gathered and analysed (Glaser and Strauss, 1967). The flexibility of an inductive methodological approach allows the exploration of areas of interest as they emerge reflecting the epistemological stance of the research that findings will unfold uniquely to the researchers' lines of enquiry.

Inductive methodologies begin with collecting data which is repeatedly reviewed until ideas or concepts become apparent and categories emerge (Glaser and Strauss, 1967; Howell, 2013). Data collection and analysis are simultaneous and feed one another, with an iterative process of going back and forth between data collection and analysis (Charmaz, 2014), As collection and analysis is treated as an ongoing and iterative process this enables a flexible research process whereby the researcher can adapt the direction of the research as appropriate (Glaser and Strauss, 1967).

This research draws upon elements of a grounded theory approach. Grounded theory accepts that research and researcher are interlinked and requires the researcher to be sensitive to their own subjectivities (Glaser and Strauss, 1967; Charmaz, 2006). A grounded theory methodology aligns with the epistemological belief of the researcher that the relationship between researcher and researched will affect the data. However, the research design deviates from the classic Glaserian grounded theory as a literature review

was conducted prior to data collection (Glaser and Strauss, 1967). This was to inform the researcher of the context in which the phenomenon operates and help shape the efficient development of research tools. Without guidance from the literature on the context of the phenomenon the researcher may produce topic guides that contain irrelevant or misinformed areas of enquiry.

4.2.1 Pilot Study

To assist the researcher, in deciding the most appropriate methods for the study, a six month pilot was undertaken at a post 1992 university based in South West England in the academic year 2014/15. The aim of the research – to explore the phenomenon of entrepreneurial learning, through extracurricular enterprise activity – had already been formulated, but the researcher was unsure of the most appropriate sampling technique to use and in particular what the unit of analysis would be. The pilot was intended to help the researcher work through these issues.

The pilot study examined the phenomenon of entrepreneurial learning through extracurricular enterprise activities at the group level; the extracurricular enterprise activity of student led enterprise groups. As outlined in Chapter 3, student led enterprise groups are voluntarily formed groups of students whom join together to raise awareness, support and engage in entrepreneurial activity whilst at university (Pittaway *et al*., 2011). The aim of the pilot was to understand the roles and activities of the groups and their potential as a platform for entrepreneurial learning.

A database was compiled by the researcher to map existing student led enterprise groups across the UK. The database was formulated through secondary research of university and Student Union websites, previously collected data by NACUE, and face to face conservations and phone calls with student groups via social media, student enterprise networking events and conferences. Detailed secondary research was conducted for the

post-1992 South West University chosen for the pilot by examining the student led enterprise group's publically available documents, such as; website, social media pages, promotional leaflet and newsletters. These documents enhanced the researcher's understanding of the group's aims and activities and assisted in identifying participants to be interviewed. The researcher used purposive sampling (Patton, 1990) and approached those individuals most prominent on the group's promotional material under the assumption they would provide a rich amount of data.

Semi-structured face to face interviews were conducted with five individual students alongside a focus group with a further four students. The interviews were used to test the most appropriate approach to discussing the topic of entrepreneurial learning with students and the focus group was designed to gather data on entrepreneurial learning from a group perspective. The testing of these approaches enabled the researcher to ascertain whether the research instruments chosen were effective and whether group discussions of entrepreneurial learning were an appropriate and useful method to address the research aim.

Several learning points emerged from the pilot study stimulated by the challenges faced by the researcher. Firstly, that the interviews were an effective instrument to encourage discussion of the research questions but entrepreneurial learning was a concept that was not easily articulated. To make effective use of interviews, the researcher would need to review the literature more thoroughly and produce a definition, or draw together a collection of statements that could be used to effectively convey the concept to research participants within the interviews and further stimulate discussion. This prompted the formulation of Table 2 (Section 2.2.1).

Secondly, it was decided that focus groups were an inappropriate research instrument and richer data may come from interviews. The researcher had noted uncomfortable body

language during the focus group and subsequently asked participants to provide feedback on their experience of participating in a focus group. It was found that the complex and often personal nature of individuals' learning processes was considered to be inappropriate for discussion in a group setting. Participants felt "awkward" discussing progress they were making through fear of appearing "boastful or arrogant". Upon reflection, the researcher decided to remove focus groups as a research instrument in the main study.

Thirdly, it was found that focusing solely upon student led enterprise groups as the unit of analysis was too limiting for data collection. It had become apparent when formulating the database of UK student led enterprise groups that groups constantly formed, re-formed and disbanded throughout the academic year. Any data that was gathered was in danger of becoming obsolete within months and would provide information of limited value to the objectives of the study. Student led enterprise groups are also only one component of a much wider suite of extracurricular enterprise activities at UK HEIs and by focusing solely upon activities within these groups a range of other learning opportunities may be ignored. These realisations stimulated extensive reflection by the researcher and led to the conclusion that student led enterprise groups were an inappropriate unit of analysis. The core aim of the research remained the same – to examine entrepreneurial learning through extracurricular enterprise activities - but instead of sampling only participants of student led enterprise groups, the research would examine individuals whom participated in a wide range of extracurricular enterprise activities.

4.2.2 Sampling

It was decided the unit of analysis would be students, at any point in their university career, that were engaged in extracurricular enterprise activities at a UK university. A UK sample was chosen for comparability reasons as the diversity of educational environments around the world may act as a barrier to seeking patterns due to intervening variables. Prior

studies have highlighted how different cultural contexts can prevent comparability of findings in entrepreneurship education research (Liñán and Chen, 2009; Bae *et al.,* 2014). Having narrowed the sample to UK universities, the researcher aimed to draw participants from a variety of institutions in terms of geographic spread, size and university groupings. In total, 24 universities were represented in the study located across England, Wales and Scotland.

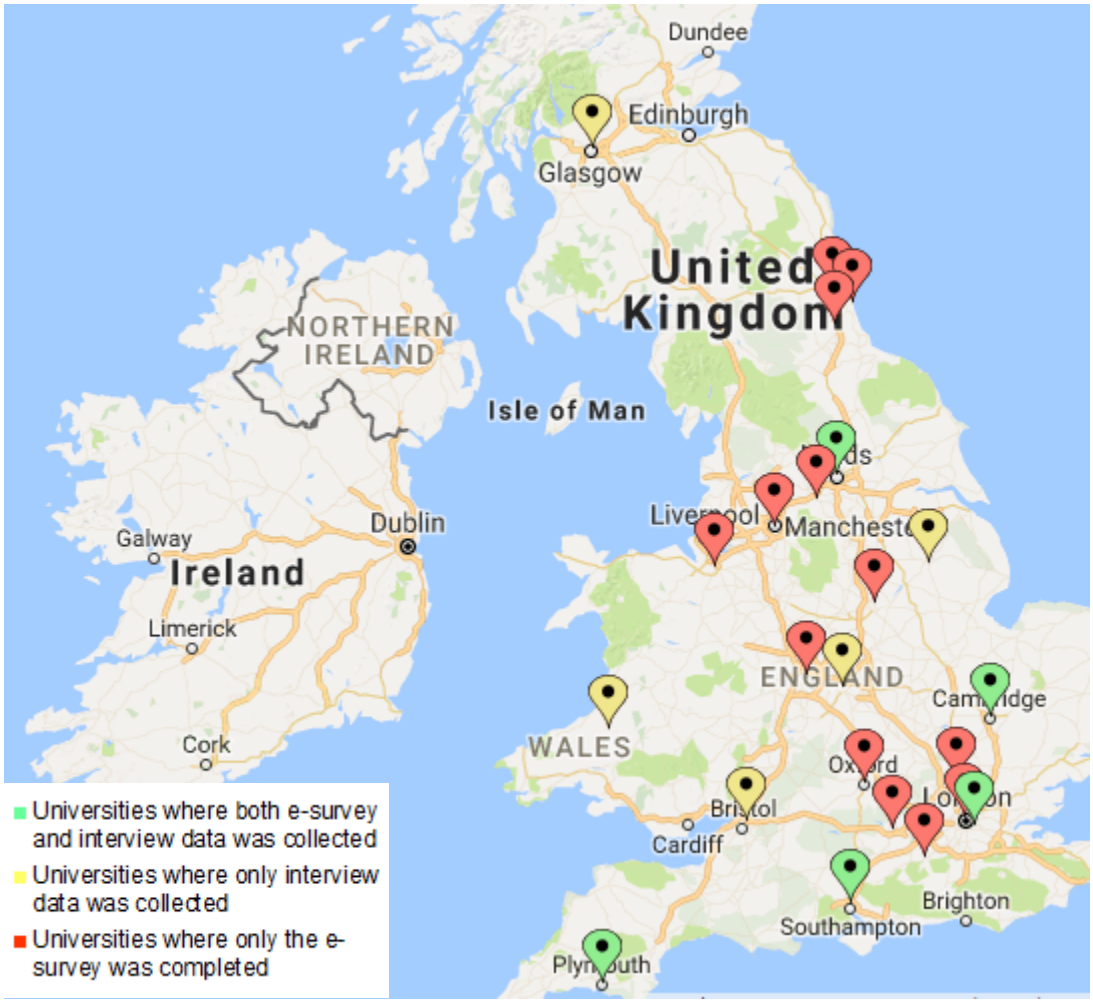

Figure 8. Geographic spread of sampled HEIs (Author's own).

Those markers in green represent universities where both e-survey and interview data was collected (n=5), yellow markers represent where only interview data was collected (n=5) and red markers indicate the location of participants who only completed the e-survey (n= 15).

There were three samples in the study as outlined in Table 5. Participants ranged from first year undergraduates to those studying masters degrees, having varying degrees of entrepreneurial education and experience, but all participants had participated in extracurricular enterprise activities for three months or more. Participants had been filtered through being asked a question about their length of time participating at the start of the e-survey and also prior to interviews. Further details regarding each of the three samples will be discussed in the remainder of this section.

Sample	Description	Data Collection Method
Sample A (n=55)	Undergraduate and postgraduate students at UK universities	Online E-survey
Sample B (n=23)	Undergraduate, postgraduate and alumni from UK universities	Qualitative semi-structured interviews
Sample C (n=3)	UK university staff members responsible for the oversight, design and/or delivery of extracurricular enterprise activities	Qualitative semi-structured interviews

Table 5. Sample numbers, description and corresponding data collection method.

Entrepreneurs can be deemed to have "life stages" beginning with their early life and extending to exiting a venture (Rae, 2000). The Global Entrepreneurship Monitor reports have 'multiphase measures' of entrepreneurship ranging from nascent entrepreneurs through to established business owners (Hart *et al.,* 2014). The sampled individuals in this study range along this spectrum but the majority of students would be considered; 'latent' entrepreneurs, those intending to engage in entrepreneurial activities, with some 'nascent', those who have been engaged in at least two entrepreneurial activities, owning or having owned previously a business (Aldrich and Martinez, 2001; Hart *et al.,* 2014). Fewer still, two participants, would be considered 'experienced', those who had been engaged in entrepreneurial activities for a significant period of time and had multiple business ventures (Hart *et al.,* 2014). The demographic information of the 55 e-survey participants (Sample A) is outlined in Table 6.

Demographic information (no. of respondents)	Percentage of respondents
Gender (52)	
Male	71
Female	29
Student status (49)	
UK	67
International (including EU)	33
Age Range (55)	
18 – 25	35
21 – 25	52
Over 25	14
Year of Study (50)	
1st year	14
2nd year	29
Final Year	47
Postgraduate	10
Subject Discipline (48)	
Business and Management	54
STEM	23
Social Sciences	15
Humanities	8

Table 6. Demographic details of Sample A.

The majority of this sample were male (71%), had UK student status (67%), were aged between 18 – 25 (87%), undergraduates (90%) and studying Business (54%).

For Sample B purposive sampling was also employed (Patton, 1990) to identify information rich cases based on the criteria relevant for the research; a) a student engaged in entrepreneurial activity outside of the curriculum b) for at least six months c) at a UK university. Requirement B was put in place to reassure a suitable wealth of experience for participations to discuss and reflect upon during the interviews. Aside from these requirements there was a significant degree of autonomy in which individuals were approached to participate and the sampling strategy was influenced by informal connections built during the research process (Benbasat *et al.,* 1987; Remenyi and Williams, 1995). In total, there were 23 student interviews.

The researcher began by contacting University Enterprise Centres and researching extracurricular enterprise activities on University websites. Most universities have publically available websites and social media pages which enabled access to contact details of those staff and students involved in extracurricular enterprise activities. The

researcher assumed that those students named on websites may have a higher than average participation rate in extracurricular enterprise activities and began with contacting them online to ask them to participate in an interview. Snowball sampling techniques were then used to identify further interview participants (Patton, 1990) as initial participants recommended other appropriate students for the study.

Table 7 outlines key demographic information for each of the 23 participants in Sample B, such as the; degree programme, gender, age and HE institution.

Participant	**Position**	**Gender**	**Age**	**Institution**
A	Undergraduate Student, final year BSc Mechanical Design and Manufacturing	Male	22	South West England, Post 1992 University
B	Undergraduate Student, 2nd year BA 3D Design	Male	19	South West England, Post 1992 University
C	Undergraduate student, Final year BSc Psychology	Male	24	South West England, Post 1992 University
D	Undergraduate, Final year BSc Maritime Business and Law	Male	21	South West England, Post 1992 University
E	Undergraduate, 1st year BSc Business Enterprise and Entrepreneurship	Female	19	South West England, Post 1992 University
F	Undergraduate, 2nd year BSc Business Management	Male	20	South West England, Post 1992 University
G	Undergraduate, 1st year BMBS Bachelor of Medicine and Surgery	Male	19	South West England, Post 1992 University
H	Undergraduate, Final year BSc Civil Engineering	Male	33	South West England, Post 1992 University
I	Undergraduate, Final year BSc Civil and Coastal Engineering	Female	22	South West England, Post 1992 University
J	Undergraduate, Final year BSc Entrepreneurial Management	Male	26	East of England, Post 1992 University
K	Undergraduate, 2nd year BSc Management and Entrepreneurship	Male	22	South East England, Post 1992 University

L	Undergraduate, Final year BSc Economics and Finance	Female	21	North East England, Red Brick University
M	Undergraduate, 2nd year, BSc Computer Science	Male	20	North East England, Post 1992 University
N	Undergraduate, 2nd year, BSc Computer Science	Male	20	North East England, Post 1992 University
O	Postgraduate, MA International Law	Male	22	North East England, Post 1992 University
P	Undergraduate, 3rd year MPhys Physics with Astronomy	Male	22	South England, Red Brick University
Q	Undergraduate, Final year BA Philosophy and Economics	Male	21	South England, Red Brick University
R	Undergraduate, Final year BA Management	Female	21	South England, Red Brick University
S	Undergraduate, 2nd year BA Photography In the Arts	Female	31	Wales, Post 1992 University
T	Undergraduate, 2nd year BSc Mathematics	Female	21	Scotland, Red Brick University
U	Alumni, BA Business Enterprise	Male	28	The Midlands, Post 1992 University
V	Alumni, BSc Engineering	Male	30	The Midlands, Post 1992 University
W	Alumni, Business (Team Entrepreneurship)	Male	22	South West England, Post 1992 University

Table 7. Demographic details of Sample B.

Sample B had similarities with Sample A in terms of male dominance (74% men) and undergraduate students (83%). However, the degree programmes the Participants in Sample B were studying was more diverse with only 40% studying a Business degree.

Following a point of data saturation with student interviews, the researcher decided to conduct three further interviews with enterprise educators (Sample C). The final three interviews with Sample B had not produced any new codes or sub-codes from those which had been discussed in prior participant interviews. However, there had been themes which

had gone unexplored due to the limited knowledge of student interviewees such as the role of enterprise educators in the design and delivery of extracurricular enterprise activities. It was not the original intention in the research to interview staff members, as the research aims to capture the student perspective, but it was felt a fuller understanding of extracurricular enterprise activities within their institutional contexts could be gained from interviewing staff involved in the design and/or delivery of extracurricular enterprise activities. Table 8 details the position, gender and place of employment for each of the staff interviewed.

Participant	Employment	Gender	Institution
1	Enterprise Educator	Male	South England, Red Brick University
2	Senior Management	Male	The Midlands, Post 1992 University
3	Enterprise Educator	Female	North East England, Post 1992 University

Table 8. Demographic details of Sample C.

Snowball sampling techniques were used to identify staff participants (Patton, 1990) whereby participants in Sample B suggested appropriate enterprise educators. It was found that student participants in Sample B suggested staff members at their own institutions which they had the most contact with in relation to extracurricular enterprise activities. In turn, these staff members recommended other staff members if they did not feel they were a suitable choice for participation. These interviews aided the researcher in understanding aspects of extracurricular enterprise activities that student participants were not privy to such as the design of activities and/or any funding and organisational challenges activities faced.

4.3 Methods

The qualitative methods chosen in this study align with the ontologically relativist and epistemologically subjectivist underpinning of the research. Qualitative methods have been

argued to enhance understanding of the social and relational aspects of entrepreneurship heeding attention to individual interpretations and understandings (Anderson *et al.,* 2012; Kevill *et al.,* 2015).

The ontological underpinning, relativism, encouraged use of qualitative methods that enable grounding in the lived experience of entrepreneurial phenomena. To understand the 'real' world of the entrepreneur, or would be entrepreneur, qualitative approaches are considered necessary as the entrepreneurial process is a dynamic and complex phenomena with interplay between individuals and social context (Jack, 2010; Drakopoulou-Dodd *et al.,* 2014; Karartus-Ozkan *et al.,* 2014; Kevill *et al.,* 2015).

Qualitative methods were also chosen to ensure the research questions were addressed. The topic of extracurricular enterprise and entrepreneurial learning is an emergent area of inquiry and qualitative methods can be used to develop understanding of phenomena and building theory in areas of limited prior research (Smith *et al.,* 2013) as opposed to quantitative research which often focuses upon measuring or theory testing (Bygrave, 2007; Hlady-Rispal and Jouison-Lafitte, 2014). If a quantitative approach had been used then this may have restricted exploration of the emergent phenomena, restricting the area of enquiry, and preventing the uncovering of the extent of its complexities and possible avenues for further research (Bygrave, 2007). The remainder of this section will provide detail on how data collection was designed and operationalised.

4.3.1 Literature Review

Before commencing data collection the researcher gathered literature relevant to the research aim and objectives in several ways; by searching electronic databases in both the business and education disciplines, utilising the university's online library and searching Google Scholar using key words *entrepreneurial learning *entrepreneurship

and *HE. The researcher concentrated upon reviewing theoretically focused journals within the Association of Business Schools list. These included Entrepreneurial Theory & Practice and the Journal of Business Venturing which enhanced the researcher's theoretical understanding of the discipline and enabled comparison of methodological approaches within the discipline area. Many of the chosen journals also provided prior literature reviews of entrepreneurship education and entrepreneurial learning and these were read carefully to assess if the literature review strategy for this study had adequate scope and relevancy. Enquiries began with reviewing entrepreneurship journals only but on realisation that the theoretical foundations of entrepreneurial learning were mainly based in theories within the education discipline this led to an extensive review of Management Learning journals.

It was identified in the early stages of the literature review that entrepreneurial learning is an interpretative concept (Wang and Chugh, 2014) therefore a key aim while conducting the remainder of the review was to choose a definition that could guide the design of the research instruments. To assist in this, the researcher drew up a summary of interpretations of entrepreneurial learning (Table 2, Section 2.2.1). It was concluded that entrepreneurial learning is a dynamic, contextual, individualised process of opportunity recognition and exploitation that enhances the development of entrepreneurial knowledge, skill and capability. A single definition of entrepreneurial learning, drawn from this literature review, was then introduced to participants in interviews and used as a basis for discussion.

4.3.2 E-Survey

Initial data collection was conducted using an e-survey. The e-survey contained questions regarding; demographic information such as gender, age and ethnicity, tick list style questions regarding what types of extracurricular enterprise activities individuals

participated in and why they participated and qualitative open textbox questions asking what participants felt they had gained from activities and if their expectations had been met.

The researcher chose an e-survey as the first research instrument in order to gather data from as many individuals as possible in a relatively short space of time. The e-survey was administered to students at a national conference themed on extracurricular enterprise activity which enabled data collection from participants spread across the UK and with a wealth of relevant knowledge and experience. Although the number of completed surveys was smaller than the researcher had anticipated (n=55), data had been collected from participants whom were well placed to discuss extracurricular enterprise activities and was considered valuable data to examine. The e-survey data was also particularly useful in identifying areas of interest which could then be further explored in the interviews with Sample B.

E-surveys were administered to participants on iPads with the researcher available in case of any queries. The use of iPads was considered an environmentally sustainable option rather than using paper surveys and also enabled data to be input straight into a Qualtrics account rather than needing to be inputted at a later stage by the researcher. The survey was not administered randomly but was opportunist. The researcher approached students between attending conference sessions and did not systematically target students from a diverse demographic background. Links to the survey were also left with the conference organisers and five participants completed the survey in the days following the conference.

4.3.3 Qualitative interviews

Qualitative interviews were selected as a research method in reflection of the philosophical stance of the research but also in adherence to prior academic suggestions that using quantitative approaches alone to examine entrepreneurial learning is superficial (Cope,

2005b). Each interview began by inviting the participant to share their entrepreneurial experiences. This element of the interview was unstructured and was designed to allow participants the freedom to express themselves and to encourage the emergence of new areas of enquiry (Guba and Lincoln, 1989; Saunders *et al.,* 2012). Alongside this 'life story' approach, all participants were asked core questions for comparability reasons, examples of which are outlined in Table 9. Although there were core questions, topic guides were allowed to evolve after each interview in order to be responsive to emerging themes. This is demonstrative of the iterative nature of the research whereby the research design, data collection and analysis were continuously under review by the researcher (Glaser and Strauss, 1967).

The interviews with staff (Sample C) covered many of the same topics as those with Sample B but it was recognised that staff could not speak on behalf of student's regarding their perceptions of entrepreneurial learning and benefits of extracurricular enterprise activities. Instead, interviews with staff focussed upon their perceptions of extracurricular enterprise activities' design, delivery and potential to act as a platform for learning from a wider institutional perspective.

Table 9 refers back to the research objectives that were outlined in Chapter 1 and demonstrates how the methods used in the study were chosen to address each research objective. Examples of the specific research tools used, such as example questions, have been included to demonstrate how the data collection process was continuously guided by the study's objectives.

Research Objectives	Method(s) used to meet objective	Example of Research Tool(s)
Examine how students perceive the theoretical concept of entrepreneurial learning.	Qualitative interviews with students regarding their perceptions of entrepreneurial learning.	Example Interview questions: *In your opinion, what represents entrepreneurial learning? How can it be quantified?* *"entrepreneurial learning is a dynamic, contextual, individualised process of opportunity recognition and exploitation that enhances the development of entrepreneurial knowledge, skill and capability." To what extent do you agree with this?*
Identify what motivates students to become involved in extracurricular enterprise activities.	E-survey and qualitative interviews with students regarding what types of extracurricular enterprise activities participated in and why.	E-survey tick list question listing possible motivations for engagement. Example Interview questions: *What engagement have you had with extracurricular enterprise activities?* *What was/were your motivation(s) for engagement?*
Critically examine the benefits of engaging in extracurricular enterprise activities.	E-survey data of how participation has enhanced individuals' professional and personal development. Qualitative interviews with students reflecting upon what benefits individuals perceived to have gained from participation in extracurricular (enterprise) activities.	E-survey open text answer box provided for descriptions of how participation in extracurricular enterprise activities has developed the participant professionally and personally. Example Interview questions*:* *Did you see your engagement as an opportunity for learning?* *If so, what did you learn and how?*
Critically examine links between engagement in extracurricular enterprise activities and entrepreneurial learning	Qualitative interviews with students reflecting upon potential learning benefits of extracurricular enterprise activities. Qualitative interviews with staff discussing the potential of extracurricular enterprise activities as platform for learning.	Example Interview question: *How can engagement in extracurricular activities enhance learning?*
Provide recommendations to improve the delivery of in and extracurricular entrepreneurial education.	Qualitative interviews with students reflecting upon perceived benefits and limitations of extracurricular enterprise activities. Qualitative interviews with staff reflecting upon perceived benefits and limitations of extracurricular enterprise activities.	Example Interview questions: *What do you think are the limitations of these activities?* *What is the future of these activities?*

Table 9. Alignment of research objectives and research instruments

4.4 Data analysis

This study did not approach the analysis process in a linear fashion. Instead, data collection and analysis was considered an ongoing and iterative process and not discrete from one another. This allowed the researcher the flexibility to adapt the direction of the research as appropriate (Glaser and Strauss, 1967). For example, the literature review influenced the design of the study as from the literature review several themes were identified within the entrepreneurial learning literature and the coding of the first interview consisted of checking the data for these themes. However, the literature review continued beyond data collection and emergent findings from the data assisted in filtering the literature according to utility and relevance to the research questions. This helped focus analysis by comparing empirical data with developed theory enhancing the internal validity of the analysis process (Yin, 2014).

Data analysis begun as soon as data collection commenced with notes taken during interviews of any codes that sprung to mind alongside any field notes of how the data collection was unfolding. Field notes included observations regarding participant body language and the researcher's own emotions and assumptions. These field notes were kept separately, to be mindful of the differences between what the interviewee said and what the researcher may have perceived, enabling data to be effectively separated from commentary (Glaser and Strauss, 1967).

The codes that were noted down during interviews were then transferred into an initial coding list which was added to and refined during the transcription process. Each interview was transcribed verbatim by the researcher within three weeks of data collection and included not only spoken words but pauses, hesitations, laughter and tone to record the context of what was said. The researcher paid close attention to participants' choice of words and what was not said was considered as important as what was said as gaps in a discourse may indicate the influence of ideology (Ogbor, 2000). Discourse was considered

to be an important aspect of the study as discourse can shape both researchers and participants' perspectives of the phenomena under study (Foucault, 1970; Kuhn, 1970; Derrida, 1978). As such, the interview data was approached from a Foucauldian perspective, that the world does not have meaning that individuals discover but that individuals create meaning through discourse (Foucault, 2002).

Transcripts were read through as a whole several times to enable immersion and familiarization (Ritchie and Spencer, 1994; Richards, 2009), and then further refinement made to the list of codes. Both manual and electronic coding processes were used in the analysis process. Manual coding begun immediately after transcription of the first interview and consisted of formulation of a coding table to plot trends. This table was added to after each transcription to give a visual representation of the emergent themes and allow for repeat occurrences to become apparent.

To strengthen the rigour of the coding process, the same data was then inputted and coded using NVIVO (Strauss and Corbin, 1998). Transcriptions were read again and each transcript coded line by line. This line by line technique forces the researcher to focus upon the words spoken without considering context and can mitigate against preconceptions (Ritchie *et al.,* 2013). Emergent codes became 'nodes' in NVIVO and this was effectively a repeat of the manual coding process. The 'nodes' formed in NVIVO were compared with the manual coding table to see if any further nuances had been found. Any additions or modifications that had been made to the manual coding list, as a result of coding through NVIVO, were recorded in an analytic memo to keep track of how a code evolved over time. Each code on NVIVO had a date of creation and a descriptive note which outlined how the code should be applied and what it could be split into. This enabled constant review of the analytic process, developed and linked concepts together into groups, and assisted in the development of core codes (Strauss and Corbin, 1998).

As the list of codes grew a process of selective coding begun to search for core categories with the aim to identify the central ideas that are connected to other categories (Ritchie *et al.,* 2013). Selective coding formalises links between codes and a refined list of codes begun to develop. Each of the core codes now had a series of sub-codes which were supporting evidence for the core code's existence and also areas of further enquiry. As the data was analysed the researcher begun to make linkages between the codes and alignment to the research questions which is outlined in Table 10.

Core codes and Descriptive Note	**Sub-codes**	**Alignment to Research Questions**
Entrepreneurial Learning What do the sampled students define as entrepreneurial learning? How do they perceive it to be manifested?	Discourse Experiential learning Learning about oneself Learning from failure Learning from practitioners Opportunity recognition Learning from practitioners Variables	Research Question 1 - How do students interpret and apply the theoretical concept of entrepreneurial learning?
Activities What extracurricular enterprise activities are participants involved in?	Student led groups Networking Coaching Guest speakers Competitions Workshops Start-up programmes	Research Question 2 - What types of extracurricular enterprise activities do students choose to engage in?
Motivation Why do the sampled students participate in extracurricular enterprise activities?	Assistance with venture/value creation Enhanced employability Network To have fun Self-Development Signposted by academics	Research Question 3 - What motivates students to become involved in extracurricular enterprise activities?
Benefits What do the sampled students perceive as the benefits of participation?	Skills Development Learning Networks created Assistance with venture/value creation Sociability and fun Confidence building Opportunities to experiment Awareness of university and external support Feeling inspired/motivated Opportunities to teamwork Business knowledge Enhanced employability	Research Question 4 - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities?

Challenges What do the sampled students, and staff, perceive to be the limitations of, or challenges to, extracurricular enterprise activities?	Business school dominance Student awareness Disparate nature of enterprise support at university Replication and repetition	Research Question 4 - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities?

Table 10. Core Codes, Sub-codes and Alignment to Research Questions.

4.5 Research Rigour

Terms such as external and internal validity are most appropriate to positivist research studies where cause-effect relationships are sought (Lincoln and Guba, 1985; Patton, 1990). The evaluative criteria considered to be most appropriate in constructivist and social constructionist studies are those of trustworthiness, it is important that the research is credible, transferable, dependable and confirmable (Lincoln and Guba, 1985). These criteria will be discussed in turn in the remainder of this section.

4.5.1 Credibility

Credibility is the confidence one has in the 'truth' of the findings (Lincoln and Guba, 1985). The researcher took various measures to assure the credibility of the study including; prolonged engagement, triangulation, negative case analysis and member checking.

The purpose of prolonged engagement is to ensure the researcher is exposed to a multiplicity of viewpoints and influences when studying phenomena (Lincoln and Guba, 1985). This included speaking with a wide range of people; developing relationships with those engaged in the phenomena and also those that influenced it such as stakeholders. This enabled the researcher to gain a wider appreciation of the context of the phenomena but also build rapport with participants to encourage a deeper level of honesty both on the part of the researched and the researcher in their dialogue.

In terms of triangulation, the study employed theory triangulation (Lincoln and Guba, 1985). By using multiple theoretical frameworks to examine and interpret the data the researcher was more effectively able to examine the data from differing perspectives (Creswell, 1998)

Negative case analysis involves searching for and discussing elements of the data that do not support patterns emerging from data analysis. Throughout data collection and analysis, the researcher sought evidence both for and against each of the codes and adjusted topic guides to explore those perceptions contrary to the majority of findings. This ensured that lines of enquiry did not become narrowed by findings in initial interviews.

Another aspect of enhancing the credibility of a study is a process of member checking. This is where participants are asked to feedback on the researcher's interpretation and use of their data (Lincoln and Guba, 1985). In this study, all interview participants read through and fed back to the researcher regarding their transcripts within three months of giving an interview. This gave them the opportunity to correct any errors they may find and confirm or challenge the researcher's interpretation of what they had said.

4.5.2 Transferability

Transferability is the measure of what extent findings may be applicable in other contexts. The researcher, drawing upon prior work that critiques causality in social science research such as Lincoln and Guba (1985), did not feel it was possible to produce value-free observations and generalisable data in this type of research. The researcher instead sought understanding through the perspective of those experiencing the phenomena acknowledging that these understandings may not apply in different contexts (Lincoln and Guba, 1985).

However, it is important for any study to produce findings that can be compared with other settings to ascertain what commonalities exist. Semi structured in depth interviews were utilised to enable the researcher to gather thick descriptions (Geertz, 1973). The same topics were discussed in 23 interviews to enable the researcher to gather sufficient detail that they could examine what conclusions may be transferable to other settings. Thick

description such as this enables a depth of understanding to a phenomenon by encouraging the researcher to immerse themselves in the context (Walsham, 1993; Macpherson *et al.,* 2000).

4.5.3 Dependability

Dependability refers to the extent to which the findings of a study are consistent and could be repeated (Lincoln and Guba, 1985). Lincoln and Guba (1985) suggest that research, from design to analysis, should be reviewed by 'outsiders' to give the researcher other perspectives to consider and to identify any flaws in the research process. In the interests of protecting the anonymity of research participants, the data was not externally audited. However, the process of data collection was discussed with the PhD supervisory team and more informally with colleagues and friends to gather their perspectives on the adequacy of the data collection and analysis process. The researcher also used a research diary to record others perspectives and then their own opinion of those perspectives thereby establishing a critical dialogue regarding the research process. This enabled a continuous feedback loop to be established from the start of the research process through to the writing up stages.

Memo writing was also undertaken throughout the duration of the research to record the researchers' ideas, assumptions and analytical thoughts. The researcher was aware that interviews can provide "scripted" data (Saunders *et al*., 2012) and used reflexive measures to identify subjectivities and inconsistencies in both the data and the data analysis process. Reflective memos documented the development of the findings, such as how the codes evolved over time, and also interrogated the researchers' assumptions about the data which fed into the analysis process. This was intended to prevent decontextualization and superficial coding (Kvale, 1996).

It is a recognised issue within qualitative research that subjective responses may be given by participants which are then subject to further interpretation by the researcher (Letherby *et al.,* 2013; Saldana, 2013). The researcher may also unwittingly influence the data collection by how they dress, talk or behave during the collection process. For example, the researcher had noticed that some interview participants were looking at the field notes while being interviewed. It became apparent when the researcher reviewed the interview transcripts and interview notes side by side that phrases jotted down during interviews were being repeated back to the researcher, either consciously or subconsciously, by the participants. This observation led the researcher to adapt their note taking style in future interviews and instead use code words, smaller handwriting and abbreviations to prevent participants being able to read and possibly become influenced by the notes.

The coding process was rigorous and could be repeated by another researcher if necessary. Use of both manual and electronic coding frameworks enabled the researcher to rigorously examine the data and identify patterns and areas of interest (Saldana, 2013). The steps of the coding process were recorded and the development of each code described and justified through coding memos. The transcriptions and codes were reviewed several times in tandem to allow immersion in the data and to keep sense checking the analysis process. This included examining; the relevance of the categories formed to the data collected and assessing how effectively the coded categories integrated into the core category.

4.5.4 Confirmability

Confirmability refers to the extent to which the findings of a study are a product of the research participants' perspectives rather than the researcher (Lincoln and Guba, 1985). Confirmability was aided by the researcher keeping a detailed audit trail of all raw data, field notes, notes on data reduction and reconstruction, methodological notes, personal

notes and pilot notes so a clear description of the research path, from design to writing up was available.

Alongside a detailed audit trail, the researcher also maintained a reflective logbook both prior to and during data collection for use in analysing the researcher's relationship with research participants and the data. The reflective logbook was used to record personal observations such as thoughts, feelings and concerns and was interrogated regularly to enable reflection upon how the researcher's personal observations may be influencing the research process. This assisted the researcher in continuously checking for bias in the data collection and analysis processes such as the research questions used or the coding memos chosen (Letherby *et al.,* 2013).

Reflexivity is also seen as important for trustworthiness as it enables the researcher to acknowledge their role in influencing the research findings. As an enterprise educator researching entrepreneurial learning, this study could be vulnerable to concerns regarding neutrality (Charmaz 2006; Dwyer and Buckle, 2009). Indeed, 12 participants in the study were located at the same university the researcher was employed at and the researcher had encountered four of the interview participants before in their capacity as a PhD student and an enterprise educator. Although the relationship between researcher and researched was professional only, the researcher was acutely aware that researching is also participating (Miles and Huberman, 1994) and to mitigate 'going native', adopted a reflexive approach through critical analysis of the researcher's potential influence upon the data at each stage of the research process (Letherby *et al.*, 2013). The researcher was also mindful that interpretations of 'enterprise' and 'entrepreneurship' will differ according to context and ideological persuasion (Ogbor, 2000) and employed a critical and deconstructive approach to the use of language (Derrida, 1978).

4.6 Ethics

Ethical approval was obtained for this study from Plymouth University prior to data collection as per the internal regulations of the University. The ethics for this study drew upon the guidelines set out by The Market Research Society (2012) and Social Research Association (2002). This process was important in ensuring the data collection, analysis and reporting was undertaken in a fair and rigorous manner, both research participants and researcher were protected from harm, and the study did not contravene any ethical guidelines.

4.6.1 Informed Consent

All participants in the research were briefed about the research and gave consent before data collection. The landing page of the e-survey contained a brief of the research and an overview of the participant's rights. Participants could only proceed with the e-survey if they had read the brief and gave their consent. A briefing document and consent form was also provided for all interview participants 5-10 working days before the potential interview date. The documents outlined the research aim, the researcher's background and an explanation of what participation will involve. Only once both documents were read and written consent given did data collection begin. This information was orally repeated to the participant at the start of the interview to remind them of the permission needed for the interview to continue. Therefore both written and verbal informed consent was given based upon good practice described in Yin (2014).

4.6.2 Right to Withdraw

All participants were recruited on a voluntary basis and informed prior to data collection that they were free to withdraw from the research at any time. The researcher provided participants with contact details if they needed to withdraw. Respondents were informed

that their data would be destroyed should they withdraw in accordance with best practice (Social Research Association, 2002).

4.6.3 Protection from Harm

As all participants were over 18 and not considered a vulnerable section of society, as outlined in guidelines from Market Research Society (2012), only the permission of the interviewee themselves was sought. Various measures were taken to ensure that both participants and the researcher were not put at any physical or psychological risk during the data collection process. Interviews were conducted in public locations in which the participant was comfortable, either their place of study or work, and within daylight hours. The researcher ensured their next of kin was notified of all the times and locations of interviews and contacted them immediately following interviews to verify their safety.

It was recognised that the topics discussed require students to reflect upon their learning experiences and this may bring up a range of emotions. In accordance with best practice outlined by Social Research Association (2002), the researcher treated interviewees with care and sensitivity and was prepared to terminate data collection if an individual indicated distress or discomfort.

4.6.4 Debriefing

Participants were thanked for taking part in the research and given the opportunity to ask the researcher any questions at the end of the e-survey or interview. Contact details were provided if the participant had any questions they wished to ask at a later date or wanted to withdraw from the research. After transcription, interviews were sent back to participants for their validation. Once agreement was reached between interviewer and interviewee regarding the transcription, it was then anonymised and analysed. This approach was informed by best practice guidelines by the Social Research Association (2002).

4.6.5 Confidentiality

All data was treated in strict confidence according to the Data Protection Act (1998). All data was anonymised and it was recognised and discussed with those individuals answering from a position of seniority that it may be possible by a process of deduction for their identity to be guessed. The few individuals that this applied to stated they were still happy to participate as long as the researcher did not reveal their identity upon being questioned.

All data collected, such as; interview transcripts, recorded interviews and logbooks were kept in a locked desk cabinet and saved onto a password protected personal computer which resided in a locked office. Identifiable information was replaced with a pseudonym during the transcription process. Participants were informed of the possible dissemination routes for the research, that the data will be published and presented in the PhD thesis but also intended for journal article submissions. Data will be held for a minimum of five years, on a password protected computer, and all respondent data will remain anonymised.

4.7 Summary

The philosophical position of the research is interpretivist, reality is perceived as subjective, socially constructed by its participants and therefore subject to interpretation (Downing, 2005). The ontological and epistemological assumptions of the research reflect this; reality is viewed as multiple and the researcher and research as interlinked. An inductive methodology encourages findings to emerge from the research and acknowledges the influence the researcher will have upon the research process (Charmaz, 2006). The methods employed in this research were designed to enable participants to discuss learning in their own terms. The use of qualitative techniques such as interviews encourages exploration of the phenomenon through a variety of perspectives and

interpretations (Saldana, 2013). For further details on the design and implementation of the research, the research process from rationale to reporting is outlined in Appendix A – The Research Protocol.

The next chapter will present the findings from the study. References to relevant literature will be included alongside analysis to assist in conceptual insight (Eisenhardt, 1989) with the researcher mindful not to constrain the voices of the participants within pre-existing research ideas (Cope, 2008). This chapter will present the main themes that were emergent from the data and these findings will be discussed in Chapter 6.

Chapter Five – Findings

The primary aim of this research is to move towards a richer understanding of the role extracurricular enterprise activities may have within entrepreneurial learning processes. This chapter will present the findings from the data analysis to support discussion of the study's aim. Findings will be compared and contrasted to demonstrate both commonalities and variation in the data and will provide an empirical basis for the discussion in Chapter 6. Each section of this chapter addresses the main themes that were emergent from the data; reflection upon entrepreneurial learning, use of discourse, participation in extracurricular enterprise activities, motivations to participate in extracurricular enterprise activities and perceived benefits of engagement.

5.1 Reflection upon entrepreneurial learning

In order to seek commonalities among participants in how they may interpret and operationalize the concept of entrepreneurial learning, all 23 student interviews included specific questions regarding: what entrepreneurial learning meant to the individuals, their perceptions of prior definitions of entrepreneurial learning, and how entrepreneurial learning may be manifested in their individual contexts. This topic was not explored in the e-survey as the researcher felt an e-survey, which was completed by participants alone on I-pads and usually within a ten minute period, was not a suitable method to capture data on such a complex topic. Subsequently, this section will only draw upon data from the 23 student interviews.

Reflection upon learning, entrepreneurial or otherwise, appeared to be an area of difficulty for many participants. Reflective processes were implied in participant responses:

"*I always look back and forward and I think I have got this to climb and this is what I have done*"
(Participant A)

There were several instances of hesitation with participants either questioning the question or plainly stating they were unsure how to discuss reflection within their context. Several participants asked for clarification regarding what the term 'reflexivity' meant.

Pilot studies can be useful in qualitative research in ascertaining participant's baseline understanding of key concepts (Maxwell, 1996) and it had been identified in the pilot study, undertaken prior to main data collection, that students' understanding of the concept of entrepreneurial learning could lack depth and criticality. Thereby to act as a prompt for discussion, the researcher provided all main study interview participants with the same definition of entrepreneurial learning *"a process of opportunity recognition and exploitation*", a conception of entrepreneurial learning which draws upon the works of Kirzner (1973), Shane and Venkataraman (2000), Corbett (2005), Politis (2005) and Rerup (2005).Participants were asked if they had seen this definition before, all of which replied in the negative, and then participants were invited to critique this definition by drawing upon their own beliefs and experiences. All participants expressed degrees of agreement with this definition with the majority stating agreement with no amendments of their own (n=19) suggesting that the definition provided was considered useful. Despite this, uncertainty in responses remained and the following quotations exemplify the degree of hesitancy participants felt when asked directly about their interpretation of entrepreneurial learning:

"I don't know…. I guess the first thing that comes to mind is 'doing it for yourself, working for yourself'... I guess that's a mundane answer?" (Participant M)

*"Umm ****long pause***** maybe… when I think of entrepreneurial learning… I just think of the skills you need to lead a group of people towards something. It can be both business related or just in a project… I don't know, sorry"* (Participant T)

The researcher recognised the value that probing may bring in pursuing this line of enquiry and adjusted interview topic guides for Participants I – V, pressing participants to expand upon their discussions of entrepreneurial learning despite indicating initial hesitancy. This resulted in a richer discussion that linked interpretations of entrepreneurial learning to

learning from failure. Failure was identified, and even celebrated, by participants as part of their learning process with the term 'fail forward' used to express the sentiment that failure was an important and positive part of the entrepreneurial learning process. Participants I, S and T described what they felt to be intense learning periods during and following periods of ambiguity which enhanced their entrepreneurial capabilities:

> "I *think also acquiring knowledge through failure. You might fail your first endeavour…your first three endeavours… but it's a great process to go through this. Every entrepreneurial experience will be different. Not getting things right is part of the learning process and it's a very active process. It's not just studying or being taught"* (Participant I)

> *"Being an entrepreneur is not something you can just learn in two days and become an entrepreneur, it takes a lot of being knocked down and coming back up, learning from mistakes, learning how to handle different situations"* (Participant T)

The use of a term such as 'knocked down' implied an emotional component of the entrepreneurial learning experience. As it had been identified in prior entrepreneurial learning literature the importance experiencing failure can have in triggering an emotional response, such as feelings of disappointment, anger or sadness which in turn encourage critical reflection (Cope and Watts, 2000; Shepherd, 2003; Cope, 2010), participants were asked to discuss their emotions regarding failure and how emotion may be a component of their entrepreneurial learning processes. Although Participants I, S and T did acknowledge a link between experiencing failure and entrepreneurial learning they did not appear to want to discuss their emotions in further depth. This was surprising as participants in the pilot study had stated that interviews would be the format they would feel most comfortable to talk candidly about their personal experiences and emotions. In this instance, the role of a pilot study in assisting the researcher to identify the most effective research tool to pursue a line of enquiry (Kim, 2010) had proven unsuccessful.

Participants' articulation of how learning from failure may be translated into entrepreneurial capability also remained unclear. A connection between failure, emotion and reflection was undefined in the data collected. It appeared that the term 'fail forward' was a shortcut

phrase participants preferred to use to articulate the complex interplay between failure, emotion and reflection.

In summary, instigating discussion of entrepreneurial learning was more difficult than anticipated. There was not an obvious divide between the capability of those studying an entrepreneurship degree programme or module(s), and non-entrepreneurship students, in articulating their perceptions of entrepreneurial learning. This was surprising considering that reflection upon learning is often a major component of in curricular assessments on entrepreneurship programmes (Neck and Greene, 2011; Higgins *et al*., 2013). The implications of students not understanding, or not wishing to articulate, their learning will be explored further in Chapters 6 and 7.

As entrepreneurial learning is often described as part of the venture creation process (Rae 2000; Minniti and Bygrave, 2001; Rae and Carswell, 2001; Corbett, 2005; Politis, 2005; Cope, 2010) and less than half of interview participants had, or previously had, a venture at the time of data collection, lines of enquiry also focused on 'when' and 'where' participants perceived entrepreneurial learning to occur. Those participants studying entrepreneurial degree programmes or module(s) emphasised the importance of 'doing' and 'putting into practice' for entrepreneurial learning processes. Participants E, K R, U and W discussed how their entrepreneurial learning was enhanced through practical learning opportunities. They described entrepreneurial learning as "*hands on*" (Participants K and R) and "*practical*" (Participants E and R) which was what made studying enterprise and entrepreneurship, in their opinion, distinct from learning general business. These participants made positive links between the activities they undertook for their degree programme and their entrepreneurial learning. Participant E described gaining the vast majority of their knowledge regarding enterprise and entrepreneurship from the reading that was required for their degree programme. Participant W, also studying a full time entrepreneurship degree, described the importance of obtaining an "*academic*

underpinning" through studying entrepreneurial education. However, these students also critiqued the entrepreneurial education they had received stating they needed more "*practical hands on activities*" (Participants, K, R and W) and there was "*too much theory*" (Participants R and U).

Although participants felt that their degree programmes offered activities which enabled them to experiment with their entrepreneurial learning, extracurricular activities were described as a particularly useful platform for students to gain entrepreneurial knowledge, skills and capabilities in ways that in curricular activities could not offer. In curricular content was seen to be overly theoretical and structured whereas extracurricular activities were practical and less formal. Some entrepreneurial learning opportunities were perceived to reside outside of the curriculum altogether through individual self-directed activities. This included researching entrepreneurship online either through forums or watching videos and reading (auto) biographies of famous entrepreneurs:

"I watch a lot of online videos on entrepreneurship. They allow me an insight from people who have experience in areas that can't be conveyed in a classroom" (Participant C)

"I try to read books on entrepreneurial leadership. Online videos are also a great source of information. There are a lot of speakers that are almost impossible to hear live, and listening to talks such as TED online allows you to see what a particular person of interest is doing with their lives and find the distinguishing characteristics that make them world class in their craft" (Participant D)

The excerpts exemplify some of the routes students took to develop their entrepreneurial learning which were the result of independent searches and outside of any staff initiated activity. It appears that participants were pursuing what they perceived to be 'real life materials' in order to identify entrepreneurs they can relate to and then applying their learning from these sources to assess what they can personally improve upon. The opportunities for learning these self-directed learning activities may afford will be critically examined in Chapter 6.

The majority of participants perceived entrepreneurial learning to be a process and were focused on achieving particular goals such as the formation of a venture or acquisition of resource. For some participants, a processual view was redundant as their innate entrepreneurial abilities were regarded as sufficient to help them reach their entrepreneurial goals. For all participants, it was implicit that entrepreneurial development was a positive phenomenon but in depth discussion regarding the specifics of the learning process was limited at times by participant's focus upon outcomes.

Therefore, participants were asked what outputs they envisaged their entrepreneurial learning processes to result in. The acquisition of entrepreneurial resources and networks was regarded to be an important 'output' of the process. Participants sought to achieve particular goals such as; a clearer understanding of enterprise (Participants K and L), a strengthened professional network (Participants B, D, F, H, I and L) or the creation of a venture (Participants C, E, H, M, O and Q). However, it became clear that a distinction between inputs and outputs was a superficial divide as the majority of participants responded by listing activities which could be classed as both 'inputs' and 'outputs' dependent on the context, such as; networking events, competitions, project management, leadership, personal growth, business knowledge, opportunity exploration and venture creation. Many participants regarded entrepreneurial learning as an iterative process, for example entrepreneurial learning was perceived to result from engagement in venture creation but equally entrepreneurial learning could prompt effective venture creation.

For those participants that believed entrepreneurship to be a trait, discussion of the processual nature of entrepreneurial learning was limited. For Participants A, B, D I and N entrepreneurial capability was perceived to be innate and as such the processual aspect of entrepreneurial learning was dismissed. These participants were particularly outcome focused, their discussions of entrepreneurial learning shaped by a focus upon 'end goals' rather than the journey undertaken. They engaged in extracurricular enterprise activities

primarily to assist them with venture creation or because they already had a venture. In this regard, they shared similarities with the other participants, engagement in extracurricular enterprise activities and venture creation were linked but the connection with the learning process was not discussed.

This section has provided insight regarding how students perceive the concept of entrepreneurial learning within their individual contexts. For the majority of interview participants, articulating their learning, and in particular their entrepreneurial learning, was difficult and appeared to be an area participants had not considered in depth before or were reluctant to divulge. When asked to put entrepreneurial learning into their own words interview participants were hesitant often lacking confidence in their abilities to articulate the concept but participants did link entrepreneurial learning with learning from failure. Although failure was seen as a positive aspect of the learning process it was unclear in participants' responses how the experience of failure was then translated into learning points.

5.2 Use of Discourse

A recurrent theme within students' interviews were references to trait entrepreneurship. As discussed in Chapter One, traditionally entrepreneurship had been perceived as a set of inherent personality characteristics, an approach which popularised entrepreneurial profiling to assist in distinguishing 'entrepreneurs' from 'non entrepreneurs' (McClelland, 1961; Rotter, 1966; Timmons *et al.,* 1985). Considering all participants were drawn from a HE environment it was surprising that five participants described entrepreneurship as a personality trait they thought people were born with. None of these participants were studying entrepreneurial modules and/or programmes.

Participants A, B, D, I and N described individuals as possessing particular characteristics or identities that predisposed them to entrepreneurial behaviours. These discussions were

idealistic at times and participants used extreme examples to support their position such as celebrity entrepreneurs like Mark Zuckerberg and Bill Gates whom were described as "*legends*" (Participant N) and "*born that way*" (Participant A). Subsequently, education was perceived to be limited in influence:

"It's [entrepreneurship] a way of seeing things that other people can't see. If a hobo had an entrepreneurial state of mind, if he really wanted to find a way of getting out that hobo lifestyle then he would" (Participant A)

"I think you could try to teach it [entrepreneurship] but if the person you're teaching doesn't have it then they just never will" (Participant I)

Although Participant N conceded that aspects of entrepreneurship may be teachable "*needs to be brought out through education*" they did not think this was possible without the individual already possessing "*a natural ability*" that predisposed them to becoming an entrepreneur.

Participants A, H, I and N were eager to impress on the researcher how their entrepreneurial experiences made them distinct from others. They felt their entrepreneurial activities were an integral aspect of their personality and discussions revealed an emergent sense of 'otherness', with the participants perceiving themselves as having a distinct identity from non-entrepreneurs. There was an apparent divide between how participants perceived themselves, and other entrepreneurs, in comparison to those they deemed to be 'workers'. In some cases, participants felt this 'otherness' was forced upon them by others "*most of my friends look at me like an alien*" (Participant H).

Figure 9 summarises a postmodern deconstruction (Derrida, 1978) of entrepreneurial discourse within the data and conceptualises how participants depicted themselves as 'entrepreneurs' in relation to 'non-entrepreneurs'. This approach reveals the dominant discourses within the data and recognises how one term may be presented in opposition to another to demonstrate superiority (Ogbor, 2000).

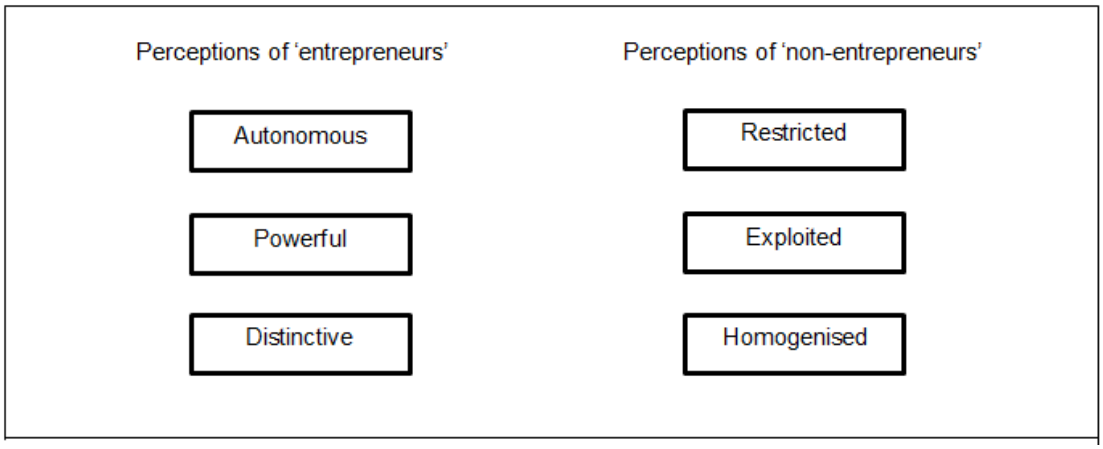

Figure 9. Participant perceptions of entrepreneurs and non-entrepreneurs (Author's own).

The binary discourse of the 'autonomous entrepreneur' as opposed to the 'restricted worker' was a strong theme within the interview data. Participants perceived entrepreneurs as being their own boss and thereby determining their own hours and lifestyle (Participants A, I and N). This was contrasted to 'workers' whom were perceived to be stuck in a routine, listening to orders from other people "*go out and work for someone else*" (Participant I), with a long working life ahead "*work 9-5 till I die. That's very depressing. I want to do something different."* (Participant N). Notable was the language used by participants when discussing 'non-entrepreneurs'; having a '9-5' job was framed almost as an insult in these excerpts "*their little 9-5*" (Participant H), and perceived by some participants as the "*easy option*" (Participant I). Significant was the use of traditional examples such as 'the 9-5', which does not necessarily reflect all options in the employment environment in 2016 yet was a preferred reference point.

Linked closely to perceptions of autonomy were descriptions of entrepreneurs as 'powerful' in relation to employees whom were considered 'exploited'. There was a sense that entrepreneurs reaped the full extent of their labours and had opportunities to create "*a legacy*" whereas 'workers' were ultimately "*lining the pockets of someone else*" (Participant I). There appeared to be a glamorisation of what it was to be an entrepreneur, being an employee was perceived by some participants as an inferior option requiring long working

hours whereas business ownership was seen a route to "*making millions*" (Participant P) with little consideration of the effort required. The majority of participants demonstrated a lack of criticality in their discussion of entrepreneurship except Participant H who offered a more balanced perspective when comparing entrepreneurship with employment, stating that they "*appreciate employment, you learn through working*" and insightfully acknowledged that representing workers versus entrepreneurs as a dichotomy was simplistic as it was not "*a two sided coin*".

Discussions of 'otherness', being 'different', almost 'alien' demonstrated how participants perceived themselves as distinct from non-entrepreneurs and may be indicative of identity formation processes. Whom individuals want to be, or be seen to be, can affect how they act entrepreneurially (Rae, 2004; Farmer *et al.,* 2011) so such binary discourses may shape what these individuals choose to pursue in the future. Their motivations to engage in entrepreneurial activities were based upon an assumption that entrepreneurship was a rewarding and desirable option. The benefits were perceived to heavily outweigh any negatives regardless of business size, sector or location. None of the participants discussed effort or hard work in their speculations on what life as an entrepreneur would look like. Instead descriptions focused only upon the positive aspects of being an entrepreneur which were then contrasted with the negative aspects of employment. Participants did not acknowledge that their use of binary discourse may perpetuate stereotypes nor discuss the possibility they were internalising wider societal discourse. The implications of this will be discussed further in Chapters 6 and 7.

5.3 Participation in extracurricular enterprise activities

Both Samples A and B in this study contain data regarding what extracurricular enterprise activities participants chose to engage in. Question 11 on the e-survey asked participants

to choose from a tick list the extracurricular enterprise activities that they had been involved in, the responses are detailed in Table 11. All 23 interviews contained questions regarding the types of activities participants had been or were currently engaged in. Interviews with staff, Sample C, was also useful in ascertaining the range of extracurricular enterprise activities that are available at UK universities. For example, staff participant 3 opened their interview with giving an outline of all the extracurricular enterprise activities they had been involved in designing and delivering but also all those activities that had been provided over the past five years. The data from staff regarding what was available at their institutions was useful in cross-referencing with participant responses regarding what activities they engaged in, with a clear coherence between the sets of data.

Participants in the e-survey were asked to select from a tick list, formulated by the researcher and based upon findings from the literature review, what extracurricular enterprise activities they had been or currently were involved in. There were 46 responses to this question and the below table outlines the number of respondents who had attended each type of activity.

Extracurricular Enterprise Activity	**No. of respondents**
Networking event	35
Guest speaker event	32
Social event	23
Mentoring/coaching session	13
Trading Practice	7
Other	10

Table 11. Types of extracurricular enterprise activities respondents participated in (n=46).

From Table 11 it is apparent that participants were usually involved in multiple activities; the average being 2.6 per participant. Networking events were the most popular activity, closely followed by guest speaker events. Trading practice was the least popular activity which may reflect the niche nature of this activity compared with the other options. 'Other' represents those activities that were not represented on the tick list and participants used

an open text box to note activities such as; ‘organising student led events’ (4), ‘competitions’ (2) and hackathons (1).

The interviews provided the opportunity to discuss activities in more depth. As each university is different in what extracurricular enterprise activities they offer (Rae *et al.,* 2012; Preedy, 2015), it was important to use the interviews to explore individual contexts. During the interviews, any extracurricular enterprise activity that was mentioned by an interview participant was coded to keep a track of types of activity listed. Table 12 outlines the coded activities from the interviews, in how many interviews the activities were discussed and how many total references were made to those activities. The findings from the interviews reflect the findings from the e-survey as all of the activities listed in Table 11 had also been undertaken by at least one of the interview participants. The most frequently discussed activity was networking which was discussed in 17 of the interviews. This was followed by coaching/mentoring which was discussed in 12 interviews.

Extracurricular enterprise activity	**Number of interviews**	**Number of total references**
Networking	17	48
Coaching/mentoring	12	30
Guest Speakers	6	9
Competitions	6	7
Workshops	3	5
Student led groups	3	5
Start-up programmes	2	2

Table 12. Extracurricular enterprise activities coded from interviews (n=23)

There are several common activities across both Sample A and B with networking the most commonly cited activity overall. The remainder of this section will examine those extracurricular enterprise activities most commonly discussed in the data and emergent areas of enquiry.

5.3.1 Networking

Participation in networking events was the most commonly referred to activity in both the e-survey and the interviews. Networking was regarded as either being formal or informal.

Formal networking included specific events either run by staff, students or externally that encouraged participants to develop their networking skills. These activities may be regularly scheduled such as monthly meet-ups or ad-hoc organised prior to or after another event. These activities were structured "*everyone had to stand up, talk about themselves and then identify another person to network with*" (Participant K) and participants were given the opportunity to interact with other entrepreneurs or members of the local business community rather than just their peers.

Informal networking consisted of participants expanding their networks either through social events such as pub crawls or through the use of social media platforms. Participants would attend events that were primarily social but use them to seek out "*likeminded people*" (Participant C) or "*bounce ideas off one another*" (Participant P). Social media platforms such as LinkedIn, Twitter and Facebook were considered to be useful forums for networking and convenient because participants could network anywhere any time. Participant A described seeking out other entrepreneurs through an exclusive online group, this group was "*closed off to non-entrepreneurs*" and the participant used it to ask for advice and resources. Participant M described finding their business mentor through LinkedIn by sending them a message to introduce themselves and then eventually meeting and forming a mentoring relationship.

5.3.2 Coaching and Mentoring

After networking, coaching and mentoring was another particularly popular extracurricular enterprise activity undertaken by participants, 13 e-survey respondents listed these activities and 12 interviewees discussed these activities in their interviews. Interview participants were asked what types of mentoring or coaching activities they participated in and with whom. Participants described a variety of mentoring opportunities available to them, from being mentored by an entrepreneur external to the university (Participants A

and U), to enrolling on a staff or student led mentoring programme (Participants E, F, I and R) to being mentors to other students themselves (Participants A, H, J, P and Q).

Most of these coaching and mentoring meetings appeared to be either in group or individual face to face meetings with fewer participants being mentored online. Participant I described being "*taught and challenged*" by these meetings and called the peer mentors "*kingmakers … people who help you grow or shape your future*". The peer mentors themselves appeared to take their roles seriously and were proud of how they could help other budding entrepreneurs. Participant A, a peer mentor, had already begun producing videos to post online in the hopes of helping more fellow students and had drawn up lists of books he recommended others to read and influential entrepreneurs he encouraged his peers to 'follow' online.

5.3.3 Guest Speakers

There were six interviewees and 32 e-survey respondents who had attended a guest speaker event. Such events had been identified in prior literature as a popular extracurricular enterprise activity and valued by both students and enterprise educators (Rae *et al*., 2012; Pittaway *et al*., 2015). The interviews with staff also highlighted the popularity of guest speaker events with all three staff interviewees discussing the range of guest speaker events offered at their institutions as extracurricular enterprise activities. This was the activity that had the unanimous support from staff interviewees whom discussed the importance of students hearing from guest speakers to gain knowledge and described them as "*inspirational*" for the students (Participant 3).

It was found that some participants attended guest speaker events regularly, up to five times a month in term time, either currently (Participant E and R) or in the past (Participant U). The main draw for participants was the opportunity to hear from people external to the university and particularly to "*hear about their experiences*" (Participant E) and "*be inspired"*

(Participant P). Participants particularly enjoyed hearing from alumni and knowing what they had gone on to do after graduation (Participant E, N and R). These activities were also attended to enable participants to ask guest speakers particular questions and approach them to network afterwards (Participant E, M, and U).

5.3.4 Competitions and workshops

As competitions and workshops have been identified in prior studies as a popular type of extracurricular enterprise activity at UK HEIs (Rae *et al*., 2012; Jones *et al.,* 2015; Pittaway *et al.,* 2015; Preedy, 2015), they became an important area of discussion with participants. It was found that the types of competitions and workshops available to participants varied greatly from one HEI to the next. Some were part of a structured start up programme or schedule of workshops which students attended throughout the entire academic year. These were often designed by enterprise educators or support staff and delivered in conjunction with external guest speakers. The content of workshops covered many aspects of the entrepreneurial process but were most likely to be focused upon assisting participants in the later stages such as with sales or pitching as opposed to ideation. Participants described staff run business challenges that may run over a few days and would vary in what prizes were available such as seed corn funding or free incubation space for a winning business idea. These competitions seemed to be run primarily through Business Schools but some participants discussed the role of careers and employability teams in design and delivery of these types of competitions (Participants C, E and R).

The researcher noticed throughout discussions of competitions and workshops that there was an emphasis upon ‘masculine’ activities and none of the activities mentioned, at the time of data collection, were specifically aimed at female entrepreneurs. Despite there being other workshops available to participants that focused on specialized areas of entrepreneurship such as ‘sustainability in enterprise’, ‘social enterprise’ and ‘technology entrepreneurship’, there was no provision for exploring gender issues in entrepreneurship.

One female participant described activities as - *"if the activity isn't being run in your style then you become excluded and miss out on learning opportunities."* (Participant L). The researcher enquired what "your style" may mean and the Participant described 'pitch and pint' and 'wolf of wall street' themed competitions which she felt was aimed at a male only audience.

5.3.5 Social Events

Within the e-survey, 23 respondents marked that they had attended a "social event" from the provided tick list of types of extracurricular enterprise activities. As this was a notable number of responses, it became an area of enquiry in the interviews to ascertain whether participants classified their engagement in extracurricular enterprise activities as purely social, purely professional or a mixture of both. It appeared that interview participants perceived the educational value and self-development opportunities afforded by the activities as inextricably linked with socialising. Participants A, B, P and R described activities as 'socialising' while simultaneously describing them as a means to advance their entrepreneurial development.

This merge between social and professional was reflected in interviewee's descriptions of student led enterprise activities. Participants in the pilot study had all been engaged in student led enterprise activities which raised the researcher's awareness of the groups' before conducting the main data collection. This awareness as a result of conducting the pilot enabled the researcher to gain a clearer conceptualization of the focus of the topic (Denzin and Lincoln, 1998; Kim, 2010) and identify emergent patterns in the main data collection. A pattern emerged with four references to student led activities in the 'Others' option on the e-survey and five references in the interviews. It appeared that students were collaborating with one another, and sometimes staff members, to run extracurricular activities of their own. These were collectively termed "enterprise groups" or "enterprise societies" and had varying degrees of staff involvement. This area of enquiry was explored

further in the staff interviews, Sample C, and all staff interviewees described personally assisting, or knowing that assistance was available to, these groups with provision of resources, guidance on delivery or provision of strategic oversight. However, this was not always the case as identified by student participants, Participants P and Q were insistent that staff had no involvement in their student led activities and appeared proud of the schedule of activities they had initiated themselves. This was an interesting finding and may indicate a difference in perspective whereby staff feel they are actively supporting student led activities whereas students feel they are acting independently of any staff involvement.

Participants had varying degrees of involvement ranging from leadership roles to general membership in these groups. Participant P, who had a leadership role in an enterprise society, discussed how this level of commitment meant he was involved in more activities than most of his peers and even to the detriment of obtaining higher marks in his degree assignments. The activities of student led groups grew as an area of interest in the research particularly in relation to the perceived benefits of engagement in extracurricular enterprise activities. A critical discussion of student led extracurricular enterprise activities and entrepreneurial learning will be developed within Chapter 6.

5.3.6 Summary

The extracurricular enterprise activities available at a UK university may vary widely according to the specific context of that institution, a finding that was discussed in depth in staff interviews, Sample C, as staff interviewees had a historical and current knowledge of what types of activity were available and what institutional factors may affect the activities. Factors such as resource, funding, staff availability and commitment will all affect the breadth and depth of activities available (Rae *et al*., 2012; Preedy 2015). Therefore it was expected participant discussion would be limited by what was readily available to them in their specific HEI. However, there were still commonalities across the data. Extracurricular

enterprise activities appear to fit into two categories; those that are student initiated and those that are staff initiated. Whether activities were staff or student led they contained similar content such as networking events, coaching sessions, guest speakers, workshops and competitions.

However, trying to clearly categorise an extracurricular enterprise activity into one 'type' was problematic as many activities overlap in content or merge over time. For example a workshop in sales techniques may also contain a guest speaker component and then also be part of a wider schedule of activities that leads up to a pitching competition. Whether they are staff led or student led, a workshop or a networking event, the important point to note is that these activities appear to be popular and valued by both students and staff. The data gathered and presented in this section has provided important context for understanding the landscape of current provision. The reasons that participants gave for participating in extracurricular enterprise activities will be examined in the following section.

5.4 Reasons to participate

Question 9 in the e-survey asked participants to identify from a tick list the motivation(s) for participating in extracurricular enterprise activities. Participants were able to tick multiple activities and Table 13 outlines the motivations that were selected by number of participants.

Motivation to engage	No. of respondents
To enhance enterprise and entrepreneurship skills	39
To network	33
To socialise	22
To enhance employability	21
Other	5

Table 13. E-survey responses regarding motivations to engage in extracurricular enterprise activities (n=46)

The majority of participants were motivated to engage in extracurricular enterprise activities to enhance their entrepreneurial skills. This was closely followed by opportunities to network, socialising and enhancement of employability prospects. The findings mirror

those in Table 11 (Section 5.3) which detailed what activities participants had engaged in. This demonstrates that participants' motivations and actions were in many cases aligned, the reason they were motivated to engage in extracurricular enterprise activities had shaped the type of activity they engaged in. 'Other' included 'to inspire and develop enterprise in others' (1), 'go to events' (1), 'find my passion' (1), 'go on trip to London' (1).

Each interview participant was questioned regarding their motivations to engage in extracurricular enterprise activities. Table 14 lists the themes that emerged from the interview data and the percentage of participants that stated each motivation during their interview.

Core Themes (%)	**Sub-theme (%)**
Desire to become or learn about becoming an entrepreneur (100)	Need for autonomy (43) Potential to earn money (35) Potential to add social value (30)
Desire to network (61)	Being part of a likeminded community (50) Growth of entrepreneurial networks (36) Fun and sociability (14)
Desire for Self-Development (57)	General Skills Development (26) Self-Development for Employability (22) Self-development for enterprise (17)

Table 14. Interview participants' motivations to engage in extracurricular enterprise activities (n=23)

Many participants expressed multiple motivations which was unsurprising considering motivations to engage in entrepreneurial activity are complex and multi-faceted (Shane *et al.,* 2012). For example, Participant P identified with all three of the core themes listed in Table 14 and also four of the sub-themes. P was engaged in extracurricular enterprise activities because they: a) had a desire to become an entrepreneur b) of which this desire related to their need for autonomy, c) had a desire to network d) due to a perceived need to grow their entrepreneurial networks, e) had a desire for self-development f) specifically developing their general skills g) and enterprise skills. However, despite such individual complexity of motivations, there were similarities across both Sample A and Sample B with

every motivator that was listed in the e-survey also discussed in the interviews to a varying degree.

As interview participants had the opportunity to discuss their motivations in depth, a number of themes emerged that were not present in the e-survey data such as; desire to create a venture or create value, desire for self-development, need for autonomy and desire to join a likeminded community. These themes had not been provided as an option in the e-survey tick list question and e-survey participants had had little opportunity to outline their motivations in detail. In hindsight, this was a limitation of the research and an open text box in the e-survey for participants to describe their motivations, rather than a pre-ordained tick list, would have been more appropriate. This will be discussed further in the methodological limitations section of Chapter 7.

The remainder of this section is segmented according to the themes identified in Table 14 with the prevalence of each theme and its sub-themes considered in turn supported by excerpts from both the e-survey and interview data. The emergent patterns will be discussed alongside anomalies. The implications of these motivational trends for curriculum enhancement, teaching and learning interventions and institutional resource allocation will be explored in Chapter 7.

5.4.1 Desire to become an entrepreneur

Although each participant was unique in the circumstances that brought them to extracurricular enterprise activities, they all shared a common interest either to become or learn about how to become an entrepreneur. When asked whether there was a link between their participation in extracurricular enterprise activities, and their desire to be an entrepreneur, responses were complex. Participants often discussed several motivations to engage in extracurricular enterprise activities that appeared to overlap and even contradict. Some participants described an instinctive feeling, an entrepreneurial passion,

which led them to engage in extracurricular enterprise activities (Participants F, U, W) whereas others pinpointed a specific outcome which had prompted engagement such as earning money or adding value to society (Participants C, H, O and Q).

Several participants (F, U and W) stated that they had had strong entrepreneurial motivations "*that entrepreneurial bug"* (Participant W) before they even started university *"From 17/18 years old I never envisaged myself being employed by anyone"* (Participant U). Their engagement in extracurricular enterprise activities appeared to be instinctive and they had sought out these activities as a way to further their entrepreneurial ambitions. Their entrepreneurial passions existed prior to engagement but had begun to take shape as achievable goals through their engagement with extracurricular activities:

> *"I've wanted to start my own business for a while but I wasn't entirely sure on firstly on how to do so ... and whether or not the idea I had was a viable one to go through with ... [by participating] I was just working out how I might get help in order to finish my idea and see if it's a viable business proposition"* (Participant F)

Others were more tentative to express their entrepreneurial ambitions. These participants (I, K, R, T) had felt drawn to entrepreneurship but did not currently have a specific business idea, thereby engagement in extracurricular enterprise activities was motivated by a desire to experiment. They joined in with activities because they wanted to "*do entrepreneurship*" (Participant K) and "*learn through doing*" (Participant R).

5.4.2 Need for Autonomy

Of the 23 interview participants, 10 wanted to be an entrepreneur because they desired a career path where they could be autonomous and independent. These participants envisaged their future as an entrepreneur as one where they had "*more control*" over their lives (Participant H, O, W), "*not having to give explanations*" (Participant T) and were considered "*the boss*" (Participant U). The same language that had been used to describe entrepreneurs compared to 'non-entrepreneurs' was used when discussing motivations. These participants had a strong desire for autonomy and perceived entrepreneurship as

the most appropriate career path to assume ownership of their lives. Contrastingly, employment was depicted as unfulfilling and the inferior option.

"The idea of owning a company rather than working for somebody else is more appealing" (Participant M)

"I think you can only be happy if you are your own boss" (Participant T)

The use of the term 'only' by Participant T demonstrates the strength of their belief in the link between achieving autonomy and being an entrepreneur. There was a perception that entrepreneurial activities gave one individual fulfilment and also economic freedom. For these participants, a need for autonomy extended beyond how they structured their working hours but also in the management of their own finances. Participant H expressed incredulity at the thought of "*basing your livelihood and families lives within someone else's financial decisions*" and described being an employee as "*the riskiest thing you could do*".

Although these participants expressed their desire to be an entrepreneur was in part motivated by their need for autonomy, for some participants this desire did not need to be fulfilled immediately. Following discussion of the potential benefits of being their own boss, Participants B and T stated their intention was to go into employment rather than set up a business immediately upon graduation. The researcher pressed Participants B and T to explain the reasoning for going into employment first and participants identified a tension between wanting to be an autonomous entrepreneur yet recognising that by working for someone else first they could acquire specific technical skills or build up their contacts in their chosen industry which may assist in future ventures.

This line of enquiry was pursued in depth in Participant B's interview. In line with good practice, a reflexive journal had been kept during the pilot study (Lincoln and Guba, 1985) whereby the researcher had questioned themselves 'who do I want to be to participants?' (Hill, 2006) and thereby what style of questioning might be adopted during interviews

(Padgett, 2008), deciding that continuous self-reflection was necessary for the researcher to adapt their position in relation to participants according to the particular line of enquiry (Hill, 2006). As prior studies had found university students' propensity to start a business is often stronger when forecasting three or more years after graduation (Souitaris *et al.,* 2007; Sieger *et al*., 2014), the researcher despite sensing participant hesitancy remained keen to explore these findings in the research and asked participants, on reflection bluntly, whether fear of job uncertainty could be influencing their decision to delay venture creation. This suggestion was met with annoyance, Participant B was insistent they just wanted their venture to be a success, defined for them as one that "*makes money*", and therefore was required to enter employment first to ensure the knowledge base and resources to start a successful venture. The participant was keen to reiterate that they were not 'fearful' and that they were delaying their entrepreneurial endeavours in order to gain valuable experiential learning opportunities first. It appears for some participants, there was a tension between their desire to be an entrepreneur and the reality of setting up a business either now or in the near future due to a perceived lack of experience. This tension in motivations between 'want' and 'need' will be critically examined in Chapter 6.

5.4.3 Value Creation

For 8 interview participants, profit generation appeared to be a motivator to engage in entrepreneurial activity. These participants stated they wanted a "*particular lifestyle*" (Participant C and Q) and "*to make money*" (Participants H, M and O). The assumption was that becoming an entrepreneur could mean "*making millions*" (Participant P), or to "*retire at 35*" (Participant I). Binary discourse, as discussed in Section 5.2, was apparent here as business ownership was seen by participants as a way of "*reaping the rewards"*" and employment as "*lining the pockets*" of someone else (Participant E). Participants contrasted 'rags to riches' stories of wealthy celebrity role models with less wealthy employees they knew in 'real life' such as parents or friends to strengthen their argument.

Several interview participants were also concerned with the social contribution they could make through entrepreneurial activities (Participants H, K, O, Q and T) and described wanting to "*create value for people*" (Participant K), "*solve problems in the world*" (Participant H and Q) and "*improve lives*" (Participants O and T). When pressed on the specifics of these ambitions, none of the participants had a current idea they were working on but felt they could use their time at university to develop one. It was notable that none of these participants discussed profit generation. It appeared in these participants' responses that being an entrepreneur to make money and an entrepreneur to create value in society could not be mutually exclusive, perhaps reflecting common misconceptions around social entrepreneurship as a non-profit or limited profit making activity (Dacin *et al.,* 2011).

Although these participants recognised that their motivations did not necessarily fit with 'traditional' motivations to engage in entrepreneurship, such as profit and wealth, only one Participant (O) mentioned the term 'social enterprise'. These participants were describing business models heavily focused on providing social value yet did not categorise them as social enterprises. The researcher enquired specifically with these participants what their views were of social enterprise and rather than discuss what may be distinct between 'types' of entrepreneurship, instead these participants believed that all entrepreneurs have ethical and social obligations regardless of economic gain.

5.4.4 Desire to Network

For 14 of the interview participants an important aspect of their motivation to engage in extracurricular enterprise activities was to become part of an entrepreneurial community. Of e-survey participants, 22 respondents stated a motivation to engage in extracurricular enterprise activities had been "to socialise". Whether that meant socialising just for fun or socialising for a strategic purpose was unclear. Each of these participants were motivated to engage in extracurricular enterprise activities to realise some form of social gain

whether that be; acceptance into a community, friendships or growth in their entrepreneurial networks.

The most popular type of extracurricular enterprise activity that participants in the e-survey engaged in was networking which was also listed by 33 e-survey participants as a motivator to engage which demonstrates an alignment between participants' motivations and actions. A similar trend was found in the interviews, with 11 participants describing growing their entrepreneurial networks as an important motivator to engage in extracurricular enterprise activity. Interview participants saw the networking opportunities from engagement as a conduit to; gaining additional perspectives (Participants A, E, I, M, O, V), meeting potential business partners (Participants B, D, L) and maintaining momentum with their business ideas (Participants F, H, I). These motivations were pragmatic; the networks they wished to establish were focused primarily around advancing their individual entrepreneurial ambitions rather than for friendship building. Only two participants claimed that they initially joined in with extracurricular enterprise activities because they thought they would be; "*fun… interesting … something different to do*" (Participant R), "*a bit of a laugh*" (Participant P). For these participants, their initial motivations were casual and not geared towards a specific outcome other than personal enjoyment. However, both participants stressed that what had started as fun soon became more serious and their focus had shifted from personal enjoyment to what could be gained in terms of employability and enterprise skills.

Participants varied in the specificity of why they wanted to grow their networks but all were driven by a belief that the larger one's network the better. Few participants explained why a larger network would be a positive development for them, perhaps because it was assumed that the larger ones network the wider ones access to resources can become. Although this quantity focused approach was a common theme across the interviews, Participants B and E did allude to a desire to improve not just the quantity but also the

quality of their networks. These participants had envisaged longevity in the relationships they might forge "*you will probably know these people for the rest of your life*" (Participant B), and were mindful of the knowledge they could gain if they sought out contacts from other disciplines "*to meet other students of a similar mind set across different disciplines*" (Participant E). Participants B and E were strategic in who they networked with and took a targeted approach of quality over quantity.

Participants were also motivated by a desire to meet others with similar interests and mind sets whether that was to; provide inspiration "*who you spend your time with shapes who you are*" (Participant P), gather useful contacts "*meeting likeminded people and having the chance to network*" (Participant R), or even meet a potential business partner "*to find likeminded people who, in a few years, I may need to help start a business*" (Participant B). These participants wished to spend time with likeminded people that could accelerate entrepreneurial advancement both for participants as individuals and for the entrepreneurial community as a whole (Participants B, I, L, M, N, P and R). The below quotation exemplifies this sense of community with a shared purpose:

> *"If you surround yourself with entrepreneurially minded people then you feed off each other, the energy is incredible. Doesn't matter what your background or intelligent is, put entrepreneurial people together and you can feel the ideas bouncing off one another" (Participant P)*

However, being part of a community was not intended to dilute the uniqueness of each individual within it. Participant I was keen to impress on the researcher that being drawn to likeminded people did not mean those individuals were all the same but were each distinct individuals bound together by the "*same sorts of objectives*". This participant strongly emphasised the preservation of individual identities within the community setting.

As they perceived themselves to be part of a community, participants were not only motivated by their own individual gain but also the community gain. Participants described a desire to help their peers in their entrepreneurial ambitions through coaching and

mentoring activities. Several participants were motivated to engage in order to "*help others realise their skills*" (Participant C and H) and "*share knowledge with others*" (Participant G). These participants saw themselves as coaches and mentors to other community members and felt pride when a peer succeeded in their entrepreneurial endeavours:

"You gain a sense of accomplishment for your peers if they go out and start a business" (Participant H)

Participants were also motivated to bolster the presence of their entrepreneurial community within their institution or geographic area, driven by a desire to see their groups acknowledged by other students, university staff and the wider business community. They were able to clearly articulate the value of their activities; "*we connect up enterprise support at the university*" (Participant J), "*we are a hub for people starting up concepts*" (Participant K) and were motivated to spread the word regarding the value their activities had.

Although this theme of collaborative community as a motivator to engagement in extracurricular enterprise activities was apparent, there was also acknowledgement by Participants M and U that competition with their peers had been a motivator for engaging in extracurricular enterprise activities. These participants were motivated to participate because they wished to have "*bragging rights*", and "*keep up*" with their peers (Participant U). Students who did not participate in these entrepreneurial communities were seen to be excluded from the group, and much like the binary discourses employed by participants when discussing entrepreneurs and employees, described as "*coasting through*" (Participant M), "*traditionalists*" (Participant G) and "*risk averse*" (Participant O and Participant R). There was an element of "otherness" for community members and an impression of elitism given. However this was a minority viewpoint. The majority of participants were instead keen to emphasise their desire to collaborate with others and widen the uptake of activities.

The enhancement of social capital, whether that be for individual or community gain, was a key motivator to participate in extracurricular enterprise activities. Several participants had recognised the potential social capital gains of extracurricular enterprise activities and there was an expectation that participation would benefit them in terms of expanding their networks and friendship circles. They wanted to be around other individuals they perceived to be of similar mind sets, which would add to the quantity and quality of their networks and subsequently aid their entrepreneurial endeavours. The potential that social networks have to enhance entrepreneurial learning and development has been noted in prior studies (Taylor and Thorpe, 2004; Pittaway and Cope, 2007b) and this empirical data will be examined further within Chapter 6 to draw out perceived links between networking and entrepreneurial learning.

5.4.5 Desire for Self-Development

Of the interview participants, 13 deemed participation in extracurricular enterprise activities as a facet of a wider ethos of self-development. These participants were pro-active in their self-development frequently seeking out opportunities to learn both within and outside the curriculum with participation in extracurricular enterprise activities one aspect of how they enhanced their learning and self-development.

The coding of this theme attempted to draw out the nuances of participants' motivations to ascertain if their desire for self-development was connected with particular end goals and it appeared that they were; under three strands of; self-development for general skills, self-development for employability and self-development for enterprise. However, each participant is unique and it is recognised that these strands overlap and interconnect, with some being more pertinent than others at differing points within individuals' academic and entrepreneurial journeys. The three strands will form the structure of this section to examine how participants were motivated to engage in extracurricular enterprise activities

to enhance their; general skills development, employability prospects and enterprise development.

Self-development for skills

For Participants O, S and U, engagement in extracurricular enterprise activities was primarily fuelled by a desire to widen their general skills set rather than as direct training for entrepreneurial activity. These participants wanted to develop a broad range of skills and abilities that would serve them in all areas of life, there were no particular events mentioned that they were developing these skills for, but there was a sense that they wanted to "push" and "stretch" themselves (Participant I and O):

"I've always been into personal development since probably age of 17/18, the idea of pushing myself so I got involved" (Participant U)

These participants sought to improve a wide array of skills including; communication, networking, project management and time management. Arguably they could develop these skills through engagement in other types of extracurricular activities such as sports teams or art clubs (Watson, 2011; Bartkus *et al.,* 2012; Milner *et al.,* 2016) but their perception was that extracurricular enterprise activities would be particularly useful for development of such 'interpersonal' and 'soft' skills. It appears that the utility participants perceived extracurricular enterprise activities had for enhancing not only their entrepreneurial capabilities but also a wide range of soft skills acted as a motivator for engagement with extracurricular enterprise activities.

Self-Development for Employability

For interview participants (B, J, O, T and U) their future employability prospects were a primary consideration when deciding whether to participate in extracurricular enterprise activities and 21 e-survey participants specified the enhancement of their employability as a motivation to engage in extracurricular enterprise activities. These participants were concerned with "*improving what my CV looks like*" (Participant J and T) and having the

"*opportunity to meet employers*" (Participant T). Participant O described participation in extracurricular activities as a "*big stand out*" on their CV and they hoped by engaging it would "*open up graduate opportunities*". Participant T, when asked if they had any express intention to set up a business now or upon graduation, stated a wish to work for someone else "*at least for a little while*". When asked why they would wait they stated they needed to "*gain more knowledge and experience*" before starting a business and perceived being an employee as an effective means to enhance their commercial awareness.

Although all 23 interview participants expressed a preference for self-employment before and during the interviews, 9 envisaged going into employment or further education upon graduation and of the remaining 14 participants over half did not have a clear timeline for starting their own venture. Participants were clearly enthusiastic about wanting to be entrepreneurs but many could not envision it happening in the near future. This is a notable finding and raises questions regarding participants' entrepreneurial motivations. Are participants engaging because they have a genuine intention to be an entrepreneur or because they want others, such as employers, to think they have entrepreneurial attributes? This line of enquiry was continued during interviews with staff who also described extracurricular enterprise activities as useful in *"building transferable skills that employers want"* and *looking "good on the CV" (*Participant 3). The researcher asked if extracurricular enterprise activities are marketed to students as a means to enhance their C.V. and Participant 3 raised the point that it was unhelpful to separate out employability considerations from motivations to engage in extracurricular enterprise activities as employability is "*a thread that runs through all university activities*". How extracurricular enterprise activities are advertised and how in turn this may shape participants' motivations to engage may be an area for further research.

Self-development for enterprise

Of the e-survey participants, 39 respondents stated a motivation to engage in extracurricular enterprise activities was to enhance their enterprise and employability skills. Interview participants B, D, P and Q also framed their goals for self-development in relation to enterprise, specifically an end goal of venture creation. They discussed a link between their individual desire to improve and their desire to be an entrepreneur. Self-development they felt could be tangibly realised through venture creation:

> *"[Participation in extracurricular enterprise activities will] enable me to gain skills that I need in order to set up my own future business"* (Participant D)

It appeared in participants' minds there was this link between self-development goals and entrepreneurial activities whereby the two interrelate. Whether the primary motivation to engage was to develop oneself personally, or to develop oneself entrepreneurially, remained unclear but it was apparent participants perceived the development of enterprise skills and self-development as connected and possible through participation in extracurricular enterprise activities.

5.4.6 Influencing Factors

This section thus far has outlined the common intrinsic motivations participants had for engaging in extracurricular enterprise activities. Alongside such motivations were also extrinsic factors that participants identified had influenced their decision to engage in these activities, these included; family business experiences, nascent entrepreneurial experience and educational experiences. Each of these themes will be discussed in turn within this section drawing upon data from the interviews.

Prior entrepreneurial experiences

Of the 23 interview participants, six had participated in a family business in varying capacities. Participants A, H, G, I, L and P described how they had grown up observing and assisting with their family business and that the knowledge and experience they had

gained had encouraged their interest in becoming an entrepreneur. These participants considered that the first and second hand experiences of entrepreneurship they had gained from observing, listening to and participating in a family business had provided them with valuable knowledge and experience of entrepreneurship. Participants described "*learning entrepreneurially*" (Participant P), and "*being inspired*" (Participants G, I, P) and drew a link between what they had been exposed to growing up and what they then wanted to do while at university. The accumulation of prior entrepreneurial knowledge and experience had given them a desire to continue experimenting and had motivated them to seek out activities where they could learn differing approaches to entrepreneurship such as an Entrepreneurship degree programme and/or modules or extracurricular enterprise activities.

Discussing the influence of family members was recognised by the researcher as a sensitive topic. Participants may be happy discussing themselves but not necessarily personal details about their own families and it became apparent in interviews that most participants preferred conversation to focus upon their individual experiences rather than to include discussion of family members. However, Participant P was happy to discuss this topic in depth and described their experiences assisting with the family business over a two year period. Participant P's father was a restaurant entrepreneur, perceived to be the 'type' of entrepreneur the participant did not aspire to be. The participant described their father as an "*old fashioned businessman*" and insinuated that he wasn't a "*true entrepreneur*" because, in the participant's opinion, the business "*lacked originality*". The exposure to the family business while growing up had motivated Participant P to seek out other avenues when at university to learn about and experiment with their entrepreneurial intentions. As their degree programme (Physics and Astronomy) did not contain any entrepreneurial education they had been participating in extracurricular enterprise activities since the first year. Participant's P exposure to family business had provided them with

one perspective of entrepreneurship that they did not want to emulate and so extracurricular enterprise activities were deliberately sought out to enable the development of other perspectives.

It was clear that this area of participants' lives had been influential on their entrepreneurial intentions. How far family members may cultivate motivations through the provision of rewards or punishments became an emergent line of enquiry. None of the participants mentioned coercion from family members to engage in entrepreneurship but hinted at emotional pressure:

"I worked in the family businesses since I was 12. 'What's the point of being an employee?' my dad would laugh" (Participant H)

"My mum tried to convince me I had to pick a module in entrepreneurship because she is an entrepreneur" (Participant L)

For these participants, their families were vocal in what they thought they should do in the future. Being an entrepreneur was seen to be "*normal"* (Participant H) and participants potentially faced scorn and/or disappointment from family and friends if they expressed an intention to work for someone else. Subsequently, participant's engagement in extracurricular enterprise activities may not be as much of a 'choice' as it first appeared to be especially if participants felt continued pressure from their families to prove they were entrepreneurial. However, other participants were clear that their entrepreneurial choices were their own and no one else's:

"*your family could push and support you but if you haven't got that drive then I don't think you could become an entrepreneur"* (Participant B)

Participant B was steadfast in their view that no matter what one's family say or do an individual could be not pushed into or dissuaded from entrepreneurial activity. For this participant, motivations were strongly intrinsic and not easily swayed by the influence of others even those closest to you.

Considering the status of the majority of participants as latent or nascent entrepreneurs, it was not expected during topic guide development that participants would have a significant amount of prior entrepreneurial experience to draw upon. However, ten interview participants who owned, or had previously owned, businesses discussed the influence they felt their business experience had upon their motivation to join and continue to participate in extracurricular enterprise activities. Participants M, O, P and S directly linked their motivation to engage in extracurricular enterprise activities with working on their business; *"[participated to] move forward with my business*", "[*participated to] apply my business concerns to workshop content*", *"[participated to] get legal advice*" and *"[participated to] find collaborators*". These participants had specific needs or clear outcomes they wanted to gain from participation in extracurricular enterprise activities. Their prior and current business experience had enabled them to narrow down their areas of need and they participated in extracurricular enterprise activities to address those requirements.

Educational experiences

As the literature review had highlighted the benefits of participation in extracurricular activities (Watson, 2011; Bartkus *et al.,* 2012; Milner *et al.,* 2016), the topic guides had been formulated with predominantly 'pull' factors in mind, assuming that participants would engage in extracurricular enterprise activities as a supplement to their current learning activities. However, during early interviews it became apparent that participants were not only motivated to participate in extracurricular enterprise activities to supplement their formal education but also felt 'pushed' towards them due to a frustration with curriculum content.

Participants from non-business school programmes described limited exposure to entrepreneurship on their programmes (Participants B, M, N, P and T) which was to be expected considering the subject disciplines but even those on entrepreneurship

programmes described limitations to what they felt their curriculum could cover (Participants E, K and R). These participants felt they required more opportunities to "*experiment*", "*practice dealing with uncertainty*" and learn "*different approaches*", that entrepreneurship modules and/or programmes were "*too theoretical*" and they required experience in "*the human side of entrepreneurship*" (Participant E). Participant K was particularly vocal on this topic:

"University is a lot about just talking about stuff and writing about what you will do … but this [participation in extracurricular activities] is actually a practical way of doing things" (Participant K)

For these participants, engagement in extracurricular enterprise activities was not just an add-on to their in class learning but considered an essential means to experience a diverse range of activities and assist them in developing their entrepreneurial capabilities. They felt their degree to be limited in the opportunities available to develop their entrepreneurial knowledge and experience:

"There's a lot of practicality whereas on your course it's pretty much about theory. There's only a certain amount you can learn from theory, whereas the stuff in the workshops you can apply" (Participant E)

Participants were particularly frustrated by too much theory on their degree programmes. They described theory in a negative manner stating it "*does not necessarily teach you [entrepreneurship]*" (Participant R) and was "*too abstract*" (Participant K). Degree programmes were perceived to be limited in opportunities to be "*hands on*" (Participants B and M), participants felt "*you actually need to do entrepreneurship to be good at it*" (Participant K). Participants noted that a key limitation to in curricular activities were adequate opportunities to practice coping with uncertainty and failure. Failure can be difficult to simulate in an educational environment because curricula is focused upon awarding achievement (Gartner and Vesper, 1994; Pittaway and Cope, 2007b) and participants acknowledged this difficulty. They discussed their engagement in extracurricular enterprise activities as an alternative means to learn about failure:

"it's all very well and good a lecturer telling us all this, you know the textbook says, but it's another thing to say look this is what really happened with this person in real life and they lost this amount of money, you know they lost 50 grand, or they made 50 grand, whatever the case may be"
(Participant P)

While the curriculum was still appreciated, it appeared that perceived deficiencies acted as a motivator for participants to engage in extracurricular activities. This finding may provide useful learning for universities in regards to how curriculum is developed. The implications of this will be examined further in Chapter 7.

5.4.7 Summary

This section examined the motivations for participant engagement in extracurricular enterprise activity and although motivations were often complex there were emergent trends within the data. All interview participants expressed a desire to be an entrepreneur in some capacity either now or in the future and the majority of participants wanted to be an entrepreneur for the perceived autonomy and independence it provided. The binary discourse contrasting entrepreneurs with non-entrepreneurs that was introduced in discussions of entrepreneurial learning appeared to influence motivations also and several participants were motivated to be an entrepreneur due to a perception of earning more money than being employed. A lesser number were motivated to be an entrepreneur to solve problems and have social impact.

The accumulation of social capital was a strong motivating theme in the data, 61% of interview participants, and 72% of e-survey participants, were motivated to engage in extracurricular enterprise activities in order to network with other people. These participants wanted to meet others with similar interests and mind sets who might aid their entrepreneurial endeavours. It appeared that being part of a community was also important to many participants whether that be for friendship building or to enhance their entrepreneurial development. Considering a main motivator to engage in extracurricular activities found in other studies has been personal enjoyment (Clegg *et al*., 2010; Milner *et*

al., 2016), it was notable that this was not a common theme in the data. Only two interview participants claimed that they initially joined in with extracurricular enterprise activities for personal enjoyment. Instead participation in these activities was mainly strategic and motivated by professional interests.

Both interview and e-survey participants were pro-active in their self-development, wishing to develop their; general skills, employability prospects and enterprise skills. Participants saw engagement in extracurricular enterprise activities as a way to improve a wide array of both general and enterprise skills including; communication, networking, project management and time management. Their future employability prospects were also a common consideration when deciding whether to participate in extracurricular enterprise activities. Although all 23 interview participants expressed a preference for self-employment before and during the interviews, 9 participants stated they wanted to go into employment or further education upon graduation and that engagement in extracurricular enterprise activities would enhance their employability prospects. Similarly, 46% of e-survey participants stated they had participated in extracurricular enterprise activities to enhance their employability.

The topic guides were designed to draw out motivations but as the data was collected it became apparent that there were also extrinsic influences affecting individuals' propensity to engage in extracurricular enterprise activities, such as; family business experiences, previous entrepreneurial experience and education. In discussions around family business, six participants drew a link between their experiences in a family business and their decision to pursue entrepreneurial education, both in and extracurricular, while at university. Participants that owned or had previously owned businesses highlighted the influence their existing business experience had upon their motivation to join, and continue to participate, in extracurricular enterprise activities. Participants' were also influenced by

their educational experiences, engagement in extracurricular enterprise activities was not just an add-on to their in class learning but considered an essential means to experience a more diverse range of activities and assist them in developing their entrepreneurial capabilities, which they felt limited opportunities to do so on their degree programmes.

Figure 10 depicts the motivations and influences, intrinsic and extrinsic, that were emergent from the data and thereby what may contribute to an individual's decision to engage in extracurricular enterprise activities.

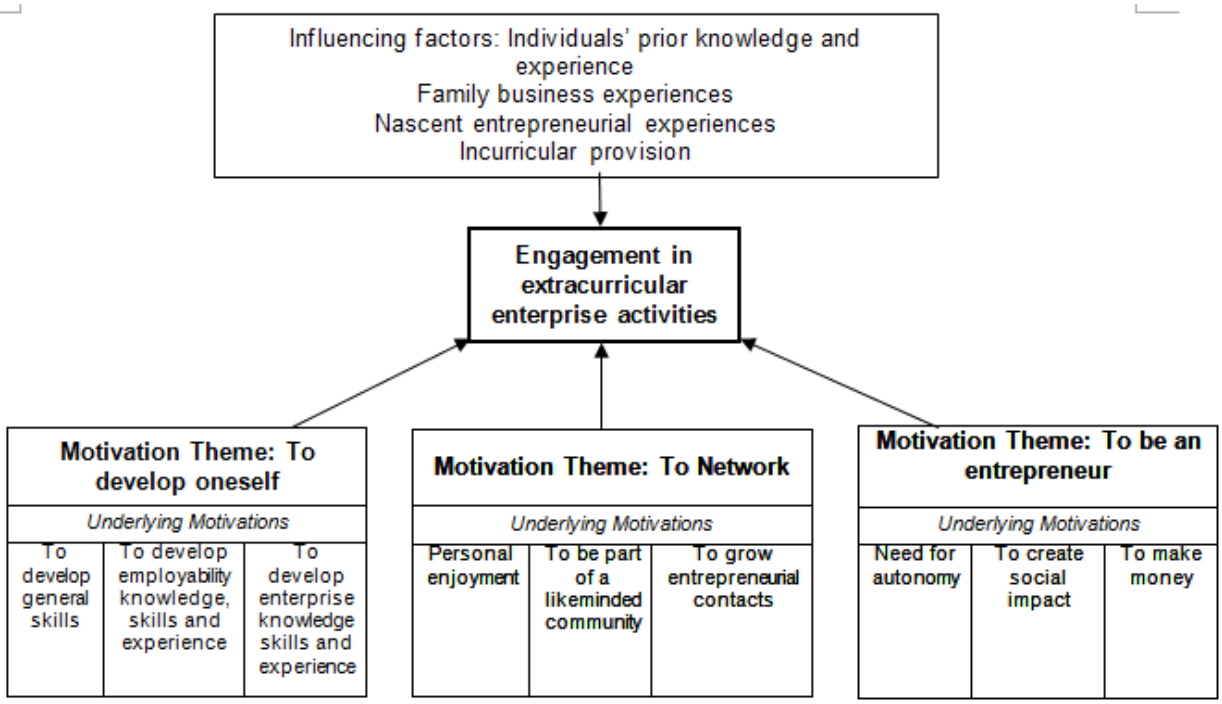

Figure 10. Motivating and influencing factors upon participants' engagement in extracurricular enterprise activities (Author's own)

The data collected represented the motivations and influencing factors identified by participants at that point in time, it cannot demonstrate how motivations may have altered over time. The researcher cannot be sure these motivations were not later recognised through hindsight rather than participants were fully aware of them before participating and cannot account for how motivations may be reinterpreted at a later stage.

Motivations were complex and competing motivations were present at times. For example, individuals weighed up their own individual desires against what they needed for the future

or what their families wanted. Although Figure 10 does not demonstrate the 'strength' of motivations it is useful in visually representing the complexity of motivations and influences upon an individual's decision to engage in extracurricular enterprise activities.

5.5 Benefits participants gained

The majority of participants across both Samples A and B described more than one benefit from participation. The response was overwhelmingly positive and there was only one negative response in the e-survey: *"I don't think the events have been run particularly well and don't live up to their potential".* The e-survey asked participants to identify what extracurricular enterprise activities they had participated in while at university before answering a free text question regarding what benefits they perceived they had gained from participation. Of the 55 surveys administered, 39 responded to both the question that listed the activities they had been involved in and the question regarding benefits. Responses were analysed and coded which formed the themes of; skills development, knowledge acquisition, social capital, personal growth, venture creation/growth, and employability prospects. Each of these codes form the column labels on Table 15 which cross tabulates participant responses to examine whether there was a pattern between the type of activity participated in and benefits described.

	Coded benefits					
Type of activity	Skills Develop-ment % (n)	Knowledge Acquisition % (n)	Personal Growth % (n)	Venture creation/growth % (n)	Development of Social Capital % (n)	Enhanced Employability % (n)
Networking event	26 (10)	21 (8)	31(12)	3 (1)	26(10)	3 (1)
Guest speaker event	23 (9)	23 (9)	28 (11)	5 (2)	26 (10)	3 (1)
Mentoring/Coaching	8 (3)	10 (4)	13 (5)	3 (1)	10 (4)	3 (1)
Trading Practice	5 (2)	5 (2)	0	0	0	0
Socialising	23 (9)	10 (4)	21 (8)	3 (1)	10 (4)	0
Business Competitions	10 (4)	8 (3)	13 (5)	3 (1)	3 (1)	3 (1)

Table 15. Cross-tabulation of participant's e-survey responses regarding participation in extracurricular enterprise activities and identified benefits (n=39).

The data presented in Table 15 suggests that participation in networking and guest speaker events were the activities most likely to bring benefits to sampled participants, in particular skills development and knowledge acquisition alongside personal growth and enhancement of social capital. Socialising activities were perceived by 21 participants to have developed their skills and knowledge, assisted in personal growth and enhanced social capital. Mentoring activities, business competitions and trading practice were also seen to enhance skills, knowledge and personal growth but to a lesser extent. The remainder of this section will examine each of the identified benefits in turn drawing upon data across Samples A, B and C.

5.5.1 Skills Development

From both Sample A and Sample B, skills development was the most commonly cited benefit of participating in extracurricular enterprise activities and valued for its applicability to both entrepreneurial activity and preparedness for employment. Many of the workshops that participants had attended focused on skills development and were perceived as providing them with the "*skills that I need in order to set up my own future business."* (Participant C) and providing *"first-hand opportunities to try out different elements of business"* (Participant D). Participant D discussed that, although opportunities for skills development were often made available within degree programmes or modules, the nature of some extracurricular enterprise activities where you are "*pushed in at the deep end*" was particularly effective in accelerating skills development:

> *"you get to learn skills that you wouldn't anywhere else in the university, especially networking skills"* (Participant D)

The informal nature of extracurricular activities was also considered appealing when contrasted with the restrictive nature of the curriculum. Participants described the positives to developing their entrepreneurial knowledge, skills and experience within a non-assessed environment (Participants B, M and K). The optional nature of extracurricular

activities and the removal of academic pressure allowed some participants to feel freer to experiment with their ideas in a way they did not feel was possible on their degree programmes, particularly as they felt constrained by the amount of content they were required to process during taught sessions.

Participants identified a range of skills they felt had been enhanced by their engagement with extracurricular enterprise activities, in particular the development of their networking skills. Interview participants A, M, P, R and U stated that networking had been the main skill they had developed as a result of participation and discussed the range of networking opportunities they had been exposed to. Of the e-survey participants, 14 cited enhancement of networking skills as a benefit of participation. Participant R described the practical application of learning such skills and stated the skills she had learnt had helped her "*negotiate with businesses and investors*" and "*understand people's needs better*" (Participant R).

Aside from interpersonal skills, participants also discussed developing their technical skills such as *"marketing" (*E-survey participant 42, Interview Participants H and R) and *"sales"* (E-survey participant 42 and Interview Participants B and R). The development of these practical skills were seen to enhance participants' abilities to pursue entrepreneurial endeavours "*We get real skills we can actually use to build a business"* (Participant H) but also useful in terms of employability. Participants discussed how having participated in such activities was a *"stand out*" on one's CV (Interview participant O and E-survey participant 52) and may open up graduate opportunities (Participant M and P). There was a perception that employers looked favourably upon graduates who had participated in extracurricular enterprise activities *"It shows employers that you have taken a keen interest in furthering your enterprise skills"* (E-survey participant 48).

5.5.2 Knowledge Acquisition

Four e-survey participants described benefits of participating in extracurricular enterprise activities in terms of what knowledge they could access and develop. Interview participants B, D, H, L, M and O also perceived knowledge to emanate from numerous sources when engaging in extracurricular activities such as; from their peers, guest speakers, workshop content and shared materials:

> *"[extracurricular enterprise activities] provide guidance to students who may have business ideas or … information on how you set up a business … the basic information they might need if they wanted to start up their own business"* (Participant B)

Participants described being signposted to resources by their peers, being provided with specific content on topics such as sales, marketing and sustainability during workshops, and gaining knowledge from listening to and interacting with guest speakers. The latter source of knowledge was perceived to be distinctive from those offered by enterprise educators. Guest speakers were valued in particular for their entrepreneurial experience and achievements and described as providing a "*real world perspective*" (Participant O) as compared to academics whose knowledge was perceived to be overly theoretical (Participants E, K and R).

Participants described how engagement in extracurricular enterprise activities meant they were more effectively informed about the entrepreneurial resources and support available to them. They described extracurricular enterprise activities as a; "*a soft entry point into wider university support*" (Participant D), "*direction to resources and opportunities*" (Participant L and M), a source of information for "*different schemes that I could get involved in that might help me with my idea*" (Participant D) and even "*a way to access the university's business incubator*" (E-survey participant 34). Extracurricular enterprise activities appear to act as a gateway, widening the resources available to participants, and exposing them to a diverse range of knowledge sources. Staff also highlighted the importance of this signposting function:

"[extracurricular enterprise activities are] a useful way if you have a community who are thinking about business but don't know how to really get going" (Participant 2)

By participating, individuals were not only acquiring knowledge of what support they could access but also widening their knowledge and understanding of enterprise. Participants discussed how their understanding of enterprise as a concept evolved through participation in extracurricular enterprise activities from "*just being start-ups*" (Participant L) to a critical understanding of enterprise within differing contexts. The following quotation is an excerpt from a discussion with Participant H regarding their perception of enterprise following participation in extracurricular enterprise activities. For them, their understanding of enterprise evolved beyond just 'business knowledge' to recognition that one's personal philosophy and how they interact with others may affect their entrepreneurial endeavours:

"Entrepreneurship is greater than business knowledge, it's everything that's involved in that mentality, that thinking from the ideology, to your ethos, to your objectives. It's about how business runs, your individual ethos, how you treat people" (Participant H)

It is important to note that Participant H was not engaged in any formal entrepreneurial education, only extracurricular enterprise activities. Their enhanced appreciation of enterprise and its contextual application was seen as a result of participation in extracurricular enterprise activities.

5.5.3 Development of Social Capital

Participants identified numerous benefits of engaging in extracurricular enterprise activities in terms of enhancing their social capital. Participants appreciated being able to diversify their peer networks, by meeting; *"people who came from different backgrounds" (Participant N)* and *"different minds" (Participant I).* The extracurricular nature of the activities meant that participants were able to mix and collaborate with students from other faculties. Some of the extracurricular enterprise activities involved the creation of inter-disciplinary networks bound by a shared interest in entrepreneurship that were utilised to find information, seek advice and mentors and collaborate on ideas. Participants stated

that their entrepreneurial thought processes were stimulated during such events as they could interact with a diverse range of individuals:

"It's almost learning how different minds think to benefit your own thought process. Everyone thinks differently, it makes you reflect and learn. We make each other better" (Participant I)

Participants described how networking with others, whether that was with guest speakers, role models or their peers, may enhance their ability to start or grow a venture. Networking benefited participants through the opportunities it gave for peer to peer learning, gaining "*critical perspectives"* and *"new thought processes"* (Participant I and P). The diversity of people in these networks was seen as an important benefit to participants whom felt that the homogeneity of peers on their degree programmes was restricting their knowledge, skills and networks:

"*You get the chance to meet other students of a similar mind-set across different disciplines, especially as a business student, you may have an idea that ranges across different disciplines and it can be quite hard to meet people from those"* (Participant E)

Alongside the establishment of professional contacts, extracurricular enterprise activities also gave participants opportunities to socialise and build friendships. Participants described becoming part of a group of "*like-minded people*" (Participants A, C, D, I, R and E-survey participant 11) which entrepreneurially inspires and motivates its participants (Participants A, C, D, I, R and E-survey participants 41 and 47). They stated that friendships had developed as a result of participating (E-survey participants 54 and 55) and Participants A, C, I and P gave examples of when they had emotionally supported and mentored their peers, often encouraging them to experiment with a business idea:

"Everyone has the same kind of goal … to set up a business, they want to be entrepreneurs, they want to live their own dreams, do their own thing. Yes they might be headed into different industries … but the main goal is common" (Participant A)

In interviews with staff, this community with a shared purpose was acknowledged, with extracurricular enterprise activities described as beneficial for *"bringing a lot of people with the same sort of thinking together"* and for encouraging *"a community who are thinking*

about business but don't know how to really get going" (Participant 2). It appeared that participants believed, and were considered by others, as operating in the manner of a community of practice (Lave and Wenger, 1991), the implications of which will be discussed further in Chapter 6.

Supportive relationships also formed between students and mentors, either internal or external to the university, and participants described spending solid blocks of time with their mentors which was *"completely over and above*" what they had expected (Participant V). Participants described having mentors who acted as a sounding board and helped them think critically about their ideas (Participant A and V). Both the peer to peer relationships that formed and the relationships between students and mentors encouraged participants to discuss their entrepreneurial development and ideas in what they perceived to be a safe and supportive environment. They described extracurricular enterprise activities as providing "*a safer place to discuss your failure or other people's failures*" (Participant H) and that talking to a non-staff member was "*less intimidating*" (Participant E).

However, not all participants gave descriptions of enhanced social capital and it is important to recognise that factors such as an individual's demographic and socio-economic background may enhance or limit an individual's propensity and ability to grow their social capital (Greve and Shalaff, 2003). In particular, the researcher noted a male dominance throughout the coded theme of social capital. The majority of the sample were male and the discussion of peers, mentors and role models either known to the participant or admired from afar, were more likely to be male with participants mentioning fathers "*one of my primary influences is my dad*" (Participant U), uncles, male mentors, male friends and male celebrity entrepreneurs. Only two women were mentioned in the context of being

a role model and this was by female participants (Participant I and Participant L) whom were discussing their mothers.

5.5.4 Personal Growth

For several participants a benefit of participating in extracurricular enterprise activities was the personal growth they felt they had experienced from engagement (Participants A, O, P, R and U). Participation in activities had enhanced these participants' understandings of their own strengths and weaknesses and bolstered their confidence. Participant P described being able to *"find out more about yourself as a person"* and "*figure out your flaws and your positives"* (Participant P). This was echoed by Participant A, who described activities as enabling him to *"understand my strengths and weaknesses*" and subsequently "*gives you a heightened confidence level"* (Participant A). In particular, the opportunities that extracurricular enterprise activities offered in terms of experimentation were regarded as a mechanism for self-discovery. Through extracurricular enterprise activities, participants felt they were exposed to a diversity of tasks, settings, and people that forced them to face uncertainty. Participant K described feeling "*empowered*" after participating in the activities. For some participants, this had also re-invigorated their entrepreneurial passion inspiring them to pursue venture creation:

"*it's inspired me to see if I could go into it [venture creation] and just see where it goes"* (Participant O)

In contrast, participants' described their degree programmes as lacking in practicality and thereby limited in exposing students to personal development opportunities (Participants B, D, E K and M). Participants described extracurricular enterprise activities as stretching their 'person-ness' in ways that the curriculum could not:

"[on a degree programme] yeah you learn business acumen but do you learn about yourself? And at uni [sic] I think people forget about that, they think you go to uni and you get a job. And I think that's what universities have lost .... you should be finding yourself" (Participant P)

This topic was explored further with alumni and staff members who also acknowledged that the logistical restraints of the curriculum meant students may be limited in opportunities to stretch themselves:

> *"[extracurricular enterprise activities are] unbounded, not constrained by academic study because the students will take it wherever they want to take it. There's far too much bounding of study and therefore limiting… if we took the limits off then people will go further than what they are constrained by at the moment"* (Participant 2)

Participants described how participation in extracurricular enterprise activities had furthered their personal development in terms of life experiences, self-awareness and confidence. Whether this would directly benefit their entrepreneurial endeavours was a consideration for many participants but the personal development opportunities were also valued on their own merit. In particular, participants felt the opportunities to experiment enabled them to identify their strengths and weaknesses more effectively. A process which was supported by the peer and mentor networks established during engagement in extracurricular activities.

5.5.5 Future pathways

In terms of future pathways, all of the benefits discussed thus far in this section; increase in skills and knowledge, opportunities for experimentation, personal development and enhancement of social capital, were related in varying degrees to individuals' plans for the future. Participants made links between their acquisition of knowledge, skills and capabilities with their preparedness for a life beyond university whether that was as an entrepreneur or an employee. Participants A, E, K, M, O, Q and S were adamant they would set up or continue to run a business upon graduation and these participants discussed how their engagement in extracurricular enterprise activities had helped them with aspects of preparing for business ownership or furthering their existing business. Participants alluded to the skills, knowledge and experiences they had from extracurricular enterprise activities as feeding into their preparation for entrepreneurial activity:

"The activities I have participated in have provided me with key information and further experience that will be instrumental in my future business endeavours" (Participant S)

For those participants who were more tentative in their ambitions to start a business, engagement in extracurricular enterprise activities had encouraged them to think about venture creation as a possible pathway:

"it wasn't something I had thought about before getting involved in these activities and now it is something I definitely want to do in the future" (Participant R).

Each participant was unique in the combination of benefits they experienced from participation in extracurricular enterprise activities and several participants made links between benefits. For example, skills development, in particular interpersonal and technical skills, were deemed useful in enhancing one's ability to become an entrepreneur but then also transferable to employment settings. The diversification of participant's networks were seen to be related to the ability to access a wider range of knowledge, skills and experiences which was then seen as assisting them in their ability to start a venture. The benefits were not distinctly separated in participant's minds but interconnected in innumerable ways specific to each individual's circumstances.

5.6 Summary

This chapter has presented the commonalities and variations in the data that were emergent under the themes of; reflection upon entrepreneurial learning, use of discourse, participation in extracurricular enterprise activities, motivations to participate in extracurricular enterprise activities and perceived benefits of engagement.

It was found that instigating discussion of entrepreneurial learning was more difficult than anticipated and there was not an obvious divide between the capability of those studying an entrepreneurship degree programme or module(s), and non-entrepreneurship students, in articulating their perceptions of entrepreneurial learning. However, all participants perceived entrepreneurial learning as a positive process and were focused on achieving particular goals such as the formation of a venture or acquisition of resource. For some

participants, a processual view was redundant as their innate entrepreneurial abilities were regarded as sufficient to help them reach their entrepreneurial goals. Participant's use of language revealed a discourse which conceptualised 'entrepreneurs' as autonomous, powerful and distinctive and non-entrepreneurs as restricted, exploited and homogenised.

Participants were usually involved in multiple extracurricular enterprise activities; the average being 2.6 per participant. Networking events were the most popular activity, followed by guest speaker events, coaching and mentoring activities, competitions and workshops, student led activities and social events. Participants expressed multiple motivations to engage in these activities but all shared a common interest either to become or learn about how to become an entrepreneur. This motivation was based upon underlying assumptions regarding entrepreneurship such as a need for autonomy or a desire to make money or create value in society. Participants were particularly keen to expand their networks and develop an array of skills both to enhance their entrepreneurial capabilities and resource and their employability prospects. Extrinsic factors such as prior entrepreneurial experiences, family businesses and education also influenced participants' decisions to engage in extracurricular enterprise activities. Participants' motivations and actions were in many cases aligned, the reason they were motivated to engage in extracurricular enterprise activities had shaped the type of activity they engaged in.

Each participant was unique in the benefits they gained from engaging in extracurricular enterprise activities but there were commonalities, namely; skills development, knowledge acquisition, development of social capital and personal growth. The benefits described by student participants were the same benefits discussed in interviews with staff participants suggesting a coherence in approach between the two groups and strengthening the case that extracurricular enterprise activities are beneficial to participants. All of the benefits discussed were related in varying degrees to individuals' plans for the future. However, not all participants benefited equally from participated in extracurricular enterprise activities.

The data suggests there is a male dominance of extracurricular enterprise activities both in the demographic of those who participate and in the associated role models and mentors.

Chapter 6 will relate the findings that have been presented in Chapter 5 to the extant literature and the research questions. Discussion of findings will be developed to demonstrate how students may develop their entrepreneurial learning processes through extracurricular enterprise activities with specific reference to educational frameworks.

Chapter 6 - Discussion

The primary aim of this research has been to explore the phenomenon of entrepreneurial learning through extracurricular enterprise activities within UK universities. Chapter 5 outlined the findings of the data and enhanced our understanding of the phenomenon of both entrepreneurial learning and extracurricular enterprise activities within a UK HE context. The purpose of Chapter 6 is to relate these findings to each of the research questions of the study to demonstrate how nascent and latent entrepreneurs may develop their entrepreneurial learning processes through engagement in extracurricular enterprise activities. This chapter will relate the empirical findings outlined in Chapter 5 with the extant literature specifically examining the role extracurricular enterprise activities may have in enhancing experiential and social learning processes. This chapter will also present evidence that self-directed learning is increasingly important in the entrepreneurial learning processes of university students. The aim and research questions of the study are detailed below as a reminder:

Research Aim: To explore the phenomenon of entrepreneurial learning, through extracurricular enterprise activity, within UK universities.

Research Question 1 - How do students interpret and apply the theoretical concept of entrepreneurial learning?

Research Question 2 - What types of extracurricular enterprise activities do students choose to engage in?

Research Question 3 - What motivates students to become involved in extracurricular enterprise activities?

Research Question 4 - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities?

6.1 Perceptions of Entrepreneurial Learning

The first research question, how do students interpret and apply the theoretical concept of entrepreneurial learning?' was explored drawing upon qualitative interview data from students (n=23). It was expected that interpretations of entrepreneurial learning would vary as the two components of entrepreneurial learning; 'entrepreneurship' and 'learning' are both intangible concepts shaped by ontological and epistemological standpoints (Wang and Chugh, 2014). Subsequently, conceptions are diverse and the theoretical basis of discussion is fluid (Harrison and Leitch, 2005). It was decided by the researcher that interviews would be the main method of data collection to collect data on this topic as the e-survey was not considered an appropriate method for exploring such a complex and interpretative concept.

Generally, entrepreneurial learning is seen to be processual and dynamic (Minniti and Bygrave, 2001; Rae and Carswell, 2001) and central to this process is identifying and exploiting opportunities for value or venture creation (Kirzner, 1973; Shane and Venkataraman, 2000; Corbett, 2005; Politis, 2005). The above conceptions, particularly the idea that entrepreneurial learning is processual and can be taught, have been highly influential upon enterprise education pedagogy (Löbler, 2006; Neck and Greene, 2011). However, such perspectives were not shared by all of the interview participants. Several participants supported a more traditional view of entrepreneurship, perceiving entrepreneurial abilities to be innate and making clear distinctions between 'entrepreneurs' and 'non-entrepreneurs'. These participants' discussions were more in line with prior work by McClelland (1961), Rotter (1966) and Timmons *et al*., (1985) in identifying traits they believed to be specific to entrepreneurs and devaluing the role of enterprise education in the entrepreneurial process. Although these viewpoints were expressed by those students not studying entrepreneurship programmes or modules, this was a notable finding that

demonstrates an incongruity between the principles of enterprise education and the perceptions of some participants involved in extracurricular enterprise activities.

The language used by participants when discussing entrepreneurship and entrepreneurial learning demonstrated patterns. There were descriptions of the entrepreneur as 'heroic' with masculine terminology that was reflective of historical models which associate masculinity with competence in entrepreneurship (Stevenson, 1990; Gupta *et al*., 2009; Ahl and Marlow, 2012). Entrepreneurial learning is understood as a highly personal experience (Cope and Watts, 2000; Rae, 2003; Cope, 2008) intertwined with aspects of identity formation (Rae 2003, 2005). It has been noted in prior studies that entrepreneurs may view themselves as distinct from non-entrepreneurs (Rae, 2004; Farmer *et al.,* 2011) and this was apparent in the data despite the nascent entrepreneurship status of the majority of participants. A dichotomy between 'entrepreneurs' and 'non-entrepreneurs' emerged with entrepreneurs depicted as autonomous, powerful and distinctive and non-entrepreneurs as restricted, exploited and homogenised. A conceptualisation of this binary discourse and examination of evidence from the data is outlined in more detail in Section 5.2.

Although gendered discourse is increasingly being critiqued by academic communities and select media outlets, there remains the idealised figure of the heroic male entrepreneur present within wider societal discourse (Ahl and Marlow, 2012). Television programmes such as The Apprentice, hosted by self-made millionaire Lord Alan Sugar, exemplify a traditional perspective of the entrepreneur as aggressive, suited, ruthlessly ambitious and male (Martin *et al.,* 2011; Ahl and Marlow, 2012). It appears some participants were internalising this societal discourse through their description of idealised scenarios of retiring at 35 and creating a legacy. Only two women were mentioned in the context of being a role model and this was by female participants discussing their mothers. The vast majority of examples were male celebrities such as Mark Zuckerberg and Lord Alan Sugar

one of which dropped out of university and the other did not participate in further education which was used as ‘evidence’ by participants of the limited influence of education upon entrepreneurial success.

The social constructionist approach of this research entails that the researcher identifies and summarises trends within the data, such as reference to particular discourses, and does not pass judgment on the validity of participants’ perspectives. It was expected that as ‘enterprise’ is a socially constructed concept in itself surrounding discourse will be subjective and negotiated (Lindgren and Packendorff, 2009). However, prior research has explored how the employment of hierarchal language may perpetuate divisions in particular along lines of race, gender and ethnicity (Ogbor, 2000). Classifying entrepreneurial activity in such a binary manner structures entrepreneurship into ‘what is’ and ‘what is not’ and may limit individuals entrepreneurial development by silencing those whom do not reflect the dominant discourse (Foucault, 1970; Ogbor, 2000).

This is problematic as an individual’s engagement in entrepreneurial activity can be mediated by their perceptions of what constitutes an entrepreneur and how closely that aligns with the perception they have of themselves (Farmer *et al.,* 2011). Prior studies have found if women are repeatedly exposed to references of only men as “successful” entrepreneurs then this can limit their entrepreneurial intentions (Gupta e*t al*., 2014). If traditional male based models, which do not reflect the diversity of modern day entrepreneurial activity, are shaping participants’ perceptions of entrepreneurship this may dissuade female engagement in enterprise activities (Martin *et al.,* 2011). Indeed, it was identified in one interview with a female participant that particular extracurricular enterprise activities were male centric in format and had made her feel uncomfortable and unwelcome. This is a notable finding and has curriculum implications. Activities should be designed and delivered to be inclusive and reflective of the diversity of the student body.

Reflection is considered a core component of the learning process (Kolb, 1984; Mezirow, 1991) particularly within constructivist models of learning (Schon, 1983; Boud *et al*., 1985) but individuals can face difficulties in reflecting upon their own learning and particularly in bringing that learning forward to new knowledge (Schon, 1983). In terms of entrepreneurial learning, reflection is also a key element of the process (Deakins and Freel, 1998; Cope and Watts, 2000; Rae, 2004) and has subsequently become integral to the design of enterprise education pedagogy (Neck and Greene, 2011; Higgins *et al*., 2013; Hagg and Kurczewska, 2016). QAA (2012) guidelines for entrepreneurial education outline reflection as a key attribute to be developed through enterprise education. They advise enterprise educators to design learning activities that encourage students to be able to identify their personal development needs and evaluate their own learning. However, encouraging participants in this research to reflect upon their learning was more challenging than anticipated as participants were in some instances hesitant and/or unable to discuss their own entrepreneurial learning. Methodologically, the discovery of participants' difficulty with reflection became a concern for the researcher. It was apparent that if participants struggled to understand and articulate entrepreneurial learning as a concept then ascertaining links between entrepreneurial learning and specific activities such as extracurricular enterprise activities was going to be difficult.

It was hoped this difficulty would be eased through the use of a definition of entrepreneurial learning to guide discussion and prompt the research participants (the methodological rationale for this definition is outlined in Section 4.3.1). However, participants did not seem enthused to discuss the definition at length and their responses lacked criticality. This was a notable finding and raises questions of why participants were either unable or unwilling to share their interpretations of entrepreneurial learning. As seven participants were enrolled on entrepreneurial programmes or modules, it had been expected these participants would be familiar with and open to discussing the concept of

entrepreneurial learning but their discussion of the term was no more detailed than those students not studying entrepreneurship. This may indicate a need for additional training on reflection, and particularly reflecting upon the concept of entrepreneurial learning, to be included in enterprise education activities, a suggestion proposed in prior studies regarding enterprise pedagogy (Neck and Greene, 2011; Higgins *et al.,* 2013; Hagg and Kurczewska, 2016).

Rather than engage in introspective discussions, participants preferred to discuss more 'tangible' concepts such as the milestones they wished to reach with their business or the types of activities they had participated in. For the majority of participants, their learning process was closely linked to the realisation of an end goal. The researcher seized upon this opportunity to develop discussion and encouraged participants to describe the operational elements of entrepreneurial learning instead such as 'when' and 'where' entrepreneurial learning could occur. This line of enquiry proved more successful in drawing out rich discussion and participants identified their educational activities, both in and extracurricular, as platforms for entrepreneurial learning.

Participants perceived their engagement in extracurricular enterprise activities as an opportunity to enhance their entrepreneurial learning and a means to advance a current or future business venture. In turn, engaging in entrepreneurial learning and the venture creation process may act as a motivator to participate in extracurricular enterprise activities. Extracurricular enterprise activities were seen as beneficial in the learning opportunities and access to resources that they afforded. Entrepreneurial learning, venture creation activities, and participation in extracurricular enterprise activities were regarded as mutually beneficial with participation in one enabling progression of the others. Figure 11 depicts this mutually beneficial relationship between participation in extracurricular enterprise activities, entrepreneurial learning and venture creation.

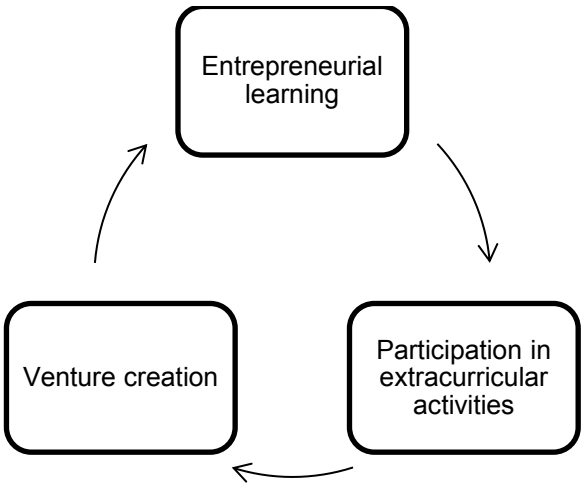

Figure 11. Interrelated nature of participation in extracurricular enterprise activities, venture creation and entrepreneurial learning processes (Author's own)

In support of findings from prior studies regarding entrepreneurial learning and entrepreneurial education (Honig, 2004; Löbler, 2006), those participants studying entrepreneurial education programmes or modules made positive links between the activities of their programme and their entrepreneurial learning but also identified limitations, namely too much theory and not enough 'hands on' and 'practical' activities. Learning opportunities were not always perceived to be confined to curricular, extracurricular or even university based activities with many students pursuing other avenues to self-direct aspects of their learning. Participants were seeking out extracurricular and self-directed enterprise activities in order to gain more "real-life" entrepreneurial experiences.

Participants emphasised the importance of experiential learning opportunities for developing their learning process. They linked entrepreneurial learning with experiential learning which supports prior studies which posit experiential learning as a core component of the entrepreneurial learning process (Minniti and Bygrave, 2001; Cope, 2005; Politis, 2005). Several participants also linked entrepreneurial learning and experiential learning with learning from failure. Failure has been identified as an important part of the entrepreneurial learning process (Deakins and Freel, 1998; Minniti and Bygrave,

2001; Cope, 2010; Ucbasaran *et al*., 2013) but difficult to simulate within an educational environment (Kuratko, 2005; Pittaway and Cope, 2007b).

Entrepreneurial learning was seen to be enacted alone but also in groups. Participants described the social element of learning whereby they observed and collaborated with peers or entrepreneurial others. This supports findings from prior literature that observing entrepreneurial others can act as a conduit to entrepreneurial learning processes (Holcomb *et al.,* 2009; Lévesque *et al.,* 2009; Hamilton, 2011).

6.2 What motivates participation in extracurricular enterprise activities?

Sources of motivation are complex, often closely linked with an individual's personal beliefs and goals which in turn can be mediated by cognitive abilities such as knowledge, skills and abilities (Locke, 2000). An individual may pursue entrepreneurial opportunities for both intrinsic and extrinsic motivations (Shane and Venkataraman, 2000; Elfving, 2008; Shane *et al.,* 2012). In the case of entrepreneurial motivations, contextual factors may shape what is possible such as: access to finance, market conditions and available networks (Aldrich and Zimmer, 1986; Shane *et al.,* 2012). The literature review had highlighted such complexities so the objective in this study was to identify and analyse any common drivers, across both e-survey and interview participants, rather than seeking relationships between particular motivations and actions.

It was found that participants were both intrinsically and extrinsically motivated to engage in extracurricular enterprise activities. Some motivations could be more easily categorised than others into 'intrinsic' or 'extrinsic', for example a desire for self-development as an intrinsic motivator and the ability to compete in the graduate job as an extrinsic motivator. Figure 10 (Section 5.4.7) conceptualised the diversity and complexity of motivations and influencing factors identified in the data. Although participants had diverse motivations specific to their individual contexts there were commonalities. All participants across

Samples A and B wanted to continue to be, become, or learn how to become an entrepreneur. This varied greatly according to individual circumstances but a commonality amongst participants was their motivation to participate in extracurricular enterprise activities to assist in the realisation of their entrepreneurial ambitions. Although this entrepreneurial ambition can be seen as a core motivator, ambitions were fuelled by differing end goals. Some participants wanted to be an entrepreneur to make significant amounts of money whereas for others their main concern was to create value in society.

Participants across both samples wanted to expand their networks, both personally for friendship building and socialising, and professionally to widen their entrepreneurial contacts and resource base. Networking was seen as a useful activity to enhance knowledge, skills and resources and become part of a likeminded community. This development of social capital was also perceived as useful in realising their core motivation of being or becoming an entrepreneur.

Other motivations were not so clearly related to the realisation of specific entrepreneurial ambitions. As identified in prior empirical studies extracurricular activities can be closely associated by students as means to enhance their CV and employability prospects (Milner *et al.,* 2016). Several participants stated they had participated in extracurricular enterprise activities in order to enhance their employability prospects. Evidently, if participants wished to enhance their employability then they were deviating from their core aim of realising their entrepreneurial ambitions. Although every interview participant expressed a preference for self-employment, 9 envisaged going into employment or further education upon graduation and of the remaining 14 participants over half did not have a clear timeline for starting their own venture. It appeared that employability considerations were high on participants' agendas. It is recognised that participants in this study will be graduating into a highly competitive global job market and that engagement in

extracurricular activities, of any variety, may be strategic in order to enhance employability prospects (Milner *et al*., 2016). The uncertainty of participants' futures beyond graduation may act as a motivator for the consideration of entrepreneurship as a future pathway (Lilischkis *et al.,* 2015; European Commission, 2016). It seemed to the researcher there was a tension in motivations here between individuals wanting to be an entrepreneur and needing to go into employment.

Figure 12 conceptualises this tension found in participants' responses between the desire to be an entrepreneur and the need to be an employee. Being an entrepreneur was desirable to all participants and formed the core intrinsic motivation but it was not always deemed to be realistic without first being an employee. The latter formed the core extrinsic motivation. Growing ones network and developing skills were also important motivators to engage in extracurricular enterprise activities and embraced both core motivations as the acquiring of knowledge, skills and resource was seen as transferable to any number of settings whether that be as an entrepreneur or employee.

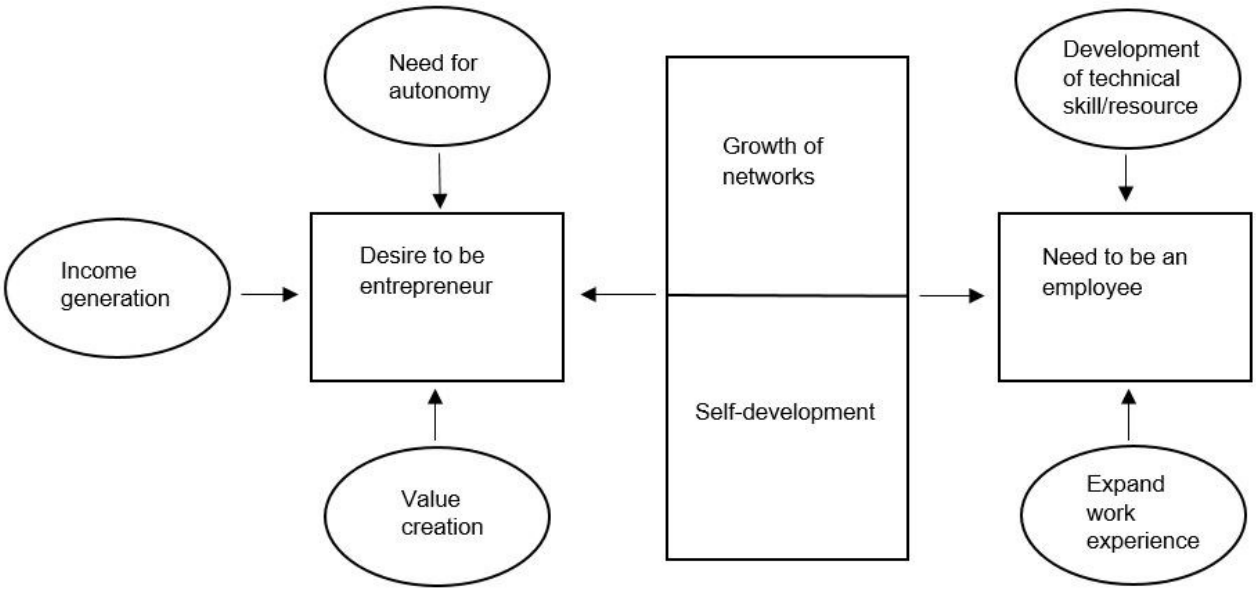

Figure 12. Participant's motivations split by desire and necessity (Author's own)

When participants referred to the motivations that underpinned their desire to be an entrepreneur, they expressed a strong need for autonomy. They wanted to be their own boss, to decide their own finances and this was seen to be realisable if they pursued their own venture. Several participants wanted to make substantial amounts of money, others to have an impact on society, both of which were perceived to be viable when an entrepreneur but more difficult as an employee. This perception of what was possible as an entrepreneur compared to an employee mirrored the binary discourse that was used by participants throughout discussions of entrepreneurial learning. Entrepreneurship was in some ways held on a pedestal and was seen as more desirable when compared to being an employee which was a “need to do” rather than “want to do”. For example, some participants felt employment was undesirable but necessary upon graduation in order to acquire technical skills and obtain work experience that could inform future endeavours.

Within motivation theory, intention is perceived to be an indicator of behaviour (Azjen, 1991) but is mediated by factors such as desirability to perform the behaviour, perceived ease of performing the behaviour, disposition to act on one’s own decisions and influence of significant others and subjective norms (Krueger *et al.,* 2000). The role of significant others and subjective norms was apparent from the data. Extrinsic factors such as family business experiences, prior entrepreneurial experiences and education all affected individuals’ propensity to engage in extracurricular enterprise activities to varying degrees. The influence of family business experiences upon motivations to engage was particularly notable. Prior research has shown that if an individual has an entrepreneurial family member then this can increase entrepreneurial intention and self-efficacy levels (Hamilton, 2011; Sieger *et al*., 2014). The research findings reflect the literature as participants considered that the first and second hand experiences of entrepreneurship they had gained from observing, listening to and participating in a family business had provided

them with valuable knowledge and experience of entrepreneurship and influenced their decision to engage in entrepreneurial activities. For some this had been positive, they had felt encouraged towards entrepreneurship, whereas for others they felt pressured by their family to engage in entrepreneurial activities.

Although there were commonalities in the data which were visually depicted in Figure 10, the researcher was cautious to draw links between motivations and actions as intentions do not always lead to immediate actions and may change over time (Ryan and Deci, 2000; Elfving, 2008). What a participant claimed to be motivated by during the interviews may evolve as that participant reflects upon past and present actions. As data was not collected pre and post engagement in extracurricular enterprise activities it was not possible to measure any differences in what participants stated were their motivations to engage before and after engagement.

6.3 Perceived benefits of engaging in extracurricular enterprise activities

This section discusses the evidence related to Research Question Four - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities? The research sought to identify what benefits participants perceived they gained from engaging in extracurricular enterprise activities and how these perceptions may align or deviate from existing literature.

Significant resources are dedicated to the implementation and delivery of extracurricular activities at universities on the basis that activities will benefit participants (Rae *et al.,* 2012; Lilischkis *et al.,* 2015; Pittaway *et al.,* 2015). Extracurricular activities are seen to be valuable for enhancing individual's employability skills and prospects (Watson, 2011; Milner *et al.,* 2016) and developing an array of interpersonal and 'soft' skills regardless of subject discipline (Watson, 2011; Bartkus *et al.,* 2012; Milner *et al.,* 2016). Extracurricular

enterprise activities in particular are seen as useful in providing opportunities to apply learning outside the classroom (Vanevenhoven and Drago, 2015; Jones *et al.,* 2015; Lilischkis *et al.,* 2015), important for experiential learning processes, and the collective nature of many of the activities are seen to promote processes of social learning (Pittaway *et al.,* 2011; 2015). There was evidence from the data, in support of prior literature, demonstrating that extracurricular enterprise activities are a positive development not just for students studying entrepreneurship but any students in terms of enhancing their knowledge, skills and capabilities.

Participants identified a range of benefits which varied according to the breadth and depth of activities they had engaged in and were often interrelated. Figure 13 depicts the benefits as perceived by participants from engaging with extracurricular enterprise activities. These benefits range from internalised benefits such as a growth in self-belief to externally focused goals such as an enhanced CV. They also range across the spectrum of the venture creation process from ideation to business registration.

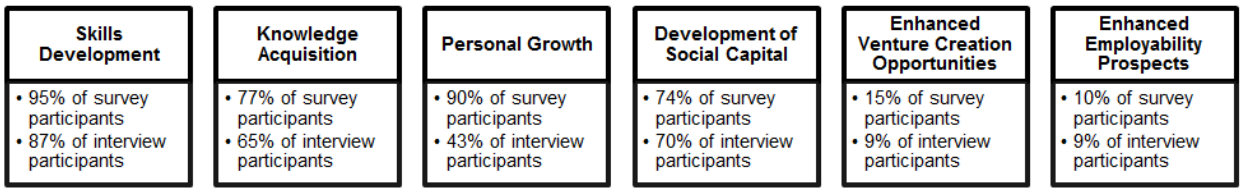

Figure 13. Benefits to individuals engaged in extracurricular enterprise activities (Author's own).

The benefits found in the data mirror those presented in prior research, in particular; enhanced employability prospects, skills development and development of social capital (Lilischkis *et al.,* 2015; Pittaway *et al.,* 2015). Benefits also aligned in many cases with motivations indicating that participants achieved what they had intended to through their participation. This suggests well designed extracurricular activities that deliver on their objectives. However, when students discussed their motivations it often naturally led to a discussion of benefits and it became hard to pick out what came first. Did the motivation of

the individual affect what they perceived to be the benefits? If they were motivated by a particular concern did they then disregard or not realise other benefits of the activities? Some benefits were also anticipated rather than realised. Participants discussed benefiting from engaging in extracurricular enterprise activities in terms of enhanced employability yet they were still studying. This 'enhanced employability' was anticipated and yet to be tested.

It was recognised that extracurricular enterprise activities can face challenges in terms of delivery and implementation. Traditionally, provision is centred within University Business Schools (Rae *et al*., 2012; Lilischkis *et al*., 2015; Preedy and Jones, 2015), often initiated and run by small groups or individuals which means they are vulnerable to being disbanded if groups become overworked or leave an institution or they struggle to obtain institution wide backing (Lilischkis *et al.,* 2015; Preedy and Jones, 2015). Activities can be costly and time consuming to implement and run (Lilischkis *et al.,* 2015) and funding can be short-term and fragile (Hannon 2007; Rae *et al*., 2012). The extent to which these possible challenges could hinder participant's ability to reap the benefits of participating in extracurricular enterprise activities was an area of enquiry in the study.

Funding challenges were not highlighted in the data collected, even in the interviews with staff which had been surprising to the researcher considering the themes found within the literature review. Either students and staff were unaware of any funding challenges or none were present in these particular HEIs. On the contrary, extracurricular enterprise activities seemed to be growing at the sampled institutions, with the range of activities increasing annually. However, Business School dominance of activities was a notable challenge discussed with several student and staff interview participants. Participants stated that extracurricular enterprise activities tended to be housed within their respective

Business Schools. This was critiqued by participants who felt that for students from other faculties it was difficult to gain awareness of activities on offer or may dissuade non-business students from joining. A Business School dominance of activities was also perceived to limit the diversity of the networks participants could pursue. Despite the Business School dominance that was discussed, participation in extracurricular enterprise activities appears to provide participants with a readily available network of likeminded, yet diverse, people. These networks were seen to be valuable for friendship building and for extending professional networks that may become sources of knowledge, support and potential finance needed to set up or maintain their venture (Field, 2003; Greve and Salaff, 2003; Cope *et al*., 2007).

According to the QAA (2012) guidance, the aim of enterprise education is to develop entrepreneurial effectiveness. It is advised enterprise educators should focus upon enhancing individuals; Enterprise awareness, defined as “understanding and awareness of enterprising and entrepreneurial activities and their significance in relation to the wider world” (p. 12), Entrepreneurial mind set: defined as when students “develop self-awareness of their own enterprising and entrepreneurial qualities, as well as the motivation and self-discipline to apply these flexibly in different contexts to achieve desired results” (p. 13) and Entrepreneurial capability which is the ability to be demonstrative of entrepreneurial skill (p. 13). All of these core areas were described in some form within participant responses and Table 16 outlines how the benefits identified by participants of engaging in extracurricular enterprise activities support the objectives of entrepreneurial education as identified by QAA (2012).

Benefits for participants	QAA guidelines for enterprise education (2012)
Knowledge Acquisition	"awareness of enterprising and entrepreneurial activities and their significance in relation to the wider world" (QAA, 2012 :12)
Skills Development	"Well developed interpersonal skills" (QAA, 2012 : 20) "gaining practical experience of enterprise" (QAA, 2012 : 14)
Development of social capital	"use of social skills to build trust, relationships and networks and to communicate ideas and information (networking and communication)." (QAA, 2012 : 16)
Personal Growth	"enhance self-confidence and belief through practice of enterprising skills and behaviours (self-confidence)" (QAA, 2012 : 16)
Enhanced employability prospects	"Enterprise education can enhance careers education and student employability by enabling students to be more opportunity-focussed, self-aware and attuned to the business environment." (QAA, 2012 : 9)
Enhanced venture creation opportunities	"undertake tasks specific to new venture creation or putting an enterprising idea into action" (QAA, 2012 : 17)

Table 16. Alignment between QAA (2012) guidelines for effective enterprise education and extracurricular enterprise activities.

Participants described enhanced entrepreneurial knowledge, skills and capabilities, personal development, strong motivations to pursue venture creation, and development of social capital. However, the enhancement of reflection abilities was not discussed by participants as a benefit of participating in extracurricular enterprise activities. QAA (2012) guidelines outline reflection as a key attribute to be developed through enterprise education and advise enterprise educators to design learning activities that encourage students to be able to identify their personal development needs and evaluate their own learning. However, it appears that reflective abilities were either not enhanced, or not recognised to be enhanced, through participation in extracurricular enterprise activities.

6.4 Do extracurricular enterprise activities help or hinder entrepreneurial learning?

When participants discussed benefits of engaging in extracurricular enterprise activities they often alluded to specific learning benefits. Table 17 lists the benefits identified by participants of engaging in extracurricular enterprise activities alongside suggested learning outcomes.

Benefit	Identified learning outcome
Skills Development	New or refined skills set
Knowledge Acquisition	New information/knowledge
Personal Growth	Learning about oneself
Enhanced venture creation opportunities	Experiential learning experiences
Development of social capital	Social learning experiences

Table 17. Benefits and learning outcomes of engaging in extracurricular enterprise activities

Each benefit that was described by a participant led to a discussion of learning in some capacity. For example when participants discussed skills development they would mention particular skills, such as networking, that they felt had improved or they were better informed about. The one benefit that was not linked to learning was the anticipated benefit of 'enhanced employability'. Although described by participants as a benefit, this was more of an aim and although it was anticipated learning may result from being employed this was not realisable at present for the majority of individuals whom were studying full-time.

The themes of experiential and social learning that emerged from the data as a learning outcome align with the entrepreneurial learning literature that links experiential and social learning with entrepreneurial learning (Cope and Watts, 2000; Minniti and Bygrave, 2001; Cope, 2005; Politis, 2005). In particular, Kolb's (1984) experiential learning cycle which has been a particularly dominant perspective within the entrepreneurial learning research in large part due to the practical nature of entrepreneurship (Wang and Chugh, 2014) was apparent in participant's responses. To theoretically frame the discussion of links between engagement in extracurricular enterprise activities and entrepreneurial learning the remainder of this section will relate the empirical findings to experiential learning theory and social learning theory.

6.4.1 Experiential learning

Experiential learning theory has been employed as a basis for examining entrepreneurial learning in prior studies. Empirical studies have found links between prior entrepreneurial experience and effective entrepreneurial learning (Minniti and Bygrave, 2001; Cope, 2005; Politis, 2005). Participants identified throughout the research the importance of gaining

practical learning opportunities as this was both an aspect of how they perceived the concept of entrepreneurial learning (as discussed in Section 5.1) and also a motivator to engage in extracurricular enterprise activities (as discussed in Section 5.3).

Participants had identified limitations of in curricular activities in providing opportunities for practical learning and 'real life' experiences. Degree programmes were regarded as overly theoretical and both student and staff participants recognised that in curricula activity faced pedagogical limitations which restricted opportunities for experiential learning, in particular practicing dealing with uncertainty. This finding echoes academic and practitioner calls for increased innovation and variety in enterprise education methods and in particular a need for experiential learning opportunities to be embedded in the curriculum (Carey and Matlay, 2011; Pittaway and Edwards, 2012; Neck *et al.,* 2014).

Table 18 lists the stages of the experiential learning process (Kolb, 1984) and marks which stages were identified in participants' data. It was found that although extracurricular activities gave participants a useful outlet to experiment with their learning and gain practical experiences, and this has been identified as an important element of the entrepreneurial learning process, what appeared to be missing were opportunities for reflection.

Elements of experiential learning (Kolb, 1984)	**Outcome of engaging in extracurricular enterprise activities**
Having experiences	✓
Reflection on experience	×
Abstract conceptualisation	×
Active experimentation	✓

Table 18. Alignment of experiential learning theory and learning outcomes of engaging in extracurricular enterprise activities

Participants had linked learning from failure with the entrepreneurial learning process and had described being motivated to engage in extracurricular enterprise activities so they could experiment with 'real life' situations and practice dealing with uncertainty. However, simulating entrepreneurial learning in this manner is challenging within a HE environment

as it is unethical to exposure students to financial exposure and risk (Pittaway and Cope, 2007b; Pittaway *et al*., 2015). Studies have also found that multiple entrepreneurs are more likely to rapidly process a failure and take away useful learning points by engaging in reflection-in and reflection-on action (Redrup, 2005; Politis, 2008). For students, whom are often latent or nascent entrepreneurs and have had limited real world business experience (McGee *et al*., 2009), processing uncertainty may be especially challenging and yet it is an important element of the entrepreneurial learning process (Cope and Watts, 2000; Rae and Carswell, 2001; Cope 2005; Cope, 2010). Again, reflection is crucial here as entrepreneurial education activities should simulate situations of uncertainty while also ensuring reflection processes are embedded that enable individuals to question existing knowledge and their own entrepreneurial practice in order to take learning forward (Higgins *et al.,* 2013). This highlights a shortcoming of both in and extracurricular entrepreneurial education and raises questions regarding the role of entrepreneurial education in exposing students to situations of uncertainty and failure while supporting them in the reflection exercises needed to stimulate learning. This will be examined further in the implications section of Chapter 7.

6.4.2 Social learning

Participants perceived their learning to be in conjunction with others, both motivated and enhanced by the presence of entrepreneurial learning communities. Although extracurricular activities varied in content and delivery at the sampled institutions there was a common perception that students who engaged in these activities, regardless of individual circumstances, would become part of a community. Prior studies have highlighted how individuals within community settings, such as sports teams, find their learning enhanced by others with a shared purpose (Lave and Wenger, 1991). Extracurricular enterprise activities were seen to bring together like-minded students with

common goals, to support and nurture one another's entrepreneurial development. This is important for learning processes as individuals may "socially share" knowledge before reflecting and processing it themselves (Vygotsky, 1978). Social learning theory as a basis for examining entrepreneurial learning has precedence in the work of authors such as Rae and Carswell (2001) and Taylor and Thorpe (2004).

The importance of networks for student entrepreneurial learning was apparent from the data. Inter-disciplinary networks were formed and bound by a shared interest in entrepreneurship that participants utilised to find out information, seek advice and mentors, and collaborate on ideas. Participants stated that their entrepreneurial thought processes were stimulated during such events as they could interact with a diverse range of people. Networks are a facet of an individual's social capital (Anderson and Jack, 2002), which is important in supporting nascent entrepreneurs with business set up (Davidsson and Honig, 2003). Small networks can limit an entrepreneur even if they reduce uncertainty (Greve and Shalaff, 2003; Cope *et al.,* 2007) so this development of networks is important in enhancing entrepreneurial development. The empirical data supports existing literature which emphasises the centrality of networking to entrepreneurial capability.

Participants discussed both informal and formal social groupings that they had participated in to develop their entrepreneurial knowledge, skills and capabilities. This included student led enterprise groups. Thus far empirical data on student led enterprise groups' roles, activities and contribution to entrepreneurial learning has been limited (Pittaway *et al.,* 2015). Prior studies suggest that student led enterprise groups may enhance entrepreneurial learning through their provision of opportunities for experiential learning (Pittaway and Cope, 2007a; Pittaway *et al.,* 2011; Pittaway and Edwards, 2012) and enhancement of leadership, team working, and networking skills, broadly defined as 'enterprise skills' (Pittaway *et al.,* 2011). The often collaborative nature of the entrepreneurial learning process (Taylor and Thorpe, 2004) would suggest that student led

enterprise groups could be a suitable platform for enhancing students' entrepreneurial learning.

Changes to self-efficacy, the level of confidence an individual has in their ability to start a venture, is seen as an important outcome of entrepreneurial learning (Bird, 1988; 1992). The potential that extracurricular enterprise activities may have in enhancing participant's confidence and self-efficacy was an area of discussion in the interviews. Participants described an increase in their self-confidence and acquiring knowledge and resource that made them feel more prepared for entrepreneurial activities in the future. Participants saw extracurricular enterprise activities as a platform to practice mini business failures and thereby develop their ability to cope with liabilities of newness. The ability to cope with "liabilities of newness', the additional learning costs involved in new tasks, is an important component of entrepreneurial learning (Politis, 2005). This was supported by a network of mentors and coaches. It has been identified in prior studies that access to coaching and mentoring activities is important for helping individuals develop and progress entrepreneurial ideas (Brookfield, 1986) and this was apparent in the data.

Table 19 outlines how key social learning theories (Vygotsky, 1978; Lave and Wenger, 1991; Taylor and Thorpe, 2004; Pittaway *et al.,* 2011) align with the learning outcomes of participating in extracurricular enterprise activities.

Elements of social learning theory	**Outcome of engaging in extracurricular enterprise activities**
Observation of others (Vygotsky, 1978)	✓
Development of networks (Field, 2003)	✓
Community of Practice (Lave and Wenger, 1991)	✓

Table 19. Alignment of social learning theory and learning outcomes of engaging in extracurricular enterprise activities

Extracurricular enterprise activities provide participants with the opportunity to observe others, develop networks and become part of a community of practice. The extent to which

this is possible for an individual will be dependent on the networks available and ease of access (Greve and Shalaff, 2003). It is important to note here that socio-economic factors may affect an individual's propensity and ability to learn in conjunction with others. This was demonstrated in the data in terms of gender where there was a male dominance of activities and dominant masculine discourse. Although how gender may affect the entrepreneurial process was not a topic of enquiry in the study, it is important to note that a male dominance in these types of activities may have the potential to disadvantage female entrepreneurial advancement.

6.4.3 Self-directed learning

It was found that participants were often self-motivated to learn about entrepreneurship seeking out activities both within and outside of the university to enhance their learning. The actions of participants whereby they independently seek information and resources to develop their entrepreneurial knowledge and capability is an example of self-directed learning. Online resources were particularly popular and perceived to provide participants with additional 'real world' perspectives. Participants used multiple online sources such as Twitter, LinkedIn and Forbes to acquire information regarding entrepreneurship and often shared information publically and with their peers through social media platforms. The research found these independent learning activities were valued by students for the opportunities they afforded for entrepreneurial development.

Thus far, research examining self-directed learning activities and entrepreneurial learning is limited despite self-management and autonomy recognised as critical elements of entrepreneurial learning (Van Gelderen, 2010). Tseng (2013) explored the conceptual relationship between self-directed learning and entrepreneurial performance with self-directed learning proposed as supporting entrepreneurial performance and Van Gelderen (2010) explored the importance of entrepreneurship students developing the capacity for autonomous action with self-directed learning as a conduit. Other studies have linked

what could be classified as self-directed learning activities, such as student led enterprise groups, with enhancing entrepreneurial learning through opportunities for experiential learning (Pittaway and Cope, 2007b; Pittaway *et al*., 2011; Pittaway and Edwards, 2012) but not made an explicit link between self-directed learning theory and entrepreneurial learning. This study's findings, that self-directed learning activities are an important aspect of student's entrepreneurial learning processes, addresses a gap in the literature where the self-directed learning activities of HE students are examined in relation to their entrepreneurial learning processes.

Engagement in self-directed learning activities was closely linked with participant motivations. Participants appeared both 'pushed' and 'pulled' towards self-directed learning activities. 'Pushed' because of a perception that in curricular activities were overly theoretical and 'pulled' by the ease and convenience of online sources to provide information 24 hours a day. However, the QAA (2012) recommends that entrepreneurial practice should be underpinned by theory, giving a combination of learning both 'about' and 'for' within the curriculum (QAA, 2012) yet self-directed learning activities potentially have little to no theoretical underpinning as sources are self-selected. This has implications for practice, how can educators encourage self-directed learning activities thereby enhancing student's autonomous learning capabilities while ensuring quality control?

6.5 Summary

The findings discussed in this chapter confirm prior literature that entrepreneurial learning is a dynamic and individualized process (Rae and Carswell, 2001; Cope, 2005a; Politis, 2005) enacted through experiential and social learning activities (Rae, 2000; Politis, 2005). The original contribution of this research is to highlight the role that extracurricular activities, those that are voluntary and sometimes student initiated, have in enhancing entrepreneurial learning processes. The conceptual framework, Figure 14, positions self-directed learning activities as an important conduit to entrepreneurial learning processes alongside experiential and social learning activities.

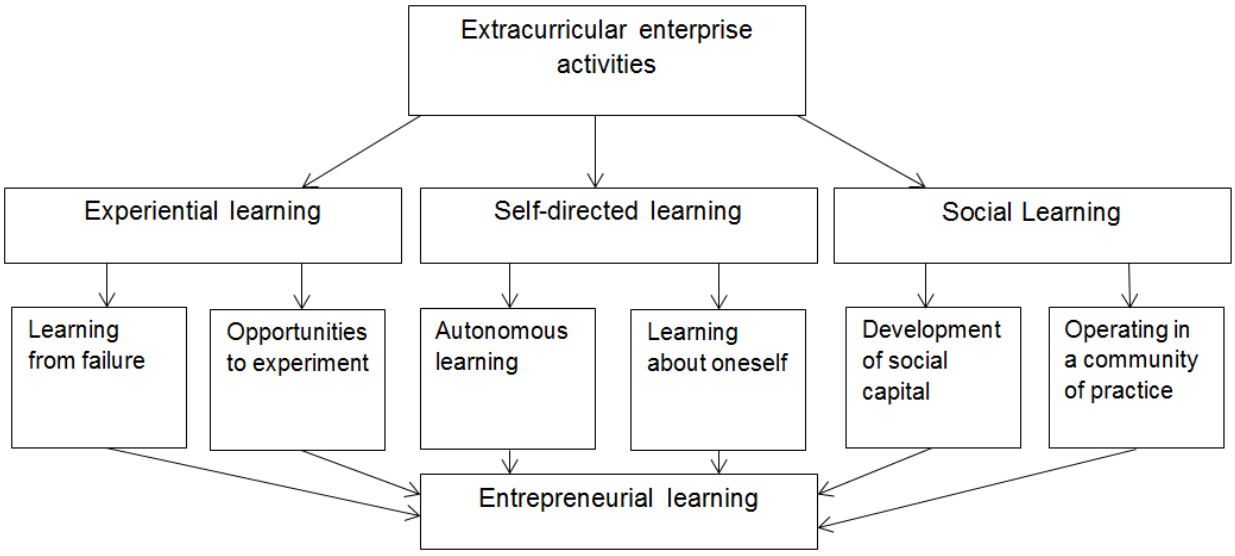

Figure 14. Conceptual Framework of links between entrepreneurial learning and extracurricular enterprise activities (Author's own).

Table 20 outlines the learning benefits identified by research participants of participating in extracurricular enterprise activities aligned with the extant entrepreneurial learning literature. This demonstrates how the findings from the data contribute to and develops existing knowledge, particularly in relation to self-directed entrepreneurial learning literature which is an emerging area.

Participant's learning benefits of engaging in extracurricular enterprise activities	Aspects of Entrepreneurial learning (Key Authors)
Knowledge Acquisition	Knowledge acquisition (Minniti and Bygrave, 2001; Politis, 2005; Holcomb *et al.,* 2009).
Experiential learning	Liabilities of newness (Politis, 2005) Discontinuities and Crises (Cope and Watts, 2000; Cope, 2011)
Personal Growth	Identity formation processes (Rae and Carswell, 2001; Rae, 2004)
Skills Development	Experiential learning (Deakins and Freel, 1998; Minniti and Bygrave, 2001; Sarasvathy, 2001; Politis, 2005)
Development of Social Capital	Co-participation (Taylor and Thorpe, 2004; Rae 2005) Observation (Holcomb *et al.,* 2009)
Learning autonomously, leading ones learning	Self-directed entrepreneurial learning (Van Gelderen, 2010; Tseng, 2013)

Table 20. Participant learning benefits and aspects of entrepreneurial learning

This chapter has brought together the findings of the research and examined it in light of existing knowledge to identify where this study aligns with and contributes to the literature. Throughout discussion of findings have been references to the implications the findings may have for policy and practice. The following chapter will confirm the contribution to knowledge achieved within the study and identify key implications for policy and practice.

Chapter 7 - Conclusions

This chapter will firstly summarise the contribution of the research to the understanding of entrepreneurial learning within a HE environment. The implications of the research for policy and practice will be outlined to demonstrate how the research can be applied practically and its relevance for key stakeholders. A critical reflection on the study's methodology and methods will discuss the limitations of the research and what the researcher has learnt from the process. Finally, areas for future research will be identified and discussed.

7.1 Contribution

The research topic, extracurricular enterprise activity and entrepreneurial learning within UK HEIs, is an area of limited prior research. This study brought focus to extracurricular enterprise activities, an important aspect of the enterprise education offer at UK HEIs, and related such activities to existing research on entrepreneurial learning. This section reviews the contribution to knowledge this study has for policy, practice and the extant literature.

This study contributes to the existing debate on the value of extracurricular enterprise activities (Rae *et al.,*2012; Lilischkis *et al.,* 2015; Vanevenhoven and Drago, 2015). Thus far research examining extracurricular enterprise activities within UK HEIs has been limited to mapping exercises or examining the educator perspective (Rae *et al.,* 2012; Lilischkis *et al*., 2015; Vanevenhoven and Drago, 2015). The data from this study provides an insight into the student perspective of these activities and goes beyond mapping activities to examine what benefits can be gained from participation. This contribution is important in highlighting 'what works' in enterprise education and has potential to inform the design and delivery of enterprise education activities.

Rich descriptive data, obtained through qualitative enquiry, provided a detailed insight into students' perspectives of their participation in extracurricular enterprise activities and their entrepreneurial learning processes. The links already posited in the literature between entrepreneurial learning and experiential learning was confirmed by the data but the role of reflection was found to be diminished. Participants struggled to articulate their reflection processes and in some cases it appeared that reflective processes did not consciously occur. This is a notable contribution to the entrepreneurial learning literature through the presentation of empirical research evidencing the strengths, but also the limitations, of experiential learning as a guiding framework for entrepreneurial learning research.

This study also contributes insight into how students interpret and apply the theoretical concept of entrepreneurial learning which has been identified as an area lacking within the current literature (Mueller and Anderson, 2014; Wang and Chugh, 2014). Improved understanding of student's interpretation and application of entrepreneurial learning has the potential to enable a more effective understanding of the entrepreneurial process within a HE context. With the continued debate regarding how best to teach enterprise and entrepreneurship education (Neck and Greene, 2011; Johannisson, 2016), greater insight into how students understand their own learning processes and what activities they engage in to enhance their learning will be of value to improving educator's practice.

Links already posited in the literature between social learning theories and entrepreneurial learning was also confirmed. This study supports social learning models in finding that participants observed others to enhance their entrepreneurial learning through modelling behaviours (Bandura, 1977; Vygotsky, 1979). Participants also collaborated in a 'community of practice', forming friendships and likeminded communities to enhance both individual and collective learning outcomes. The emerging role of student led extracurricular enterprise activities such as enterprise societies was presented which supports prior social learning research regarding processes of co-participation (Taylor and

Thorpe, 2004). Such groups are growing yet existing research examining the groups' remains limited (Pittaway *et al.,* 2011; 2015). This study contributes significantly to the nascent literature regarding student led enterprise, highlighting the distinction between staff led and student led extracurricular enterprise activities, a review of the global and national organisations that exist to support student led activities (Table 4), and evidence of the benefits that can be gained from participating in these communities of practice.

The research confirmed findings from prior studies of the types of extracurricular activities HEI students engage in (Rae *et al.,* 2012; Lilschkis et al., 2015; Vanevenhoven and Drago, 2015), and how these activities may aid entrepreneurial learning processes through the opportunities they afford for experiential and social learning (Pittaway *et al.,* 2011; 2015). However, this research contributes a new perspective for examining entrepreneurial learning through extracurricular enterprise activities; that of self-directed learning. It was found participants sought to learn experientially but wanted to create the environment themselves in which to gain learning experiences. Participants wanted to learn socially but to be selective in the social environments they placed themselves within and who they might learn from. For these reasons they sought out extracurricular enterprise activities but also initiated activities of their own. This took the form of student led groupings but also individual self-directed learning activities often through online platforms. The production of a conceptual model of entrepreneurial learning through engagement in extracurricular enterprise activity (Figure 14) depicts the centrality of self-directed learning activities to students' entrepreneurial learning processes. This is a significant contribution to the extant literature as it widens the scope of examination of extracurricular enterprise activities to consider those activities that are also student initiated and self-directed and proposes that SDL activities be integrated into models of entrepreneurial learning. The conceptual framework (Figure 14) has application for theory building and informing the design of enterprise education.

In summary, this research has value in contributing to the existing debate on the value of extracurricular enterprise activities (Rae *et al.,* 2012; Lilschkis *et al.,* 2015; Vanevenhoven and Drago, 2015) by providing empirical evidence that goes beyond mapping these activities from an educator perspective to examining the benefits of engagement from a student perspective. The examination of engagement in these activities and students' conceptualisation of entrepreneurial learning within a HE setting contributes an examination of engagement in extracurricular enterprise activities and enhanced entrepreneurial learning processes. This research reaffirms the importance of experiential and social learning opportunities in aiding entrepreneurial learning but presents the centrality of self-directed learning activities to students' entrepreneurial learning processes. The latter being an under-researched area within the entrepreneurial learning and enterprise education literature. It is recognised that the findings are bound to the context they were gathered within, that of UK HEIs, thereby some conclusions are specific to a UK setting and others will have broader application.

7.2 Implications

This section will outline implications for both policy and practice. These implications are intended as a useful basis for educational policymakers and enterprise educators to consider amendments to existing entrepreneurial education provision. The researcher recognises that each educator will face different circumstances and that some of these implications may not be applicable in their context. Considering the focus of this research on the student perspective, a further set of implications is provided which are intended to provide latent and nascent student entrepreneurs with suggestions of how they could more effectively stimulate their own entrepreneurial learning processes.

Implications for policy and practice:

Extracurricular enterprise activities were valued by both students and educators in the opportunities they afforded to learn experientially, socially and independently. Benefits to

participants included; skills development, knowledge acquisition, personal growth, enhanced social capital and assistance in future pathways whether that be as an entrepreneur or an employee. This suggests that extracurricular enterprise activities should be encouraged at universities and the effort put in by educators to design and deliver these activities be continued.

However, it appeared that some participants had a glamourized view of entrepreneurship that was fuelling their motivations and engagement in extracurricular enterprise activities. Gendered discourse was also prevalent in the data in terms of the examples students gave of role models, guest speakers and even the range of activities available at their HEIs. Gendered discourse has already been identified as an issue within enterprise education in terms of the potential to dissuade female participants from engaging in entrepreneurial activity (Martin *et al*., 2011). Without challenge, stereotyped discourse could lead to, or encourage a narrowing of entrepreneurial intentions for some participants, create idealised ambitions and/or perpetuate stereotypes regarding entrepreneurs. There may be a role for enterprise educators here in encouraging criticality and it is recommended that enterprise educators embed critical exercises within enterprise education activities to encourage students to question societal discourse and critique their own assumptions and preconceptions regarding entrepreneurship.

Reflection upon learning appeared to be an area of difficulty for many participants yet this is considered an important outcome of entrepreneurial education (QAA, 2012). There appears to be a need for greater support for students in their processes of reflection. There did not appear to be any reflection exercises included within the extracurricular enterprise activities participants engaged in. It is suggested that for those who design and deliver extracurricular enterprise activities there should be attempts to embed critical reflection into the activities on offer, the criteria for which could be derived from the QAA guidelines for entrepreneurial education.

The social aspect of extracurricular enterprise activities was an important theme emergent from the data. Those who participated in extracurricular enterprise activities discussed the development and enhancement of their social capital and described activities that were led by students akin to communities of practice. Educators can capitalise on these emergent groups and encourage their continuation thereby offering students additional routes to developing their entrepreneurial knowledge, skills and experience. However, the majority of participants in extracurricular enterprise activities were studying business or were required to access extracurricular enterprise activities through their respective Business Schools. Participants discussed a Business School dominance of extracurricular enterprise activities which was seen to limit participants' opportunities to diversity their networks particularly with peers from other disciplines. Prior research into enterprise extracurricular activities has also found extracurricular enterprise activities are often implemented by and housed within Business Schools and subsequently participated in by mainly Business School students (Hannon, 2007; Klofsten and Jones-Evans, 2000; Pittaway and Hannon, 2008; Preedy and Jones, 2015). It is recommended that extracurricular enterprise activities are offered across all faculties and advertised to a more diverse audience to encourage interdisciplinary connections between students and a wider pool of participants.

Despite the efforts of the UK enterprise educator community to encourage more 'for' and 'through' forms of education (Gibb, 2002), apparent in the data was both student and staff frustration with overly theoretical and structured curriculum activities. A suggestion is that enterprise educators increase the use of self-directed learning activities within degree programmes. This may take the form of connecting up the activities students may engage in outside of the curriculum more effectively with aspects of the curriculum, for example students could evaluate their own participation in student led activities. It could also take the form of utilising the online resources that students currently access to enhance their

entrepreneurial learning and encouraging students to critique such sources and their utility in their educational journey. An issue with students using online sources to supplement their entrepreneurial learning can be quality control. Many of these sources are peer generated content and as such as not validated or even known to some enterprise educators. By educators encouraging students to critique the sources that they are independently seeking online then self-directed learning activity, and thereby autonomous learning, is encouraged while maintaining a degree of quality control.

Implications for students:

Increasingly, students are involved in the design and delivery of extracurricular enterprise activities, particularly in the form of student enterprise groups. All of the implications suggested above to enterprise educators can also apply to those students who may design and deliver their own extracurricular activities. There is a need for activities to be inclusive, challenging of dominant discourses and encouraging of students' processes of critical reflection. Those students to whom this is applicable could evaluate existing extracurricular enterprise activities to ascertain whether they are; inclusive to all demographics within their university, questioning the status quo rather than perpetuating it, and if participants are adequately encouraged and supported to reflect upon their learning.

Students have various existing routes they can utilise to feedback their thoughts on the student experience, such as the National Student Survey (NSS). However, to encourage speedier lines of communication between students and educators regarding entrepreneurial activities it is suggested that, alongside using official channels such as the NSS, students liaise directly with enterprise educators to express their opinions on entrepreneurial activities at their HEIs. This could involve setting up a staff-student forum on entrepreneurial education whereby staff and students could work together in a

partnership approach to evaluate the most effective means to enhance entrepreneurial learning processes.

Self-directed learning activities have been identified in this study as a useful mechanism for enhancing entrepreneurial learning. To ensure that students are deriving the most benefit possible from these activities, it is suggested that students share with educators the resources they are using to self-direct aspects of their learning process. This may lead to such resources being included within the curriculum but also assist students in reflecting upon the quality and merit of the resources they have independently sought.

7.3 Research Limitations

This section provides a critical reflection on the methodology and methods employed in the research. The most pertinent question to ask of any research project is whether it achieved its aim and answered the research questions (outlined in Section 3.3). It is concluded that the aim and research questions were addressed but with the power of hindsight there are refinements that could have been made to the research design. These improvements will be outlined below.

When asked to describe their learning, participants struggled at times to articulate their learning processes and particularly to discuss reflection. Hesitancy had been expected as the literature review had highlighted that students, across any discipline, may find it difficult to categorise their own learning and struggle to transpose information from the context in which it was learnt (Philips and Solitis, 2009). The researcher was unsure whether this inability and/or reluctance to discuss reflective processes could also indicate awkwardness on the part of the participant at discussing what may feel to them a personal issue. As only four participants had physically met the researcher prior to data collection this had limited opportunities for the researcher and participants to build rapport which may have been a reason for participant hesitancy (Yin, 2014). This could have been eased by introducing

an additional method such as reflective portfolios. This method has the potential to lessen the influence of the researcher upon data collection and enable a more organic data collection process.

Some of the e-survey questions contained a tick list for participants to choose from. In some instances this was too restrictive for the question asked. For example, Question 9 asked participants to identify from a pre-ordained list what had motivated them to engage in extracurricular enterprise activities. The option of a tick list rather than an open text box limited participant responses as they were unable to introduce a new option or expand upon their answers with supplementary information. The researcher had been concerned about keeping the e-survey short enough to encourage completion and thereby chosen tick list questions but in doing this may have missed an opportunity to collect richer descriptive data.

Participants were mainly male undergraduates studying within a Business School which limited the data that could be gathered from a more diverse range of participants. This may have been attributable to the sampling methods used by the researcher. For the e-survey, participants often passed the survey onto to whomever they were stood with at the time of completion. The researcher had observed that males and females often grouped with their gender and subsequently tried to target female groups to encourage higher levels of females completing the survey. However, the same approach could not be taken in regards to year of study and degree programme as this was not possible to discern from observation alone. Therefore the skew in data towards Business School undergraduate participants may also have been attributable to same phenomenon of participants passing the survey to others most like them.

There are recognised issues with having university students as a sample in a research project. Logistically, students can be a difficult group to gather data from as collection is

usually restricted to term time and then also outside of assessment and exam periods which can leave only a limited number of weeks when it is possible to contact students. As the sample was spread across the UK, face to face data collection was also limited by the available research travel budget. This issue was overcome with the use of Skype to conduct six of the interviews but the researcher felt it was difficult to establish rapport with a participant over Skype compared to face to face and was mindful of the impact this may have upon data collection in these instances. The researcher reviewed those interviews conducted face to face and those via skype to seek any differences that may be attributable to the data collection method. It was found that on average skype interviews were shorter and the researcher did a larger share of the talking. Although rich data emerged from the skype interviews, the researcher felt the environment restrained interviewee responses and will seek to conduct face to face interviews in future research projects.

Research Question Four suggests a before and after measure would be used to ascertain to what extent extracurricular enterprise activities may act as a platform for entrepreneurial learning. However, the data was collected at one point in time for each participant. This method was considered sufficient to gather data on student perceptions on learning benefits of engaging in extracurricular enterprise activities but not sufficient to ascertain the extent to which extracurricular enterprise activities may have affected specific learning outcomes. The choice not to collect data pre and post engagement was shaped by the researcher's philosophical position. The social constructionist approach of the research entails that entrepreneurial learning is treated as a contextual, dynamic and interpretative phenomenon. The emergent nature of this area of enquiry also entailed an inductive approach thereby the research did not seek objective truths but instead deeper understanding by seeking commonalities, rather than relationships, in the data. However,

use of reflective portfolios may have been an appropriate method to gather data over a period of time while remaining true to philosophical grounding of the research. Participants could record their thoughts and feelings before, during and after participation in extracurricular enterprise activities. The subjectivity of their answers would be strength to the research as rich contextual data could be gathered that also enabled insight into pre and post perspectives on the activities.

Recognition of these limitations does not detract from the contribution achieved in this thesis. These limitations offer the opportunity for further investigations in this area which are considered in the following section.

7.4 Future Work

The researcher's own understanding of entrepreneurial learning evolved throughout the research process. As data was collected and analysed, the researcher's conceptualisation of entrepreneurial learning became clearer, what had been abstract became embodied. As the researcher's understanding grew, deeper analysis was possible which was reflected in the growth of sub-codes and the illumination of nuances in participant responses. The researcher would like to build upon their enhanced understanding of entrepreneurial learning to conduct post-doctoral research within the same research area. Specifically to examine how self-directed learning activities may enhance entrepreneurial learning processes. Prior studies have identified the need for a longitudinal study that examines students learning pre and post involvement in enterprise activities (Pittaway *et al.,* 2015). The researcher wishes to use reflective portfolios as a means to examine students' pre and post perceptions of their entrepreneurial learning as a result of engagement in self-directed learning activities. This may assist enterprise educators in effectively designing SDL activities within entrepreneurial education and also empower students to lead their own learning.

The tension participants demonstrated between wanting to engage in entrepreneurial activities because of a desire to be an entrepreneur and needing to enhance their employability prospects was a strong theme within exploration of participation motivations (see Figure 10). Further research is needed to effectively examine whether participants are motivated to engage in extracurricular enterprise activities because they intend to be an entrepreneur or because they want others, such as employers, to think they have entrepreneurial attributes. Findings from research like this could inform the design, delivery and marketing of extracurricular enterprise activities to ensure they are being targeted to the right audiences.

The extent to which family members may cultivate intention through the provision of rewards or punishments became an emergent line of enquiry as some participants described facing emotional pressure to pursue entrepreneurship. This is a notable area for further research, how far does familial pressure affect latent and nascent entrepreneurs entrepreneurial intentions while in higher education?

The strong female entrepreneur was a concept noticeably missing from the data. Participant discussion of role models, guest speakers and types of extracurricular enterprise activities indicated a masculine emphasis. This was particularly notable in participant discussions of social capital development where networks appeared to be largely formed by and constituted of men. While feminist literature is not the principle frame of reference, what or whom is missing from the discourse often reflects those who have been silenced (Kuhn, 1970). This finding raises an opportunity for further investigation of how male dominance of extracurricular enterprise activities may affect the dispersion and development of social capital for female nascent entrepreneurs.

7.5 Conclusions

It is recognised that each participant in the research has a unique learning experience while at university which is influenced by a myriad of internal and external forces reflective of a reality whereby entrepreneurs are continually influenced by environmental factors (Gartner, 1989). An array of intervening influences affect learning processes such as; individual motivation to learn, personal characteristics and opportunities to apply learning (Holton, 1996). Although, each individual will differ in what enables or disables their entrepreneurial learning this study discovered commonalities among its participants. These empirical findings contribute to our understanding of extracurricular enterprise activities; the types of activities participants choose to engage in, what motivates engagement and the perceived benefits learning or otherwise.

Participants' interpretations of entrepreneurship and entrepreneurial learning shaped what they thought was possible, their motivations to engage in extracurricular enterprise activities, and the outcomes they hoped to achieve. A range of benefits resulted from participation including the enhancement of individual entrepreneurial learning processes through the enactment of social, experiential and self-directed learning activities. The types of activities available differed across HEIs as did the resources and networks available. Such contextual factors created unique learning environments for each participant in the study.

Appendix A – Research Protocol

Question	Sub-issues and problems
Who wants the research? Enterprise educators, policymakers, academic community, student community, researcher.	*Will the research be useful?* Yes to all identified parties in terms of informing policy, practice and evaluation.
	Who might wish to use it? - Educators to inform practice - Policymakers to inform policy - Academic community to inform future research - Student community to inform practice
	Will different people want different things from the research? Yes, dependent on ontological stance of the reader, the level of their involvement and support for extracurricular enterprise activities.
Who will receive the research? Publically available through thesis uploaded online.	*Will participants be able to veto the release of parts of the research to specific audiences?* No, once the thesis is published it will be publically available
	Will participants be able to give the research to whomever they wish? Yes it will be publically available
	Will participants be told to whom the research will go? Yes, this was detailed in the consent forms.
What powers do the recipients of the research have? The right to withdraw, protection from harm and anonymity.	*What use will be made of the research?* Thesis publication, academic conferences and publications, dissemination workshops.
	How might it be used for or against participants? To improve academic practice and entrepreneurial education.
	What might happen if it falls into "wrong hands"? Could be used to undermine the role of in curricular enterprise activities.
	Will participants know in advance what use will and will not be made of the research? Yes, this was outlined in the consent forms.
What are the timescales of the research? The length of completing a doctorate between 2014 and 2017.	*Length of project?* 3 years.
	How will tasks be scheduled? Gantt chart scheduling and agreed deadlines with supervisory team.
What are the purposes of the research? To examine any possible links between extracurricular enterprise activities and entrepreneurial learning.	*Any formal or hidden agendas?* Formal - To inform policy and practice. Potential hidden - to champion the role of entrepreneurial education.
	Whose purposes are being served by the research? Enterprise educators, policymakers, academic community, student community and researcher.
	Who decides the purposes of the research? The researcher can suggest purposes but once the research it is public then it may fulfil any purpose the public deems appropriate.
What are the research questions? Research Question 1 - How do (latent and nascent student entrepreneurs) interpret	*Who decides the research questions?* The researcher in conjunction with advice from the supervisory team.

and apply the theoretical concept of entrepreneurial learning? Research Question 2 - What types of extracurricular enterprise activities do (latent and nascent student entrepreneurs) choose to engage in? Research Question 3 - What motivates (latent and nascent student entrepreneurs) to become involved in extracurricular enterprise activities? Research Question 4 - What benefits, learning or otherwise, may be gained from engaging in extracurricular enterprise activities? Research Question 5 - Do extracurricular enterprise activities act as a platform for entrepreneurial learning?	*Do the specific research questions demonstrate construct and content validity?* In terms of construct validity, the research does not contain any measurement tools so this is non-applicable. In terms of content validity the methodology and methods are appropriate to the examination of the phenomenon.
	Can participants add their own questions? Interviews were semi-structured so lines of enquiry evolved throughout the interview process but participants did not have the designated role of adding questions.
What must be the focus in order to answer the research questions? Reaching data saturation.	*Is sufficient time available to focus on all necessary aspects of the research?* A 3 year timespan is appropriate to answer the research questions but limits the scope for a larger sample or longitudinal research which may become the scope of post-doctoral research.
	How will the priority focus be decided? By who? Data collection will be the priority focus and this was decided by the researcher in conjunction with the supervisory team.
What costs are there? There are monetary costs to conduct data collection alongside human, material and administrative costs throughout the entire research process.	*What support is available for the researcher?* Scholarship funding for data collection and a supervisory team for intellectual guidance and moral support.
Who owns the research? The researcher until thesis publication from which it is then owned in part by Plymouth University and can be used by any member of the public subject to correct referencing.	*What protection can be given to participants?* Right to anonymity and the right to confidentiality alongside secure storage of data.
At what point does the ownership pass from the respondent to the researcher and from the researcher to the recipients? At the point of data collection, ownership, subject to informed consent, passes to the researcher. Upon thesis publication, ownership becomes shared by the researcher and recipients, the latter of which may only use the research when correctly referenced.	*Can participants opt out of specific parts of the research?* Yes, they can choose to opt out at any point of the research process until thesis publication.
	Can the researcher edit out certain responses? All responses will be stored in an unedited form and when inserted into the thesis will remain in their unedited form. However not every response can be included in the final thesis.
What is the main methodology of the research? An inductive methodology.	*How many methodologies are necessary?* The methodology should align with the philosophical stance, the paradigm of enquiry, the ontological and epistemological stance of the researcher.
	Will a single research question require more than one

	methodology? Multiple methods will be used in the study but unified under one inductive methodological approach.
How will validity and reliability be addressed? External validity was addressed by comparing findings against priori knowledge from the literature review to look for commonalities and anomalies. Internal validity was addressed through a well-designed robust methodology whereby rigour, trustworthiness, authenticity were paramount at all stages of the research process. Reliability is addressed through incorporation of cross-checking questions during data collection and respondent validation measures.	*Will there be opportunity for cross checking?* The data will be reviewed multiple times and analysed using a three layer process of open, axial and selective coding. All respondents will be sent transcripts of their interview data within 3 months of collection for the purposes of respondent validation.
	How does the researcher know if people are telling the truth? For any social science research, data reliability is reliant on the truthfulness of human research participants. Interview questions will be designed to discuss particular topics from various angles often with the same question framed differently. This strategy will enable the researcher to cross-check responses for any inconsistencies.
	How will data be gathered consistently over time? The use of topic guides to structure data collection and ensure all respondents are asked the same core questions.
	How to ensure each respondent is given fair opportunity to respond? The researcher will be mindful of the conditions within each interview and work hard to ensure that participants feel comfortable and are given the space and time to reflect upon questions and give the fullest answer they are able to at the time. Respondents will also be offered the opportunity to email the researcher if they want to add any further comments.
How will reflexivity be addressed? Reflexivity was considered an important part of the research process and was an integral part of the methodology.	*How will reflexivity be recognized?* The use of a research diary will enable the researcher to write their thoughts on the research and analyse diary entries to identify possible biases. Field notes taken during interviews will record the researcher's initial impressions and these will be analysed in conjunction with interview data to identify if and how the researcher may have impacted upon the data collection process. Analytic code memos will record the evolution of the data analysis process enabling the researcher to clearly see the progression of codes and reflect upon whether code creation is logical.
	Is reflexivity a problem? Reflexivity is a strength of the research as it enables the researcher to acknowledge their own biases and confront those within the data collection and analysis process through sustained reflection.
What kinds of data are required? Qualitative data was required to answer the research questions.	*Does the research need words, numbers or both?* It needs qualitative data - words - to examine individual perceptions. Some numbers may be helpful in mapping the types of extracurricular activities individuals are engaged in.
	Does the research need opinions, facts or both? Both. Primarily it seeks the opinions of individuals upon their learning but this also needs to be supported by facts derived from secondary data sources.
	Does the research seek to compare responses and results or simply illuminate? The research seeks both to illuminate an under-researched area and also to find commonalities through comparison of data sources.
From whom will data be collected? HE students and staff engaged in entrepreneurial education	*Will there be enough time to sample from all relevant parties?* Data saturation will be aimed for but post-doctoral research could continue with a larger sample.

	What kind of sample is required? Snowball and convenience sampling will be used to identify information rich sources. In terms of sample size, data will be collected until data saturation is reached. This may become evident during the coding process whereby as interviews continue there may be no additional new codes and repetition only.
Where else will data be available? Secondary data sources such as university websites.	*What documents and text can be used?* Publically available documents detailing extracurricular activities currently available.
	How to access confidential material? There will be no access of confidential material, only publically available secondary data and primary data collected through informed consent.
How will the data be gathered? Desk-based research, e-survey and semi-structured interviews.	*What methods are available and appropriate?* The methods chosen will be appropriate for an inductive methodology within a social constructionist paradigm of enquiry and to answer the research questions.
	How to construct topic guides? Topic guides will be piloted with a small sample at a UK university to test for ease of use and any potential misunderstanding. The topic guides will then be refined following the pilot and more tightly aligned to the research questions.
	How many methods should be used to ensure reliability and validity? Multiple methods but also multiple lines of enquiry within a single method will be used to ensure validity and reliability.
	Is it necessary or desirable to use more than one method of data collection for the same topic? When examining what types of extracurricular enterprise activities students engage in, it may be necessary to conduct an e-survey to gather a broader perspective on the types of activity available across the UK.
	Will many methods yield more reliable data? Not necessarily. The research aims to examine, explore and understand not to generalise. A wider range of methods may be appropriate if the research aimed to find casual relationships.
	Will some methods be unsuitable for some people? All participants will be self-selected, no coercion will be used to gather data. It is highly unlikely a participant would agree to fill out an e-survey or be interviewed if they did not feel it was appropriate for them to do so.
Who will undertake the research? The researcher.	*Can different people plan and carry out different parts of the research?* All data collection, processing and reporting will be carried out by the sole PhD researcher. Advice and guidance will be offered by the supervisory team.
How will the data be analysed? Using descriptive statistics and qualitative coding.	*Are the data to be processed numerically or verbally?* Both. Numerically using Excel to produce descriptive statistics and verbally using both manual and NVIVO coding.
	What computer packages are available to assist? NVIVO and Excel.
	What statistical tests will be needed? None, as the sample size will be too low for significance tests.
	How to perform content analysis of word data? Manual coding using open and axial coding and then NVIVO software for selective coding.

	Will the data be presented person by person, issue by issue, aggregated to groups, or a combination of these? All data will be presented under themes aligned with the research questions, this includes excerpts from individual interviews and e-survey participants which are anonymised.
	Does the research seek to make generalizations? No.
How to verify and validate the data? Respondent validation processes.	*What opportunities will there be for respondents to check the researchers interpretation?* All participants will be provided with a transcript of their interview and asked to verify whether they agreed with the interpretation of the interview and wished for anything to be removed.
	What will happen if respondents disagree with the researchers interpretation? The researcher will check what parts of the data the respondent is happy to be used in the thesis. If they are not happy with use of any of the data then it would be destroyed.
How to write up and report the research? Thesis format appropriate for Plymouth University. Academic Publications.	*What must it contain?* An Introduction, Research Questions, Literature Review, Methodology, Findings, Analysis, Conclusion and Discussion.
	What will be public? The final published thesis via a thesis repository. Sections of the thesis in the form of publishable outputs.
When to write up the research (ongoing or summative)? Ongoing as data collection, analysis and writing up is considered an iterative process, each stage informing the progression of the others.	*How many times should the reporting be written?* Over several iterations until the aims, findings and conclusions of the research are clear to the reader.
	Are interim reports compiled for anyone? Drafts of the thesis provided to the supervisory team periodically.
How to present the findings? In a thesis format appropriate to Plymouth University's rules and regulations.	*How to ensure everyone will understand the language and/or statistics?* The thesis, although intended for an academic audience, will be written in a succinct and clear manner that should enable anyone to understand its purpose and content. An acronym list will be provided to ensure that any abbreviations or niche terminology would be understood. The statistics are descriptive and each graph and table will be given a clear label and description.
	How to ensure confidentiality of participants? All participant names and the location of their institution of study will be removed prior to reporting.
To whom to report the research? Supervisory team, VIVA examination team, conferences and academic publications**.**	*Do all participants receive a copy of the research?* No but the thesis will be publically available on an online repository.
	What might be the effects of not providing copies to stakeholders? Participants will be informed of the online repository and how to access the thesis. The study will also have a page on the University website to inform stakeholders of its date of publication and access instructions.

(adapted from Cohen *et al.,* 2011)

Appendix B – Research Instrument (Sample A)

Many thanks for agreeing to complete this survey. This research is part of a PhD research project being undertaken by Sarah Preedy from Plymouth University. Please only complete this survey if you have participated in extracurricular enterprise activities for more than three months. The results from this survey will remain anonymized and your data stored securely and confidentially.

Q1 Please indicate your gender

- ❍ Male
- ❍ Female
- ❍ Other _____

Q2 How old are you?

- ❍ 18 - 20
- ❍ 21 - 25
- ❍ 25 - 30
- ❍ 30 and above

Q3 Ethnicity origin (or Race): Please specify

Q4 What subject discipline is your course?

- ❍ Arts
- ❍ Humanities
- ❍ Social Sciences
- ❍ Business
- ❍ Life or environmental sciences
- ❍ STEM (Science, Technology, Engineering or Mathematics)
- ❍ Medicine or Dentistry

Q5 What year of study are you in?

- ❍ First year undergraduate
- ❍ Second year undergraduate
- ❍ Third year undergraduate
- ❍ Fourth or Fifth year undergraduate
- ❍ Postgraduate

Q6 What is your student status?

- ❍ UK home based student
- ❍ International student

Q7 Which university are you a member of? Please give full name of your university

Q8 How long have you been participating in extracurricular enterprise activities at your university?

- ❍ Less than 3 months
- ❍ Between 3 - 6 months
- ❍ One year
- ❍ Two years
- ❍ Three years or more

Q9 Why did you choose to participate in extracurricular enterprise activities? (Tick all that apply)

- ❑ To enhance enterprise and entrepreneurship skills
- ❑ To network
- ❑ To socialise
- ❑ To enhance employability skills
- ❑ Other (5) _____

Q10 What have you gained by participating in extracurricular enterprise activities?

Q11 Please describe the activities you have been involved in (tick all that apply)

- ❑ Attended a networking event
- ❑ Attended a guest speaker event
- ❑ Received mentoring/coaching
- ❑ Trading practice
- ❑ Socialising
- ❑ Other, please describe _____

Q12 Please describe in what ways you think participating in extracurricular enterprise activities has developed you professionally and personally?

Q13 Have your expectations of the activities been met?

- ❍ Yes, how? _____
- ❍ No, why? _____

Appendix C – Research Instrument for (Sample B)

Thank you for participating in this research. Review signed consent form.

The main focus of discussion today will be extracurricular enterprise activities and your entrepreneurial learning. The research aim is to understand what learning may results from participation in extracurricular activities.

Demographics

Age	
Gender	
University of Study	
Year of Study	
Course	
Nationality	
Ethnicity	
Religion	

Please tell me in your words what your journey has been with entrepreneurship?

For how long have you been participating in extracurricular enterprise activities?

What types of activities have you been engaged in?

Why did you choose to engage in these activities? What was/were your motivation(s) for engagement?

In your opinion, what represents entrepreneurial learning? How can it be quantified?

"entrepreneurial learning is a dynamic, contextual, individualised process of opportunity recognition and exploitation that enhances the development of entrepreneurial knowledge, skill and capability." To what extent do you agree with this?

Did you see your engagement in extracurricular enterprise activities as an opportunity for learning?

If so, what did you learn and how?

How can engagement in extracurricular activities enhance learning?

What do you think are the limitations of these activities?

What is the future of these activities?

Additional prompt questions if needed:

In your opinion, do you think it is possible to teach entrepreneurship?

Have you ever reflected upon your entrepreneurial learning before? How do you log your progress?

How much do you think you can separate out what you have learnt in the extracurricular enterprise activities from other aspects such as your course or other aspects of university?

If the extracurricular enterprise activities were not around, how else would you pursue your entrepreneurial learning?

What other sources in your life influence you in terms of entrepreneurship?

Do you think there are any other influences on you in this process of opportunity recognition and exploitation?

Do you think your family have had a role to play in promoting entrepreneurship?

I would like you to rank the following variables – (1) is the most influential on your entrepreneurial learning (10) is the least influential.

PERSONAL EMOTION

EXPERIMENTATION

FELLOW STUDENTS

RESOURCES

MOTIVATION

PRIOR EXPERIENCE

PRIOR KNOWLEDGE

CURRICULUM DELIVERY

CURRICULUM CONTENT

FAMILY

Why have you ranked the variables in this way?

Do you read a lot of books about entrepreneurship?

What about online sources like videos or talks? How do they help in ways the society or course can't?

Do you currently own a business?

Is there anyone from the extracurricular activities involved in that business with you?

Would you define yourself as an entrepreneur?

What are your plans when you graduate?

Appendix D – Research Instrument (Sample C)

Thank you for participating in this research. Review signed consent form.

The main focus of discussion today will be extracurricular enterprise activities and entrepreneurial learning. The research aim is to understand what learning may result from participation in extracurricular activities.

Demographics

Gender	
Staff position	
Teaching responsibilities	
University	

Please tell me in your words what your journey has been with entrepreneurship?

How are you involved in supporting extracurricular enterprise activities?

In your opinion what are extracurricular enterprise activities' potential to act as a platform for learning?

What do you think are the limitations of these activities?

What is the future of these activities?

Additional prompt questions if needed:

Is there any particular feedback you are getting from students about entrepreneurial learning and any adjustments to curriculum?

Do you find that the students find it easy to reflect upon their own learning processes?

Appendix E – E-Survey participants demographic details

Participant	Gender	Age Range	Subject discipline	Year of study	Student status
1	Male	18 – 20	STEM (Science, Technology, Engineering or Mathematics)	Second year undergraduate	UK home based student
2	Male	18 – 20	STEM	First year undergraduate	UK home based student
3	Female	21 – 25	Arts	Second year undergraduate	UK home based student
4	Female	21 – 25	Social Sciences	Third year undergraduate	UK home based student
5	Male	21 – 25	Business	First year undergraduate	UK home based student
6	Female	21 – 25	Humanities	Third year undergraduate	UK home based student
7	Male	21 – 25	Arts	Final year undergraduate	UK home based student
8	Male	18 – 20	Business	Second year undergraduate	International student
9	Male	25 – 30	Business	Second year undergraduate	UK home based student
10	Male	18 – 20	Business	First year undergraduate	UK home based student
11	Male	21 – 25	Business	Third year undergraduate	UK home based student
12	Female	18 – 20	Business	First year undergraduate	UK home based student
13	Female	18 – 20	Social Sciences	Third year undergraduate	International student
14	Male	18 – 20	Business	Second year undergraduate	UK home based student
15	Female	30 and above	Social Sciences	Third year undergraduate	International student
16	Male	18 – 20	Business	Second year undergraduate	UK home based student
17	Male	30 and above	STEM	Postgraduate	UK home based student
18	Male	21 – 25	Business	Second year undergraduate	International student
19	Male	21 – 25	STEM	Third year undergraduate	International student
20	Female	18 – 20	Business	Second year undergraduate	International student
21	Male	21 – 25	Business	Postgraduate	UK home based student
22	Male	21 – 25	STEM	Third year undergraduate	UK home based student
23	Male	21 – 25	Humanities	Third year undergraduate	UK home based student
24	Male	21 – 25	Business	Second year undergraduate	UK home based student
25	Male	21 – 25	Humanities	Final year undergraduate	UK home based student
26	Female	21 – 25	Social Sciences	Third year undergraduate	UK home based student
27	Male	30 and above	Humanities	Postgraduate	International student
28	Male	21 – 25	Business	Third year undergraduate	UK home based student
29	Female	21 – 25	STEM	Final year undergraduate	International student

30	Female	18 – 20	Business	First year undergraduate	International student
31	Male	21 – 25	Social Sciences	First year undergraduate	International student
32	Male	21 – 25	STEM	Third year undergraduate	International student
33	Male	18 – 20	STEM	First year undergraduate	UK home based student
34	Male	18 – 20	Business	Second year undergraduate	UK home based student
35	Male	21 – 25	Business	Postgraduate	International student
36	Male	18 – 20	STEM	Second year undergraduate	UK home based student
37	Male	18 – 20	STEM	Second year undergraduate	UK home based student
38	Male	25 – 30	Not specified	Not specified	Not specified
39	Male	21 – 25	Not specified	Not specified	Not specified
40	Female	18 – 20	Business	Third year undergraduate	UK home based student
41	Male	18 – 20	Business	Third year undergraduate	UK home based student
42	Female	25 – 30	STEM	Second year undergraduate	International student
43	Female	18 – 20	Business	Third year undergraduate	UK home based student
44	Male	21 – 25	Business	Third year undergraduate	International student
45	Male	25 – 30	Business	Third year undergraduate	UK home based student
46	Male	21 – 25	Business	Second year undergraduate	International student
47	Male	21 – 25	Business	Postgraduate	UK home based student
48	Male	21 – 25	Social Sciences	Third year undergraduate	Not specified
49	Male	21 – 25	Social Sciences	Third year undergraduate	International student
50	Female	21 – 25	Business	Third year undergraduate	UK home based student
51	Male	18 – 20	Business	Second year undergraduate	UK home based student
52	Female	21 – 25	Business	Third year undergraduate	UK home based student
53	Not specified	Not specified	Not specified	Not specified	Not specified
54	Male	21 – 25	STEM	Second year undergraduate	UK home based student
55	Male	21 – 25	Business	Second year undergraduate	Not specified

Appendix F – NVIVO coding process

Name	Description	Sources	References
Activities	What extracurricular enterprise activities are participants involved in?	10	37
Networking		17	48
Coaching		12	30
Workshops		3	5
Guest speakers		6	9
Competitions		6	7
Student led groups		3	5
Start up programmes		2	2
Discourse	How do participants frame their discussion of extracurricular enteprise activities and entrepreneurial learning?	16	54
Marketised HE sector		4	4
Challenging stereotypes		4	9
Intrinsic motivation		2	2
Superiority to employment		10	19
Status		8	25
Nature vs Nuture		9	12
Male Centric		7	15
Entrepreneurial Learning		0	0
Experiential learning		18	24
Learning from Practitioners		8	10
Learning about oneself		9	19
Opportunity Recognition		7	7
Learning from failure		10	15
Perceptions and definitions		16	33
Motivation	why do the sampled students participate in extracurricular enterprise activities?	10	29
Assistance with venture or value creation		7	13
Signposted by academics		1	2
Self development		2	3
Enhanced employability		8	10
Network		7	8
To have fun		2	2
Variables	What do the sampled students feel influences their entrepreneurial learning?	16	45
Intrinsic motivation		9	10
Family		11	21
Culture		3	7
Other extracurricular activities		5	7

Benefits	What do the sampled students percieve as the benefits of participation?	1	1
Opportunities to experiment		4	7
Socialiability and Fun		10	13
Learning		14	38
Networks created		18	37
Skills Development		20	59
Feeling inspired or motivated		5	6
Opportunities to teamwork		4	5
Business knowledge		2	2
Confidence building		7	8
Assistance with venture or value creation		15	28
Awareness of university and external support		6	6
Enhanced employability		1	2
Challenges	What do participants perceive to the limitations of, or challenges to, extracurricular enterprise activities?	2	3
Business school dominance		6	8
Disparate nature of enterprise support at university		2	2
Student awareness		2	2
Replication and repetition		2	2

Screenshot of Nodes list

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