**Title:** Extracurricular Enterprise Activities as a Vehicle for Entrepreneurial Learning: Examining Experiential, Social and Self-directed Learning Outcomes

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# Extracurricular Enterprise Activities as a Vehicle for Entrepreneurial Learning: Examining Experiential, Social and Self-directed Learning Outcomes

**Keywords: extracurricular; enterprise education; higher education; entrepreneurial learning; self-directed learning**

## Abstract

This paper critically examines the value of extracurricular enterprise activity from a student and educator perspective at United Kingdom (UK) universities. Extracurricular activities are a popular facet of enterprise education and studies note an increase in recent years of provision of extracurricular enterprise activities across European universities (Rae *et al.,* 2012; Lilischkis *et al.,* 2015). The research aims to examine the benefits of participation in extracurricular enterprise activities and in particular the benefits to students' entrepreneurial learning processes. Thus, this research addresses the following research questions:

1. What benefits, learning or otherwise, may be attainable from Higher Education (HE) student engagement in extracurricular enterprise activities?
2. How may engagement in extracurricular enterprise activities enhance students' entrepreneurial learning processes?

This paper addresses the conference theme – 'Research, policy and practice: Collaboration in a disparate world' by examining the advancement of individuals' entrepreneurial learning processes through engagement in collaborative activities. This study adopted an inductive methodological approach to explore themes emergent from the data rather than to predict or explain through hypotheses (Berger and Luckmann, 1967; Booth *et al.,* 2009). A semi-structured survey (n=55), administered to students at a national conference themed on extracurricular enterprise activity, contained qualitative questions regarding what types of extracurricular enterprise activities respondents had participated in and what they felt they had gained from participation. A total of 26 in-depth interviews were also conducted, 23 with student participants and three with enterprise educators, to ascertain the perceived value of participation in extracurricular enterprise activities to students' entrepreneurial learning processes.

In relation to research question one, it was found that each participant was unique in the combination of benefits they gained from engaging in extracurricular enterprise activities but there were commonalities identified under the six themes of: skills development, knowledge acquisition, personal growth, development of social capital, venture creation/growth and enhanced employability. These benefits ranged from intrinsic, such as a growth in self-belief, to extrinsic such as an enhanced CV. They also ranged across the spectrum of the venture creation process from ideation to business registration.

In relation to research question two, the data was reviewed in accordance with established theoretical framing for the examination of entrepreneurial learning processes; experiential and social learning theory (Taylor and Thorpe, 2004; Politis, 2005; Cope *et al.,* 2007; Pittaway *et al*., 2015). It was found that prior links posited in the literature between entrepreneurial learning and experiential learning were supported in the data but the role of reflection was found to be diminished as limited opportunities to reflect upon learning may hinder abstract conceptualization processes. Links already posited in the literature between

social learning theories and entrepreneurial learning were also confirmed; entrepreneurial learning was seen to be enacted alone but also in groups whereby participants observed others to enhance their entrepreneurial learning, modelling behaviours, and collaborating in a 'community of practice' (Lave and Wenger, 1991).

For policy and practice, findings contribute to ongoing debate regarding the value of enterprise education and in particular extracurricular activities (Lilischkis *et al.*, 2015; Johannisson, 2016; Arranz *et al.*, 2017; Nabi *et al*., 2017). This research contributes significant empirical knowledge to the limited understanding of how extracurricular enterprise activities may positively enhance students' entrepreneurial learning processes. Prior studies have focused upon mapping the extracurricular enterprise activities available at universities and gathering an educator perspective of potential benefits (Rae *et al*., 2012; Lilschkis *et al.*, 2015; Vanevenhoven and Drago, 2015). This research moves beyond mapping activities to contribute empirical evidence of how HE students' entrepreneurial learning processes may be enhanced by engagement in extracurricular enterprise activities and also offers valuable insight into the student perspective of these activities.

This research also has value in enhancing the theoretical conceptualisation of entrepreneurial learning within a HE setting. A conceptual framework confirms the importance of the experiential and social learning activities afforded by participation in extracurricular enterprise activities but also provides a novel contribution in positioning the self-directed nature of these activities as key to developing students' autonomous learning capabilities. Such findings have important implications for enterprise educators in their design and delivery of extracurricular enterprise activities.

## Introduction

Over the past 30 years there has been an increase in the global provision of enterprise and entrepreneurship education (Bae *et al*., 2014; Nabi *et al.,* 2017). Enterprise education has become a global agenda, fuelled by socio-political drivers and an emphasis upon the role universities have in encouraging enterprising graduates (Wilson, 2012; European Commission, 2016). Alongside an increase in entrepreneurial degree programmes has been a growing suite of extracurricular enterprise activities (Rae *et al*., 2012; Lilischkis *et al.,* 2015). In the UK, with the introduction of the Higher Education Achievement Record (HEAR), a record of university students' extracurricular achievements, participation in extracurricular activities is now certificated. Although inclusion of the HEAR is currently voluntary, both on the part of students and universities, it signifies a drive towards quantifying participation in extracurricular activities and recognising their value to students' development (Milner *et al.,* 2016).This is particularly relevant in the era of increased student fees where the value of undertaking a degree is continually questioned (Woodall *et al.,* 2012; Douglas *et al.,* 2015).

Extracurricular activities are a popular facet of enterprise education and studies note an increase in recent years of provision of extracurricular enterprise activities across European universities (Rae *et al.,* 2012; Lilischkis *et al.,* 2015). Vanevenhoven and Drago's (2015) review of enterprise education at 321 universities in 60 countries found 80% of institutions offered extracurricular entrepreneurial activities, calculating that on average students had four types of opportunities outside the curriculum on offer to them, with the most popular being guest speaker events, business plan competitions and student enterprise clubs. Such activities are perceived to complement in curricular activity and enhance students' entrepreneurial knowledge, skills and capabilities (Rae *et al.,* 2012; Lilischkis *et al.,* 2015; Vanevenhoven and Drago, 2015; Arranz *et al.,* 2017). The consensus of prior research is that extracurricular enterprise activities are beneficial to those who participate through enhancing students' opportunities to experiment with entrepreneurial practice (Rae *et al.,* 2012; Pittaway *et al.,* 2011) and connect with likeminded students (Cordea, 2014; Pittaway *et al.,* 2015). The role of extracurricular enterprise activities in enhancing students' autonomous learning capabilities has been largely ignored in the literature (Pittaway *et al.,* 2015; Padilla-Augulo, 2017), as has examining extracurricular enterprise activities from a student perspective (Pittaway *et al.,* 2011, 2015). This study seeks to supplement this nascent literature by addressing in what ways engagement in extracurricular enterprise activities may benefit participants and enhance their entrepreneurial learning processes.

This research makes two key contributions. For policy and practice, it adds significant empirical knowledge to the limited understanding of how extracurricular enterprise activities positively enhance learning through examining what activities students select to engage in and the benefits they perceive they attained. This research also contributes to the limited understanding of Higher Education (HE) student's entrepreneurial learning processes through empirical evidence of how HE students' entrepreneurial learning processes may be enhanced by engagement in extracurricular enterprise activities. The findings from this research, contribute to ongoing debate regarding the value of enterprise education and in particular extracurricular activities (Lilischkis *et al.,* 2015; Johannisson, 2016; Arranz *et al.,* 2017; Nabi *et al*., 2017). The results have important implications for enterprise educators in their design and delivery of extracurricular enterprise activities.

The next section provides an overview of the literature on enterprise education and extracurricular enterprise activities and outlines the research questions. The research methodology, sampling and methods will be outlined thereafter and the data analysis and

results provided in the 'Findings and Analysis' section. The 'Discussion' and 'Conclusion' sections will relate findings to the research questions, as well as outline limitations and suggestions for future research.

## Literature Review

### *Enterprise and Entrepreneurship Education*

Although the UK QAA (2018) guidelines provide clarity, on the aims and objectives of EE, there remains contention on how 'best' to teach entrepreneurial concepts (Johannisson, 2016) with a diversity of pedagogical approaches employed by enterprise educators (Neck and Greene, 2011; Fayolle *et al.,* 2016). Enterprise and entrepreneurship are difficult concepts to teach as the rigidity of an academic environment is perceived to conflict with the complexity and variability of the entrepreneurial process (Johannisson, 2016). Educators are constrained by institutional requirements yet need to employ innovative teaching methods (Pittaway and Edwards, 2012; Lackéus, 2014). EE provision is further criticised for lacking a multidisciplinary approach with Business Schools dominating its development and delivery (Klapper and Refai, 2015; Preedy and Jones, 2015).

Another challenge for EE is the measurement of programme impact (Nabi *et al.,* 2017; Jones *et al.,* 2017). The literature identifies interest in examining the relationship between EE and its influence upon business start-up intentions (Nabi *et al.,* 2016; Arranz *et al.,* 2016). Enhanced intention to start a business is not the only activity which signifies a 'successful' outcome of enterprise education. Often intangible outcomes could indicate success; such as increased effectiveness in opportunity recognition (Politis, 2005) and improved entrepreneurial skills and competencies. However, measuring improvement in such knowledge and skill is difficult to attribute to specific interventions (Morris *et al.,* 2013). Studies measuring entrepreneurial intentions are challenged by seeking to account for exogenous factors influencing an individual's intentions (Krueger *et al.,* 2000). Although the majority of the literature suggests a positive relationship between EE and enhanced entrepreneurial intention several studies suggest the opposite, that EE can reduce entrepreneurial intention among HE students (Oosterbeek *et al.,* 2010; Joensuu *et al.,* 2013). To date the literature remains explorative in identifying a link between EE and specific outcomes such as more effective entrepreneurs (Pittaway and Cope, 2007a; Lilischkis et al., 2015).

Learning is considered an integral aspect of the entrepreneurship process from nascent to established entrepreneurs (Harrison and Leitch, 2005) and research examining entrepreneurial learning has increased significantly (Blenker *et al.,* 2014). However, the learning processes of students are considered different from practicing entrepreneurs (Mueller and Anderson, 2014; Hägg and Kurczewska, 2016) as business start-up within a university environment exposes individuals to differing pressures and resources (Politis *et al.,* 2010). Thus literature on practicing entrepreneurs cannot be easily translated within the HE context and a range of theoretical frameworks underpin the design of EE that draw from both the educational and entrepreneurial discipline (Rideout and Gray, 2013).

Experiential learning is a dominant perspective within the entrepreneurial learning literature due to the practical nature of entrepreneurship (Politis, 2005). Practical 'hands on' learning activities are regarded as effective in enhancing entrepreneurial knowledge, skills and capabilities (Neck and Greene, 2011; Rideout and Gray, 2013). Typically such activities

include work based learning opportunities, consultancy projects, reflective portfolios and running a start-up as part of a module or programme requirement (Pittaway and Cope 2007a; Arranz *et al.,* 2016).

Social learning models have also been influential, grounded in social constructionist perspectives which emphasise how relationships influence entrepreneurial activities whereby entrepreneurs learn from peers and role models (Taylor and Thorpe, 2004; Hamilton, 2011) often forming learning networks and communities (Greve and Shalaff, 2003; Cope *et al.,* 2007). As networks are a facet of an individual's social capital, the development of networks is considered important in supporting nascent entrepreneurs with business start-up (Davidsson and Honig, 2003). Correspondingly, there has been a rise in 'team entrepreneurship' delivery models of EE whereby students work in groups through the stages of running a business (Butler and Williams-Middleton, 2014).

An emerging area within EE design has been the use of heutagogical frameworks (Hägg and Kurczewska, 2016; Jones, 2016). Heutagogy, as an educational framework, proposes the learner should be at the centre of their own learning process and proposes educators act as facilitators, recognising students learn both inside and outside the classroom (Bhoyrub *et al.,* 2010). As the emphasis is upon creating autonomous learners (Brockett and Hiemstra, 1991) educators provide guidance, such as suggesting resources or setting assessment criteria. They also encourage students to self-direct their study often through independent reading and online materials. Despite the label 'self-directed', heutagogy is not the isolated pursuit of knowledge as learning often occurs within a social context, in peer groups and with mentors whom may enhance learning outcomes (Garrison, 1997).

Heutagogy's emphasis upon learner responsibility aligns with a guiding principle of EE, to develop students' autonomous and leadership behaviours (Bacigalupo *et al.,* 2016; QAA, 2018), and yet research examining self-directed learning and entrepreneurial learning within a HE environment is scarce. Prior related work includes Tseng's (2013) exploration of the conceptual relationship between self-directed learning and entrepreneurial performance which proposed self-directed learning activities as supporting entrepreneurial performance and Van Gelderen's (2010) work which recommended the importance of entrepreneurship students developing the capacity for autonomous action with self-directed learning as a conduit. Other studies have linked 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) but not made an explicit link between self-directed learning theory and entrepreneurial learning. This study provides, the first empirical study examining the value of extracurricular enterprise activities in relation to self-directed learning models.

### *Extracurricular Activities*

Extracurricular activities occur outside of scheduled teaching time and are distinct from in curricular activities due to their voluntary nature (Clegg *et al.,* 2010). Such activities may be closely associated with a student's subject of study, employability focused, cultural or sport-based (Clegg *et al.,* 2010; Milner *et al.,* 2016) initiated by either staff or students (Chia, 2005; Clegg *et al.,* 2010). Extracurricular activities are seen to enhance student's interpersonal and 'soft' skills (Watson, 2011; Bartkus *et al.,* 2012; Milner *et al.,* 2016) and the more active an

individual is with the activities, such as taking on a leadership role, then the more likely they are to develop such skills (Rubin *et al.,* 2002).

Extracurricular enterprise activities are distinctive in their focus upon developing student's entrepreneurial knowledge, skills and capabilities (Rae *et al.,* 2012; Lilischkis *et al.,* 2015). They can include; business competitions, networking events, business incubation services and awareness raising of an entrepreneurship career option (Rae *et al.,* 2012; Pittaway *et al.,* 2015; Lilischkis *et al*., 2015; Vanevenhoven and Drago, 2015). Prior studies conclude that extracurricular enterprise activities should be encouraged on the basis that engagement enhances students' entrepreneurial development (Rae *et al.*, 2012; Pittaway *et al.,* 2011, 2015; Padilla-Augulo, 2017) and raises entrepreneurial intention (Arranz *et al.,* 2017). Prior studies have focused upon mapping the extracurricular enterprise activities available at universities and gathering an educator perspective of the benefits of extracurricular enterprise activities (Rae *et al*., 2012; Lilschkis *et al.,* 2015; Vanevenhoven and Drago, 2015). The aim of this study is to move beyond mapping these activities to further understand the benefits of participation in extracurricular enterprise activities, and in particular benefits to students' entrepreneurial learning processes. Thus, this research addresses the following research questions:

3. What benefits, learning or otherwise, may be attainable from HE student engagement in extracurricular enterprise activities?
4. How may engagement in extracurricular enterprise activities enhance students' entrepreneurial learning processes?

## Methodology

Utilising a social constructionist paradigm of enquiry, this study explores student and educator perceptions of extracurricular enterprise activities. A UK sample was selected as prior studies have highlighted how different cultural contexts can hinder comparability of findings within 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 and size. In total, 24 universities were represented in the study located across England, Scotland and Wales. As the population of the UK is more heavily weighted towards the English counties (ONS, 2017) English universities were more heavily sampled.

Despite the narrowing of the sample's geography to the UK, it is recognised that the sample is not culturally homogenous as each university has their own cultural norms, identity and operational context (Lilschkis *et al.,* 2015). Rather than using a deductive hypothesis driven approach, this study adopted an inductive methodological approach to explore emergent themes. The aim of this study was to identify tendencies within localized contexts (Ogbor, 2000) using qualitative methods to gather rich descriptive data (Saldana, 2013).

A six month pilot was undertaken at a post-1992 university based in South-West England. Post 1992 universities are former polytechnic institutions that were given university status by the Further and Higher Education Act 1992. Extensive desk-based research of university enterprise activities, semi-structured face-to-face interviews with five individual students, and a focus group with an additional four students was conducted to assess the most appropriate approach to discussing the research topic. Several learning points emerged from the pilot study and thereafter used to inform subsequent research design.

Purposive sampling was employed to identify information rich cases based on the criteria relevant for the research (Patton, 1990); a) a student engaged in extracurricular enterprise activities b) for at least six months c) at a UK university. Filter questions were used to ensure participants met these criteria thereby assuring a suitable wealth of experience to discuss and reflect upon. Snowball sampling techniques were also employed to identify further potential respondents as initial participants recommended peers for the study (Patton, 1990).

A semi-structured survey contained qualitative questions regarding what participants felt they had gained from participating in extracurricular enterprise activities and if their expectations had been met. The survey was administered to students at a national conference themed on extracurricular enterprise activity which enabled data collection from participants from across the UK whom had appropriate experience to draw upon. There were 55 completed surveys from students that met the purposive sampling criteria and the survey also assisted in identifying areas of interest which could then be further explored during the in-depth interviews. A total of 26 in-depth interviews were conducted, 23 with student participants and three with enterprise educators. Each interview began by inviting the participant to share their entrepreneurial experiences or involvement with enterprise education. 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; Booth *et al.,* 2009; Saunders *et al.,* 2012). Alongside this 'life story' approach, all participants were asked core questions for comparability (Strauss and Corbin, 1998).

Data collection and analysis were considered an on-going and iterative process whereby data analysis begun as soon as data collection commenced with emergent themes noted alongside field notes (Booth *et al.,* 2009; Charmaz, 2014). Field notes, included observations regarding participant body language and the researcher's own emotions and assumptions, were kept separately to be mindful of the differences between what the interviewee said and what the researcher may have perceived thereby 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. Discourse was considered to be an important aspect of the study given its ability to shape both researchers and participants' perspectives of the phenomena under investigation, as such interview data was approached from a Foucauldian perspective (Foucault, 1970; Kuhn, 1970; Derrida, 1978).

Manual coding consisted of formulation of a coding table to plot trends such as areas of learning development and benefits of engagement. The coded table was added to and refined after each transcription providing a visual representation of emergent themes and enabling repeat occurrences to become apparent (Strauss and Corbin, 1998). The same data was inputted and coded using NVIVO with each transcript coded line by line. This technique forces the researcher to focus upon the words spoken without considering context and can mitigate against preconceptions (Ritchie *et al.,* 2013). The NVIVO codes were compared with the manual coding table to see if any further nuances had been discovered. Any modifications made to the manual coding list, as a result of coding through NVIVO, were recorded in an analytic memo to track its evolution. This enabled constant review of the analytic process, developed and linked concepts into groups, and assisted in the development of core codes (Strauss and Corbin, 1998).

## Findings and Analysis

Participants were asked what extracurricular enterprise activities they were engaged in to establish an understanding of the types of activities students may benefit from. Participants were usually involved in multiple activities; the average being 2.6 per participant, Table 1 outlines the responses. Networking events were the most popular activity across respondents, closely followed by socialising and guest speaker events. Mentoring and coaching activities and trading practice were less popular but still notable emergent themes from the data. 'Other' classifies those activities that participants were unsure had a clear label, this included participation in student led enterprise groups and ongoing start-up programmes.

| **Extracurricular Enterprise Activity** | **No. of respondents** |
|---|---|
| Networking event | 52 |
| Socialising | 43 |
| Guest Speaker event | 38 |
| Mentoring/coaching session | 25 |
| Trading Practice | 11 |
| Other | 19 |

**Table 1. Types of extracurricular enterprise activities respondents participated in (n=78).**

All participants were then asked what benefits they believed they had derived from participation in extracurricular enterprise activities. The responses to these questions were analysed and coded and the emergent themes were; skills development, knowledge acquisition, personal growth, development of social capital, venture creation/growth and enhanced employability. Upon cross-referencing the types of extracurricular enterprise activities participants and the benefits cited from engagement, patterns emerged. Participation in networking and guest speaker events were the activities perceived to be most likely to achieve benefits, in particular skills development, personal growth and knowledge acquisition alongside enhancement of social capital. Socialising activities were also perceived as particularly beneficial by participants in terms of developing their skills and knowledge, assisting in personal growth and developing social capital. Mentoring activities, business competitions and trading practice were perceived to enhance participants' skills, knowledge and personal growth but to a lesser extent than other activities.

### *Skills Development*

Skills development was the most commonly cited benefit of participating in extracurricular enterprise activities (87% of interview participants and 95% of survey participants) valued the skills they developed for their applicability to both entrepreneurial activity and preparedness for employment. Interview Participant D discussed that, although opportunities for skills development were often made available within their degree programme, the nature of extracurricular enterprise activities where you are "*pushed in at the deep end*" was considered particularly effective in accelerating specific skills development:

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

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. Networking benefited participants through the opportunities it gave for peer to peer learning, gaining a range of perspectives and stimulating thought processes. Of the survey participants,

36% described the enhancement of their networking skills as a benefit of participation. Participants also discussed developing specific technical skills such as marketing and sales, describing extracurricular enterprise activities as a useful platform to practice pitching and selling goods or services particularly at networking events and business competitions.

***Knowledge Acquisition***

Participants described acquiring specific entrepreneurial knowledge when engaging in extracurricular activities. This knowledge arose from their interaction with peers, guest speakers, workshop content and shared resources. 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:

*'[extracurricular enterprise activities] provide guidance to students who may have business ideas … 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 how engagement in extracurricular enterprise activities meant they were more effectively informed regarding the available entrepreneurial resources and support. They described extracurricular enterprise activities as an entry point into wider university support, providing a reliable source of information for different enterprise schemes they could participate within that might benefit their business idea development. 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'* (Enterprise Educator)

By participating, individuals were not only acquiring knowledge of what support they could access but also widening their knowledge and understanding of enterprise. The following quotation is an excerpt from a discussion with Interview 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 direct result of participation in extracurricular enterprise activities.

***Personal Growth***

Participation in activities enhanced participants' understandings of their own strengths and weaknesses and bolstered their confidence with 90% of survey participants identifying personal growth as a benefit of participation and 43% of interviewees. Participants described being better placed to self-reflect in particular regarding their own strengths and weaknesses. Participants described extracurricular enterprise activities as boosting confidence levels and enhancing 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? At uni [sic] I think people forget about that, they think you go to uni and you get a job. I think that's what universities have lost .... you should be finding yourself'* (Participant P)

Moreover, respondents described how participation in extracurricular enterprise activities had furthered their personal growth in terms of diversifying their life experiences, enhancing their self-awareness and instilling confidence. Whether this would directly benefit their entrepreneurial endeavours was a consideration for many participants but the personal growth opportunities were also valued on their own merit. Participants described an increase in their self-confidence and self-efficacy bolstered by the knowledge and access to resources afforded by engagement in extracurricular enterprise activities providing a belief that they were more effectively prepared for entrepreneurial activities in the future.

### *Development of Social Capital*

Survey participants and interviewees (74% and 70% respectively), discussed a growth in both the quantity and quality of their networks as a result of engaging in extracurricular enterprise activities. Participants described the homogeneity of peers on their degree programmes as restricting their knowledge, skills and networks and saw extracurricular enterprise activities as a mechanism to engage with a wider group with a shared interest in enterprise and entrepreneurship:

*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)

The positioning of some extracurricular activities outside of a specific faculty meant that participants were more likely to network and socialise with students from other disciplines. 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, in a manner not possible in the curriculum, 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)

Alongside the establishment of professional contacts, extracurricular enterprise activities also gave participants opportunities to socialise and build friendships. Participants described becoming part of a like-minded community of people which entrepreneurially inspire and motivate one another. Enterprise educators also described the benefit extercurricularr enterprise activities had in bringing students with similar objectives together, highlighting the emergence of entrepreneurial communities. It appeared that participants believed, and were considered by others, as operating in a manner akin to a community of practice (Lave and Wenger, 1991).

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. Discussion of peers, mentors and role models

either known to the participant or admired from afar, were more likely to be male. Over half of participants discussed the influence of role models who were typically male family members, business mentors, friends and celebrity entrepreneurs. Only two women were mentioned in the context of being a role model and this arose from two female respondents discussing their mothers.

***Future Prospects***

All of the benefits discussed were related in varying degrees to individuals' future plans. 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. For 15% of survey participants and 9% of interviewees, the knowledge, skills and experiences afforded by participating in extracurricular enterprise activities were perceived to enhance their abilities to pursue entrepreneurial endeavours. Respondents described how their engagement in extracurricular enterprise activities had benefited them with aspects of preparing for business ownership or furthering their existing business, alluding to the skills, knowledge and experiences they had gained as nurturing 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)

Engagement in extracurricular enterprise activities were also regarded as useful in terms of enhancing participants' employability prospects. For 10% of survey participants and 9% of interviewees, having participated in such activities was seen as a positive addition for their Curriculum Vitae (CV) and may open up graduate employment opportunities. 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'* (Survey participant).

Figure 1 summarises the benefits identified by participants. The most notable benefits across both samples were skills development and development of social capital. The findings across both the survey and interviews was similar except for discussion of 'personal growth' as a benefit with survey participants more likely to identify this as a benefit (90%) compared to interviewees (43%). This difference may be attributable to the data collection method whereby interviewees may be more reserved about sharing details on their confidence levels and discussing their weaknesses than a participant in an anonymous survey.

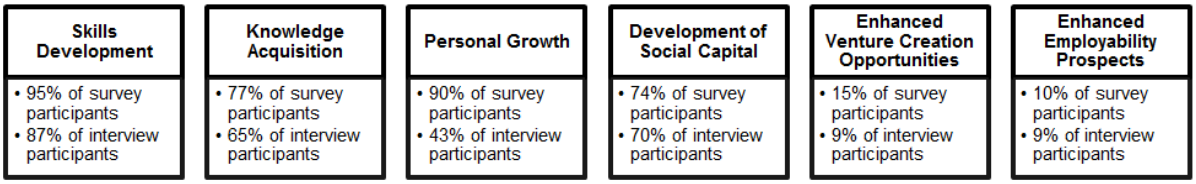


**Figure 1. Benefits to individuals engaged in extracurricular enterprise activities (Author's own).**

### *Entrepreneurial Learning*

This section outlines the entrepreneurial learning processes participants described in relation to engagement in extracurricular enterprise activities. The experiential and social learning opportunities afforded by engagement in extracurricular enterprise activities were a strong theme within the data.

Participants identified having more varied learning experiences from engaging in extracurricular enterprise activities than they could have through in curricular activities, and described a process of active experimentation with their new found knowledge and skills. 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. Instead, students regarded 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, are an important component of entrepreneurial learning (Politis, 2005).

The informal nature of extracurricular activities was 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. 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. 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 2 lists the stages of the experiential learning process (Kolb, 1984)and categorizes which stages were identified by respondents in the research.

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

**Table 2. Alignment of experiential learning theory and learning outcomes of engaging in extracurricular enterprise activities**

It appeared that although extracurricular activities provided an opportunity to gain practical experience and were a useful platform to actively experiment, what appeared to be missing were structured opportunities for reflection on experience and subsequent abstract conceptualisation processes. Reflection upon learning, entrepreneurial or otherwise, appeared to be an area of difficulty for many participants. There were several instances of hesitation with several participants stating they were unsure how to discuss reflection within their context. Several participants also asked for clarification regarding what the term 'reflexivity' meant. This was surprising considering that reflection upon learning is often a major component of in-curricular assessments on enterprise education programmes (Neck and Greene, 2011; Higgins *et al*., 2013). It seemed the extracurricular, and therefore informal and

often unstructured, nature of the activities were not offering adequate opportunities for participants to pause and reflect upon their learning with the focus instead on gaining experience and taking action.

Participants also described the opportunities engagement in extracurricular enterprise activities afforded for their social learning; 70% of interviewees and 74% of survey participants perceived their learning to be in conjunction with others and enhanced by their interactions within a likeminded community of fellow students. 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 became part of a learning community. Prior studies have highlighted how individuals within community settings, such as sports teams often find their learning enhanced by interacting with others with a shared purpose (Lave and Wenger, 1991). Extracurricular enterprise activities were perceived to unite like-minded students with common goals, to support and nurture collective entrepreneurial development. This is important for learning processes as individuals may socially share knowledge before reflecting and processing it themselves (Vygotsky, 1978). The networks that participants formed were bound by a shared interest in entrepreneurship and participants stated that their entrepreneurial thought processes were stimulated by interacting within a like-minded community comprising students across a range of subject disciplines.

An emergent theme within the data was the importance of the self-directed nature of learning through extracurricular enterprise activities. 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. This took the form of self-directed learning activities, both individual, such as engaging in online forums, and collective such as student led enterprise groups.

*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)*

Recent developments in technology and global access to online resources assisted students' ability to self-direct aspects of their entrepreneurial learning. 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.

*'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)*

Participants valued the self-directed nature of engaging in these activities as it gave them the autonomy to tailor their learning experience, engaging in targeted activities at a time convenient to them. The self-directed nature of these activities also challenged them in a different manner to the staff initiated activities as they felt '*pushed in at the deep end*' and responsible for the outcomes of engagement.

## Discussion

The aim of this study was to examine two research questions; what benefits, learning or otherwise, may be attainable from HE student engagement in extracurricular enterprise activities and how many engagement in extracurricular enterprise activities enhance students' entrepreneurial learning processes?

In relation to research question one, it was found that each participant was unique in the combination of benefits they gained from engaging in extracurricular enterprise activities but there were commonalities identified under the six themes of: skills development, knowledge acquisition, personal growth, development of social capital, venture creation/growth and enhanced employability. These benefits ranged from intrinsic, such as a growth in self-belief, to extrinsic such as an enhanced CV. They also ranged across the spectrum of the venture creation process from ideation to business registration. The benefits that were identified confirm 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).

In relation to research question two, the data was reviewed in accordance with established theoretical framing for the examination of entrepreneurial learning processes; experiential and social learning theory (Taylor and Thorpe, 2004; Politis, 2005; Cope *et al.,* 2007; Pittaway *et al*., 2015). It was found that prior links posited in the literature between entrepreneurial learning and experiential learning were supported in the data but the role of reflection was found to be diminished. Reflection is considered a core component of the entrepreneurial learning 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). Yet participants struggled to articulate their reflection processes and in some cases it appeared that reflective processes did not consciously occur. Findings suggest that aspects of experiential learning were encouraged by participation in extracurricular enterprise activities but limited opportunities to reflect upon learning may hinder abstract conceptualization processes. This is a notable contribution to the entrepreneurial learning and enterprise education literature evidencing the strengths, but also the limitations, of experiential learning as a guiding framework for entrepreneurial learning research.

Social learning theory as a basis for examining entrepreneurial learning has precedence in prior entrepreneurial learning literature including Rae and Carswell (2001), Taylor and Thorpe (2004) and Cope (2005). Links already posited in the literature between social learning theories and entrepreneurial learning were confirmed; 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. Participants observed others to enhance their entrepreneurial learning through modelling behaviours and collaborated in a 'community of practice' (Lave and Wenger, 1991), forming friendships and likeminded communities to enhance both individual and collective learning outcomes supporting prior research regarding processes of co-participation (Taylor and Thorpe, 2004).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).

An emergent area of enquiry that came from the data was the value engagement in extracurricular enterprise activities had for participants' self-directed learning processes.

Although participants sought to learn experientially and socially, they also desired to create the environment themselves in which to acquire learning experiences and be selective in the social networks they placed themselves within. Thus far, empirical 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; QAA, 2018).

## Contribution and Implications

This research has addressed a gap within the literature whereby the self-directed learning activities of HE students are examined in relation to their 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 both student initiated and self-directed. This findings from this research raise an important consideration regarding the academic and educator communities' understanding of how students may self-direct aspects of their entrepreneurial learning processes. Despite the efforts of the enterprise educator community to encourage more 'for' and 'through' forms of education (Gibb, 2002), apparent in the data was student frustration with overly theoretical curriculum activities and a subsequent desire to engage in activities outside of the curriculum that were perceived to provide experiential, social and autonomous learning opportunities. Figure 2 presents a conceptual framework that outlines the centrality of experiential, social and self-directed learning models for enhancing entrepreneurial learning.

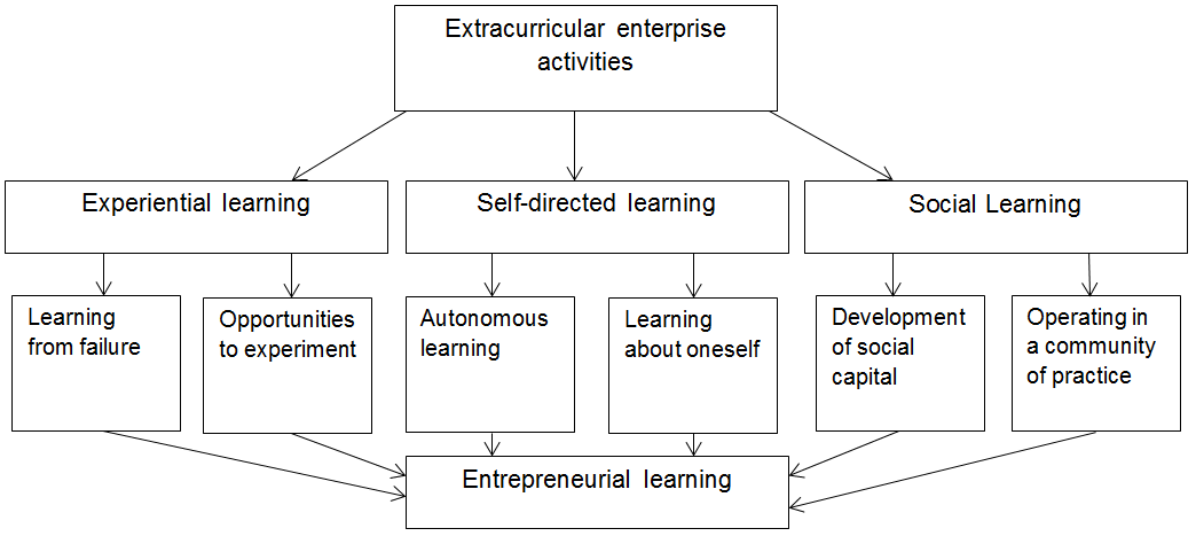


**Figure 2. Conceptual Framework of entrepreneurial learning and extracurricular enterprise activities (Author's own)**

Figure 2 depicts the relationships between engagement in extracurricular enterprise activities and associated learning processes. Through engagement in extracurricular enterprise activities students can learn experientially and socially but also gain the experience of self-directing aspects of their entrepreneurial learning process. The autonomous learning opportunities and capacity to learn about oneself complements experiential and social learning processes thereby enhancing, and having the capacity to accelerate, the entrepreneurial learning process.

This conceptual framework has application for theory building and for informing the design of enterprise education. Enterprise educators can apply the framework by capitalising upon the use of self-directed learning activities in their institutions. This may take the form of connecting up the activities of student led enterprise groups 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 online resources that students currently access to enhance their entrepreneurial learning and encouraging reflective critique of such sources thereby encouraging abstract conceptualization processes. QAA (2018) guidelines outline reflection as a key attribute to be developed through enterprise education and this framework can be used to assist enterprise educators to design learning activities that encourage students to identify their personal development needs and evaluate their own learning activities and processes.

## Conclusion

This study has provided important novel insights into students' entrepreneurial learning processes while participating in extracurricular enterprise activities. This research has value in enhancing the theoretical conceptualisation of entrepreneurial learning within a HE setting and also supporting links between engagement in extracurricular enterprise activities and enhanced entrepreneurial learning processes. In particular, this research reaffirms the importance of experiential and social learning opportunities afforded by engagement in extracurricular enterprise activities and also 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.

However, several considerations need to be taken into account when interpreting the findings. First, this study examined self-reported perceptions collected at one point in time from each participant. This method was considered sufficient to gather data on perceptions of the learning benefits of engaging in extracurricular enterprise activities thereby answering the research questions. However, the findings are not generalizable and cannot be used to predict outcomes or infer causation. Future studies could include pre and post measures or reflective portfolios to gain a longitudinal perspective of students' entrepreneurial learning through engagement in extracurricular enterprise activities. The research sample was also dominated by students accessing enterprise education through their respective Business Schools. Although this is reflective of the typical extracurricular enterprise activity participant (Hannon, 2007; Klofsten and Jones-Evans, 2000; Pittaway and Hannon, 2008; Preedy and Jones, 2015), the data does not adequately capture a multidisciplinary perspective. The study is also UK based and findings may not easily be transposed to global universities. Future research could examine the phenomena through evenly sampling participants across disciplines and also comparing samples across different countries.

Despite such limitations, this research offers a useful starting point for exploring the connections between engaging in extracurricular enterprise activities and the enhancement of students' entrepreneurial learning processes. This study addresses the scarcity of research on self-directed learning activities and entrepreneurial learning processes and provides empirical evidence of the benefits of engaging in extracurricular activities. The results have implications for enterprise educators and researchers in the fields of enterprise education and entrepreneurial learning.

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