DEVELOPMENT OF ENTREPRENEURIAL INTENTION THROUGH SIMULATION

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ABSTRACT

We report the results of a research study that seeks to understand the impact of simulation-based training (SBT) on the entrepreneurial intentions of a student cohort at a UK higher education institution (HEI). The research builds on previous studies in two ways: (1) By utilizing a phenomenological approach to the question of intention development as a direct outcome of simulation experience; (2) By supplementing and enhancing our understanding of student experience using a mixed method approach. Our study sits at the nexus of three current avenues of importance in business school education: (1) Understanding the development of student's entrepreneurial intentions as an outcome of SBT in the HEI context; (2) Embedding experiential learning within business schools as a potential tool to support student intentions; and (3) Charting a course for future developments in entrepreneurship within HEIs.

INTRODUCTION

The link between innovation and entrepreneurship is well understood. Simply put, entrepreneurs are individuals who both support and lead the innovation process by bringing new products or services to market with the use of capital or institutional resources (Fadaee & Alzahrh, 2014; Crumpton, 2014; Bygrave & Zacharikis, 2014).

The likelihood of students becoming entrepreneurs is enhanced when entrepreneurial knowledge and skills are developed through education (Liu et al, 2022; Hahn et al., 2019; Lv et al., 2021). Indeed, researchers have long studied the relationship between entrepreneurial outcomes and human capital. Recent work in the field suggests that there is a need to investigate further the links between education and both the human capital it creates and the entrepreneurial outcomes to which it claims to lead (Martin et al, 2012).

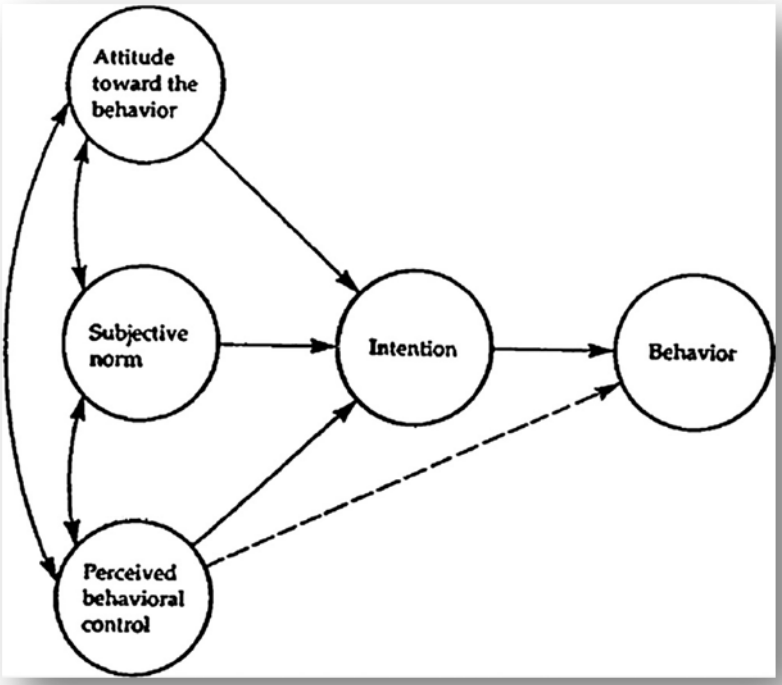
The concept of entrepreneurial intention, and later related models, have been built largely around the model of the "Theory of Planned Behavior" (see figure 1, Azjen, 1991). A psychological model, this theory includes at its core cognitive self-regulation, thus conceptualizing strength of intention as an immediate antecedent of volitional human behavior. It is one of the most applied theories in the behavioral and social sciences, having received attention from a broad range of , including educational research (Bosnjak et al, 2020).

Given the examples of relationships to institutions (employer, religion), ethnicity, and other specific individual groups, Ajzen argued that, in addition to character traits, general disposition is a poor predictor of behavior in specific situations. Ajzen therefore argued that human behavior was determined by individual intentions - a person's readiness to perform a given behavior (Kautonen et al, 2015). These intentions are mediated by three elements: beliefs around the consequences of a given behavior (behavioral beliefs), beliefs around the normative expectations of others (normative beliefs), and beliefs about the presence of factors that will support or sabotage performing the behavior (control beliefs) (Bosnjak et al, 2020).

In turn, entrepreneurial intention is regarded as the primary antecedent in driving entrepreneurial behavior (Fayolle and Liñán, 2014). As it is unlikely that there will be any entrepreneurial activity in the absence of intentions to undertake it (Bird, 1988), the study of entrepreneurial intention is an important consideration for HEIs and policymakers (Hannon et al., 2006).

Academic literature suggests that entrepreneurship education develops students' entrepreneurial intentions (Zhao et al., 2005) by encouraging students to acquire entrepreneurial knowledge (Souitaris et al., 2007). Such education can also motivate students to gain a more comprehensive understanding of entrepreneurship, which improves their entrepreneurial self-efficacy and opportunity recognition ability, thus influencing entrepreneurial intention indirectly (Karlsson and Moberg, 2013; Nowiński et al., 2019, Hoang et al., 2020).
In recent times, simulation-based training (SBT) has been identified as blended learning that can be used as an integrated tool to enhance learner engagement and understanding. Broadly speaking, the main aim of SBT is to "imitate a system, entity or process" (Lean et al. 2006, p.228).

FIGURE 1
Components of the theory of planned behaviour, Ajzen, 1991.



Current management education literature is predominantly strongly positively aligned to the use of SBT in the HEI business school context. The benefits of experiential learning, practical experience, and academic education are combined in a well-planned manner, leading to the development of managerial skills gained through experience. Utilizing complex and realistic learning environments, working in a risk-free, experimentation-friendly environment, and fostering an increase in dynamic knowledge and inherent learner engagement are all commonly lauded benefits. In addition, research demonstrates that learners respond positively to simulations, considering them engaging, fun, and stimulating.

However, the links between the development of entrepreneurial intention and SBT activity are not well understood. Only a handful of studies have taken the opportunity to evaluate SBT's impact on entrepreneurial intention. Key among them, Sofiullah et al (2023) and Zulfiqar et al. (2019) found evidence that entrepreneurial business simulations represent a promising approach to enhancing entrepreneurial intentions among university students. Silitonga et al (2023) also found a positive correlation between SBT and entrepreneurial intention outcomes, with results showing participation significantly improved students' cognitive and non-cognitive entrepreneurial competencies, as well as their intention to start a new business. Their study concludes that SBT can be an effective teaching strategy for entrepreneurial competencies among undergraduate students. Yet in every case, there is a call for more evidence to support the claims, given the limited spectrum of published studies.

Furthermore, in the context of entrepreneurial intention research, there has been little attention paid to those qualitative methods that could add a richer understanding of the issue. Indeed, according to Maheshwari et al. (2022), "Out of the 290 studies conducted between 2005 and June 2022, most of the studies (n = 285) used quantitative research methodology and (only) three studies used qualitative methodology. One study used mixed methodology while another study was a synthesis of literature. This clearly indicates that quantitative research methodology dominates this field of research and there is a need to use qualitative or mixed methodology approaches in this research field."

THIS STUDY

Given the aspiration and importance of developing entrepreneurial graduates within HEI business schools, this study seeks to understand student perceptions regarding the development of their entrepreneurial intentions through participation in SBT activities within peer groups at a UK HEI. This study utilizes a sample group from a post-graduate cohort that incorporates

SBT as a component of their study program. The simulation utilized is focused on entrepreneurship, simulating the business start-up process across four stages: ideation, developing business models, start-up, and pitching for investment.

The objectives of the study are:

1. Measuring the perceived impact of SBT on the entrepreneurial intentions of HEI students.
2. Contributing to the broader understanding and application of entrepreneurial intention and its development in Postgraduate student cohorts within the HEI sector.
3. Using a mixed methods approach to gain a richer understanding of student perceptions of SBT and entrepreneurial intention.
4. Providingn recommendations for higher education institutions on optimizing the positive development of entrepreneurial intentions through SBT.

While Stage 1 of the study uses a survey, stage 2 involves focus groups. Our survey relies on previously validated question sets (see Linan & Chen, 2009) to quantitatively benchmark student perceptions, both pre- and post-simulation, on key areas of entrepreneurial intention. Following this, semi-structured small group small (n= >/5) focus group activities will be conducted and analyzed. Semi-structured interviews will enable us to build on understanding gained from our survey, while incorporating perceptions of simulation impacts and process.

RESULTS

The analysis is ongoing and will conclude in February 2024. The study utilizes both qualitative and quantitative data and analysis to draw conclusions and make recommendations for the use of SBT to support and facilitate the development of entrepreneurial intentions in HEI students' study programs. Further, the research contributes to the broader academic understanding of entrepreneurial intention and its development in students.

This study is limited to a small cohort in a UK business school. On successful completion and publication, we will expand the research to incorporate a more diverse dataset, allowing for more generalization of findings.

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