

EMPLOYMENT SKILLS DEVELOPMENT AND SBT: AN ONGOING INVESTIGATION OF POSTGRADUATE STUDENT PERCEPTIONS

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ABSTRACT

The authors report the results of a long-term research study covering two full cohort years' experiences of simulation-based training (SBT) activities. The research builds on previous studies by (a) extending the sample group to encompass two large diverse postgraduate cohorts, engaging with the same SBT activity; and (b) supplementing and enhancing our understanding of student experience using focus group activity. This study contributes to the field of simulation applications in business school education in three important ways: (1) Development of skills that enhance students' employability prospects and future career development; (2) Engaging increasingly diverse cohorts of students in the post-graduate space; (3) Embedding of experiential learning within business school curricula – in the context of this study, through simulation-based training [SBT]. The study that is being conducted will report qualitative and quantitative data and analysis to draw conclusions and make recommendations for further development of SBT in the HEI context, with a particular focus on employability.

INTRODUCTION

The contemporary higher education institution [HEI] environment in the UK and elsewhere is rapidly evolving. Within this dynamic arena, students are increasingly indicating financial drivers as the primary motivator (Crockford, Hordósy, and Simms, 2015) for undertaking study. As such, HEIs are becoming increasingly aware of the need to support students' transition into employment by addressing the needs of employers more effectively. Consequently, universities engage in several activities designed to support the employability of graduates, including work placement schemes (representing a form of on-the-job training [OTJT]) and a wide range of simulations and role-playing scenarios. These are intended to contribute to the development of generic employability skills, as well as provide a 'head start' for graduates at the outset of their careers (Wilton, 2012).

Further, in recent years recruitment to many university and college business schools has become more international, for undergraduate and particularly for postgraduate programs (Universities UK, 2023). This has brought fresh challenges for both educators and students – not least in maintaining student engagement and in selecting pedagogic methods that will best ensure that program learning objectives are met.

There is accumulating evidence that business simulations, which incorporate a considerable experiential learning element, can be particularly effective for mixed-nationality, mixed-culture cohorts, increasing higher-order thinking skills and reducing the academic performance gaps (notably between domestic and international students) that are often features of more traditional, didactic course deliveries (e.g. Kerridge & Simpson, 2021; Huang et al, 2023).

Similarly, universities are more alert to how their programs, assessment strategies and on-campus activities can support graduate and postgraduate employability. One such approach is the use of SBT in the classroom as a form of 'free practice' activity, often linked to assessment. The use of SBT has been shown to act as both a catalyst and a vehicle for learning (e.g. Proserpio & Gioia, 2007; Loon, Evans & Kerridge, 2016; Kerridge & Evans, 2023a).

Employability skills for undergraduate business students

In reported studies by the authors (see Evans, Kerridge & Loon, 2013; Evans & Kerridge, 2021), as well as others (e.g. Crowley, Farren & Súilleabháin, 2017; Preston & Rosairo, 2021; Huang et al, 2023), with cohorts of both final year undergraduate and postgraduate students, SBT has been shown to develop student perceptions of their own employability.

The research data was generated through a detailed questionnaire survey, plus in-depth semi-structured focus group activity. The questionnaire addressed knowledge (K), skills (S), and attitudes (A) acquired by the students. These KSA categories and measures were adopted following an analysis of academic literature on employability skills required by industry. The broader

findings have been reported elsewhere (Evans & Kerridge, 2015; ABSEL, 2023a; CABS LTSE, 2023b), and it is upon this data that our current study builds.

THE STUDY

The study we report on here investigates the continued application of SBT across two diverse cohorts of MSc postgraduate students in a UK university business school across a two-academic year period. The objectives of the current study are:

- To validate (or not) the evidence reported in previous literature on the benefits of SBT for undergraduate business students using similar research methodology for comparative use;
- To extend and enrich our previously reported findings, establishing data on student perceptions and performance evaluations with SBT which can subsequently be evaluated vs. data for OTJT e.g. work placement programs.

Against a backdrop of increased use of business simulations in HEI business schools, our paper reports data from a large group of participants (n=350) who are also studying a strategic management module and engaged in a multi-week simulation activity, to evaluate student perception of the advantages of SBT, with particular focus on developing employability skills.

We utilize a mixed method approach as in the cited previous studies (Evans & Kerridge, 2015). Our surveys rely on previously validated question sets to quantitatively benchmark student perceptions pre- and post-simulation in the following categories: demographic sample information; experience of the simulation; experience in the management meetings; employability skills development; learning outcomes; financial and non-financial metrics and performance.

Following this, semi-structured focus group activities are conducted and analyzed. Semi-structured interviews allow us to build on understanding gained from our survey, whilst allowing for some degree of participant freedom to explore. These are made up of small (n= >/5) randomized groups.

RESULTS AND FINDINGS

Interim results were derived from a first-stage postgraduate study, based on Likert scale responses to a detailed questionnaire survey (n=67) comprising four question sets, which covered: (a) the simulation experience: (b) undertaking of simulated board meetings; (c) module learning outcomes/ learning development; (d) Employability skills development.

In relation to Employability, the postgraduate student responses to three specific questions (EMP 8-9-10 in Fig.1) showed a strong positive relationship with the EMP 11 responses to 'I feel that, as a direct result of completing the simulation I have developed overall employability skills that may give me a comparative advantage over others who have not undertaken a similar activity (from an employer's perspective)'.

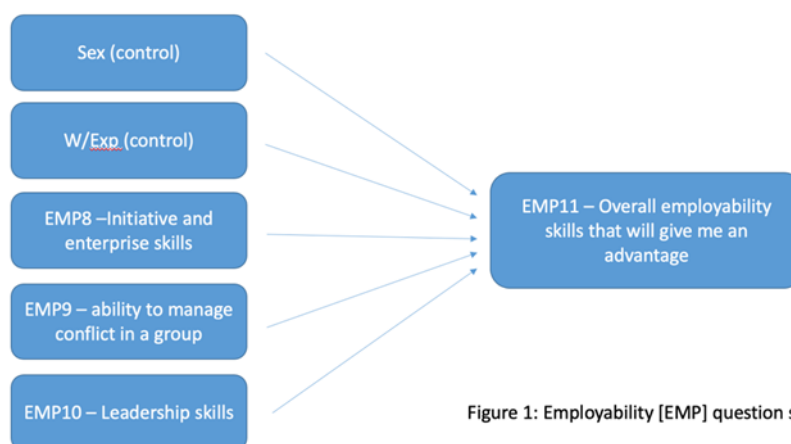


Figure 1: Employability [EMP] question set

Across sex and age, there were generally positive means i.e. positive perceptions across all categories – see Figure 2a/2b below, with example statistical data for responses to the Overall Employability enquiry:

FIGURE 2A

Example data: crosstab for EMP 11 responses:

Crosstab

Count

I feel that, as a direct result of completing the simulation, I have developed... Overall employability skills that may give me a comparative advantage over others who have not undertaken a similar activity (from an employers' perspective).

		Strongly Disagree	Neutral	Agree	Strongly Agree	Total
Sex	Male	2	1	16	16	35
	Female	2	3	16	7	28
Total		4	4	32	23	63

FIGURE 2B

Example data: Chi-square tests for EMP 11 responses:

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.791 ^a	3	.285
Likelihood Ratio	3.885	3	.274
Linear-by-Linear Association	1.673	1	.196
N of Valid Cases	63		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.78.

The extended study that is being conducted will report qualitative and quantitative data and analysis to draw conclusions and make recommendations for further development of SBT in the tertiary/higher education context. In doing so, we hope to contribute to the growing academic literature about SBT and to provide empirical evidence to support the pedagogic use of the approach in post-graduate programs, as well as in the undergraduate programs that we have previously studied.

Finally, as reported, we hope to use this study as the basis for a subsequent broader study into the relative efficacy of SBT versus OTJT programs.

REFERENCES

Crockford, J, Hordosy, R & Simms, K (2015), "I really needed a job, like, for money and stuff": Student finance, part-time work and the student experience at a northern red-brick university.', *Widening Participation and Lifelong Learning*, vol. 17, no. 3, pp. 89-109. <https://doi.org/10.5456/WPLL.17.3.89s>

Crowley, A., Farren, M., & Súilleabháin, G.Ó. (2017). *Strategy Simulation Games: The Student Perspective and an Investigation of Employability Competencies Gained Through the Use of Strategy Simulations in Higher Education*. Proceedings of International Conference on E-Learning, E-Education, and Online Training. Available at: eudl.eu/pdf/10.1007/978-3-319-49625-2_25

Evans, J, Kerridge, C, & Loon, M (2013) 'Campus based students' perspectives on strategic management simulation.' *World Journal of Social Sciences*, 3 (2). pp. 12-24

Evans, J. & Kerridge, C. (2015). *Campus based Student' Perspectives on Strategic Management Simulation: A Contextual Study*. Conference Proceedings of Asian Conference on Technology in the Classroom: ACTC 2015, pp. 307-320

Evans, J. & Kerridge, C. (2021), 'Business simulations to develop employability skills in Strategic Management, Games, Simulations and Playful Learning in Business Education. Edward Elgar, pp. 113-125

Huang, Y. M., Silitonga, L. M., Murti, A. T., & Wu, T. T. (2023). *Learner engagement in a business simulation game: impact on higher-order thinking skills*. *Journal of Educational Computing Research*, 61(1), pp. 96-126.

Kerridge, C. & Evans, J. (2023a). *Employment Skills Development in a Simulation Activity: an investigation of postgraduate student perceptions*. ABSEL 50. Available from: <https://absel-ojs-ttu.tdl.org/absel/issue/view/84>

Kerridge, C. & Evans, J. (2023b). *CABS LTSE. Enabling practical application of employability skills through authentic simulation technology*. Available from: <https://charteredabs.org/events/ltse2023/#1646231529523-cc0f39bc-8196>

Kerridge, C. & Simpson, C. (2021). 'Tutor and international student perceptions on an action research project: use of a business strategy simulation with mixed nationality cohorts', *Journal of International Education in Business*, 14 (2). pp. 240-258. <https://doi.org/10.1108/JIEB-07-2019-0034>.

- Loon, M., Evans, J. & Kerridge, C. (2015) 'Learning with a strategic management simulation game: a case study.' *The International Journal of Management Education*, 13 (3). pp. 371-380.
- Preston, J., & Rosairo, F. (2021). Reflections on the value of simulations in developing employability skills in postgraduate business students. *Games, Simulations and Playful Learning in Business Education*. Edward Elgar, pp.100-112.
- Proserpio, L., & Gioia, D. (2007). Teaching the Virtual Generation. *Academy of Management Learning & Education*, 6, 69-80. <http://dx.doi.org/10.5465/AMLE.2007.24401703>
- Universities UK. (2023). Diversification and strengthening international recruitment practices. Available from: <https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2023-06/diversification-and-strengthening-international-recruitment-practices.pdf>.
- Wilton, N. (2012) The impact of work placements on skills development and career outcomes for business and management graduates, *Studies in Higher Education*, 37 (5) pp. 603-620 DOI: 10.1080/03075079.2010.532548