

ENTREPRENEURSHIP EDUCATION: AN APPLICATION OF THE THEORY OF PLANNED BEHAVIOUR AND ENTREPRENEURIAL INTENTIONS OF ALLIED HEALTH STUDENTS

Anthony Weber, Central Queensland University
Malia Ho, Monash University
Julie Nguyen, Charles Sturt University

ABSTRACT

Introducing entrepreneurship education (EE) for allied health students is under-researched, with an uncertain image of where EE could sit within allied health courses. Understanding the factors of the entrepreneurial intention of allied health students could become an important factor for the allied health and entrepreneurship disciplines. Using the Theory of Planned Behaviour (TPB), the survey data showed that the constructs of attitude, subjective norms, and perceived behavioural control could predict 48.9% of the behavioural intent of allied health students undertaking EE. The results of our study also showed that attitude was the most obvious construct in predicting students' intent to study entrepreneurship and potentially becoming a business owner. These results have outcomes for both allied health and entrepreneurship curriculum developers. By investigating the factors that contribute to allied health students' entrepreneurial intention, the research suggests some implications for future research into student entrepreneurship, in order to develop specific curriculum supporting allied health students' entrepreneurial experience. The findings from this study contributes to the Theory of Planned Behaviour, the field of entrepreneurship education, and entrepreneurship intention of allied health baccalaureate students.

Keywords: Entrepreneurship Education, Entrepreneurship Intention, Allied Health, Education University.

INTRODUCTION

In recent years, the landscape of higher education has witnessed a surge in demand for graduates who possess a multifaceted skill set capable of navigating diverse professional environments. This trend has prompted an exploration of cross-disciplinary collaborations that extend beyond the traditional confines of academic domains. Notably, the coming together of business education and health science disciplines has garnered significant attention due to its potential to produce graduates equipped with both clinical proficiency and business acumen (Shealy & McCaslan, 2018).

Allied health courses traditionally include content that ensures that graduands meet professional competency standards set by their respective accreditation boards. To obtain professional registration to practice, the course content traditionally focusses on building

professional skills and competency.

Business schools have long been dedicated to fostering an understanding of organisational dynamics, financial principles, and strategic decision-making among their students. Conversely, health science programs have diligently focused on imparting clinical skills and medical expertise necessary for delivering quality patient care (Causby, Dars & Ho, 2023). These two educational pathways have typically remained discrete, with limited overlap in content and objectives. However, an emerging prospect lies in the integration of these seemingly disparate disciplines to create a transdisciplinary curriculum that prepares graduates for the evolving demands of modern industries.

Upon graduation and registration, allied health students may consider entrepreneurship and self-employment as an option to employment with an employee (Hynes, Kennedy, & Pettigrew, 2016). Setting up their own practice requires an entrepreneurial skillset and business administration not taught as part of the allied health course. While entrepreneurial courses are increasing in Australian Universities, typically they reside within a Business Schools realm. Entrepreneurship plays an integral role in economic, social and cultural challenges, not only through the incubation of new technologies and big ideas but cultivating employment opportunities through new start-up businesses (Ajike, Goodluck, Babatunde, Onyia, & Kwarbai, 2015).

Entrepreneurship education is more than just developing a business case to develop wealth. It also teaches essential skills such as team work and collaboration to problem solve using innovative solutions to real world issues (Vaicekauskaite & Valackiene, 2018). However recent literature continues to advocate that entrepreneurial education (EE) is still about the desire for students to start their own business (Abdelkarim, 2021). Therefore, entrepreneurial education needs to be more than just developing a business venture but should be about teaching students to have the skills to promote the essential skills of entrepreneurship.

Our research is the first step in investigating the feasibility of merging business and health science education, exploring the potential student interest associated with such a transdisciplinary approach. Our inquiry surveys the direct stakeholders – the students, and how they view the importance of cross-disciplinary education in business and health. The results may contribute to developing innovative solutions, and contributes to economic and social development within healthcare sectors. By examining patterns, triggers, and catalysts for innovation, we aim to provide insights that inform future research, educational practice, and policy in both business and health science domains.

Introducing entrepreneurship into an allied health course or as an add on post graduate qualification is under-researched with an uncertain image of where EE could sit within allied health courses. Understanding the factors of entrepreneurial intention of allied health students is an important factor for the discipline. A reliable theoretical framework is required when investigating the student's entrepreneurial intention to study entrepreneurship with the possibility of commencing their own business after graduation (Ajike, et al.,2015).

The Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA) (Kan & Fabrigar, 2017). Developed by Ajzen and colleagues, the TPB attempts to predict behaviours over which people do not have complete volitional control (Ajzen, 2020). The theory postulates three conceptually independent determinants of behavioural intention. Similar to the TRA model, the first two determinants of behavioural intention are attitude (A) toward the

behaviour and subjective norm (SN). The third predictor relates to the degree of perceived behavioural control (PBC) an individual has over performing the target behaviour.

The Theory of Planned Behaviour states that people's behaviour is determined by their intention to perform a given behaviour (Ajzen & Madden, 1986). Intentions are the most immediate antecedents to behaviour and represent the convergence of the cognitive, motivational, and effective internal processes associated with a given behaviour. The intention is considered the best predictor of deliberate behaviour. The theory of planned behaviour postulates that intentions are a function of three factors: attitudes toward the behaviour, subjective norms, and perceived behavioural control over the behaviour. Attitudes refer to beliefs about the outcomes associated with performing a particular behaviour. Subjective norms refer to perceptions about how others would judge a person for performing the behaviour. Perceived control is the self-assessment of both the capability or skill and the opportunity to perform the behaviour. More researchers are using the Theory of Planned Behavior (TPB) to explain various behaviours that are considered not under complete volitional control.

The Theory of Planned Behaviour has been used successfully to predict and understand individual behaviour in various educational settings. For example, TPB has been used to predict students' ability to study (Li, Schulz, Wang, & Lu, 2019; Skoglund et al., 2020). Within the discipline of entrepreneurship, the TPB has been used widely for many years to determine the intent of higher education students to undertake entrepreneurship studies (Chang, Wannamakok, & Kao, 2021)(Yu-Yu, Wannamakok & Kao, 2021; Ajike (Ajike et al., 2015) and if EE influences intent (Zahoor Ahmad & Sumit, 2020; Zhang, Duysters, & Clodt, 2014).

Utilising the Theory of Planned Behaviour, this study investigated the influence of EE on the entrepreneurial intent of allied health students in a higher education course in Australia. The objective was to firstly identify the intent of students undertaking EE within their course or as a post graduate qualification, as well as their intent to set up their own business post graduation. The secondary aim was to identify which aspects of TPB (attitude, subjective norm and perceived behavioural control) are significant predictors of and influence the students' intent of undertaking entrepreneurial education within or as an add-on to their allied health course.

METHODS

Setting

To explore the methodological challenges related to eliciting intent and forming reliable intention scales, we used a sequential exploratory study design. The study was approved by the university's research ethics committee (Application ID: 0000023490).

Participants

Email invitations were sent to potential participants via their respective Heads of Courses. The disciplines included were Bachelor of Oral Health, Science (Chiropractic), Occupational Therapy, Physiotherapy, Podiatry, Speech Pathology, Psychology and Exercise and Sports Science, across all year levels of study. An information sheet was also provided to the potential participants as part of the email invitation. Interested participants could access an online questionnaire via a link, and all participants provided electronic consent before being able to

participate in this study. All responses were anonymous. Data collected by the electronic questionnaire were stored on a database that resided on the university's computer server. Survey data were coded and transferred from the database to an SPSS 26.0 (SPSS, 2019) statistical package software program.

METHODOLOGY

A methodological origination in the context of the Theory of Planned Behavior (TPB) was used as a single belief item as predictors for direct measures. The participants completed a structured online survey designed to view the participant's perceptions of EE and business start-ups. The construction of the questionnaire is supported by Fishbein and Ajzen recommendation of study design (Gold, 2011). To predict whether a person intends to do something, we need to know:

- Whether the person is in favour of doing it ('attitude')
- How much the person feels social pressure to do it ('subjective norm') and
- Whether the person feels in control of the action in question ('perceived behavioural control')

The following TPB constructs were examined: (1) Attitudes, (2) Subjective Norms, and (3) Perceived Behavioral Control. Figure 1 is the conceptual model for this study.

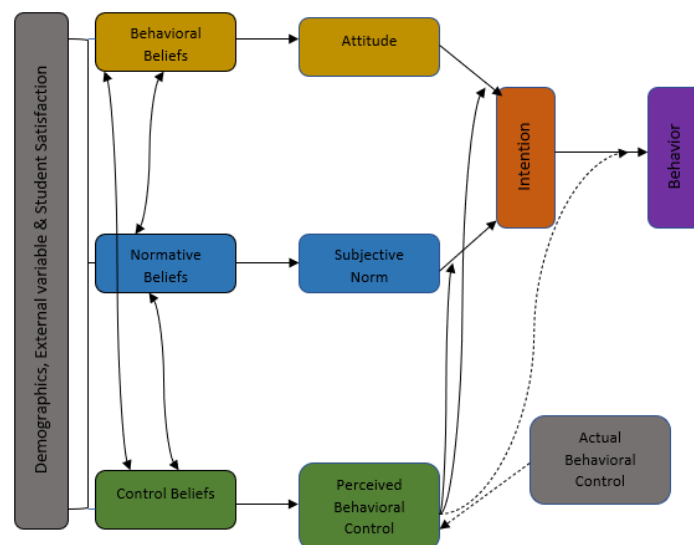


Figure 1
CONSTRUCTS OF THE THEORY OF PLANNED BEHAVIOR TO PREDICT BEHAVIORAL INTENTION

The construction of the questionnaire involved three phases, demographics of the participants, measurement of the belief based TPB constructs, and questions to assess behavioural intention. The TPB constructs assessing behavioural intention consisted of 31 items

that are grouped to reflect attitude, subjective norm, perceived behavioural control and behavioural intention constructs consistent with the theory. Attitude was assessed using 22 questions, sub grouped into attitudes towards entrepreneurship education (three questions), entrepreneurship education embedded into the curriculum (eight questions), the university role in promoting entrepreneurship (six questions), and attitude towards being a business owner (five questions). The construct of Subjective Norm was identified as the importance of others who would approve or disapprove studying entrepreneurship and involved seven questions. The final construct of Perceived Behavioural Control identified the effects of certain factors on entrepreneurship education and elicited the degree of consideration given to those effects. Three questions were asked to elicit the responses from the students. Finally, to understand student's behavioral intent, five questions were posed to the students. A seven-point Likert-type scale anchored by the use of bipolar adjectives (i.e. pairs of opposites) was used to evaluate student responses.

Statistical Analysis

Descriptive statistical analyses were conducted using frequency distributions, means, and standard deviations to describe the respondent population and identify trends or data abnormalities among study variables. Means and standard deviations were obtained for direct measures of the TPB constructs of attitude (A), subjective norm (SN), and perceived behavioral control (PBC), along with behavioral intent.

To identify the predictor variables using constructs of the TPB to predict factors influencing allied health student's intent of EE within or as an add-on of their allied health course. A bivariate analysis was conducted to determine if the TPB constructs were significant predictors of intention. Hierarchical multiple regression was used to assess the ability of the constructs of the Theory of Planned Behaviour (attitude, subjective norm, and perceived behavioural control) to predict student intention of entrepreneurship after controlling for behavioural intention. Preliminary analyses were conducted to ensure no violation of normality, linear, multicollinearity, and homoscedasticity assumptions. Data were analysed using SPSS V25 (IBM Corp., Armonk, NY, USA) and level of statistical significance was set at $\alpha = 0.05$.

RESULTS

Thirty-nine participants were included in this study. Seventy-two percent of the participants were female, with a majority of the students studying physiotherapy (41%) and podiatry (26%) and were predominantly in their second year of study (41%).

Eighty-five percent of students were located regionally and 51% indicated that they were intending on remaining regional for their work. Eighty-five percent indicated that they were considering starting their own business after graduation and agreed that entrepreneurship education is important to their current studies, with 80% of students agreeing that EE should be taught within the educational setting and 86% agreeing that their course had the scope to include EE units. However, 37% of respondents did not want EE units to replace their units of study, preferring the content to be optional and taken at a post graduate level. 89% of the students felt that the university did not promote entrepreneurship, nor was the university focused on

entrepreneurship (64%). Regarding their attitude towards starting their own business, 57% of respondents felt they would earn more money than being employed. The student’s attitudes towards the university promoting entrepreneurship were not as positive as the other attitude questions raised in the survey.

The bivariate analysis conducted to determine if the TPB constructs were significant predictors of intention is shown in Table 1. The behavioral intention variable was correlated onto the direct measures of Attitude (A), Subjective Norm (SN) and Perceived Behavioral Control (PBC) variables to determine if they were significant predictors of allied health student’s behavioral intention to undertaking EE. The relationship between the behavioural intent of students to undertake entrepreneurial education, as measured by their responses to five questions related to EE was investigated using Pearson product-movement correlation coefficient. Preliminary analysis was performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The strongest positive correlation between the student’s intent and the TPB construct was attitude, followed by perceived behavioural control and finally subjective norm.

	Behavioral Intent	Attitude towards learning (A), r (p-value)	Perceived Behavioral Control (PBC), r (p-value)	Subjective Norm (SN), r (p-value)
Behavioral Intent	1	0.687 (<.001)	0.607 (.003)	0.495 (.015)
<i>M</i>	14.32	9.63	7.93	30.64
<i>SD</i>	6.90	5.57	3.96	4.55

Hierarchical multiple regression was then used to assess the ability of the constructs of the Theory of Planned Behavior (attitude, subjective norm and perceived behavioral control) to predict allied health student’s behavioral intention to undertake EE.

Variable	□	t	p	R ²	R ² Change	F change	Sig. F change
Step 1							
	0.851	3.90	.001	.472	-	15.21	.001

Attitude							
Step 2							
	.675	1.907	.074				
Attitude	.320	.645	.528	.486	0.013	.416	.528
Total PBC							
Step 3							
	0.652	1.761	.099				
Attitude	.253	.457	.654				
Total PBS	.119	.312	.759	.489	.003	.097	.759
Subj Norm							

Table 2 shows that attitude explained 47.2% of the variance in behavioral intent ($F(1, 17) = 15.21, p = .001$). After entry of perceived behavioral control, the two constructs explained a 48.6% of behavioral intent ($F(2, 16) = 7.55, p = .005$). After adding the third TPB construct of subjective norm, the three constructs explained 48.9% of behavioral intent ($F(3, 15) = 4.78, p = .016$). It would seem that attitude was the main predictor of behavioral intent to the prediction of allied health students undertaking entrepreneurship education. Adding the predictors of Total PBC and Subjective Norm did not significantly increase the R² value and thus do not add value to the model.

The TPB construct of attitude measured a number of variables, general attitude towards EE, embedding EE in their current degree, the role of the university in promoting entrepreneurship and their attitudes towards being a business owner. The findings of their attitude toward EE were extremely positive (89%), and when thinking about EE being embedded throughout their degree, students had a positive attitude towards EE preparing them in starting up their own business (79%).

DISCUSSION

The results of our study found that the majority of allied health students expressed their intention to start their own business upon graduation and based on the feedback indicates the potential need for EE in the post-graduate curriculum. Attitude towards EE was the main predictor of intent to start their own business. This is the first study of this nature to understand the needs of EE for allied health students.

It is interesting to note that whilst students felt EE was important, it was not as important as the clinical component of their undergraduate study and would prefer EE to be part of post graduate studies. Most allied health courses are accredited by their respective professional bodies, and whilst there is an emphasis on safe practice and lifelong learning, there is no

requirement for a clinician to have business-related knowledge to be deemed competent. However, if the proportion of new graduates setting up their own practice/ business is projected to be high, then EE may need to be deemed as a necessary part of a student's training. Higher education needs to be able to incorporate EE content within the curriculum to meet the authentic needs of students upon graduation.

One way may be to provide equal proportions of clinical and business-related Work Integrate Learning (WIL)internship through an EE WIL framework (Winborg & Hägg, 2022) to enable students to learn business strategies alongside acquiring skills related to their clinical scope of practice. In addition a finding of this study noted that students felt they will earn more money and be successful if they started their own business. This reflects the naivety of students who although optimistic, may not be fully prepared to start ensuring success in their business (Grant, 2011). They may not have considered the other aspects of owning a business, such as the risks involved, initial capital that needs to be injected into the business, business administration and social responsibilities. This further highlights the need of EE to ensure business preparedness of allied health students.

The intersection of business education and health science, as explored in this study, presents profound implications for the development of transdisciplinary courses, particularly in the context of emerging markets. The dynamic nature of these markets necessitates a versatile workforce capable of navigating complex regulatory landscapes, cultural nuances, and economic intricacies. Our findings underscore the potential for designing innovative educational pathways that amalgamate clinical proficiency with business acumen, catering to the unique demands of these evolving environments.

In addition to traditional degree programs, the concept of short courses, micro-credentialing, and Continuing Professional Development (CPD) (Maina., et al. 2022) tailored to the private health business context emerges as a strategic approach. Such specialized offerings can empower allied health professionals with targeted knowledge and skills to excel in the complex realm of private healthcare enterprises (Hicks, Siganga, & Shah., 2004). Importantly, these courses could be customized to address the unique challenges faced by healthcare providers who must balance ethical considerations with business imperatives.

The pursuit of integrating business acumen into health science education offers transformative potential, yet this endeavour is not without its obstacles. A primary barrier lies in the resistance encountered when attempting to bridge the gap between traditionally separate academic disciplines and may be disruptive to the traditional higher education model (Varadarajan, Koh, & Daniel,.2023). The inherent differences in teaching methodologies, objectives, and ingrained disciplinary boundaries often result in hesitancy among academics to embark on collaborative ventures that extend beyond their comfort zones. This interdisciplinary resistance underscores the need for strategies that incentivise and facilitate cross-disciplinary cooperation (Davies, MJ., et al, 2013) .

A fundamental shift in institutional culture is imperative to surmount these barriers and foster an environment conducive to interdisciplinary exploration (Ralston., 2021). Faculty development programs can play a pivotal role in effecting this transformation. Equipping educators with the pedagogical tools and skills necessary for crafting transdisciplinary courses can bolster their confidence and encourage them to transcend disciplinary boundaries (Sandhu, Hosang, & Madsen,.2015). By providing educators with the means to navigate the complexities

of cross-disciplinary collaboration, institutions can empower their faculties to embark on innovative pedagogical ventures.

The Theory of Planned Behaviour recognises that although not an absolute association between actual behaviour and intended behaviour, intention can be seen as the precursor measure of behaviour. Intention can be measured by the three constructs of attitude, subjective norm and perceived behavioural control, with a high or strong positive outcome of one or all of these constructs will have a greater intent to perform the behaviour.

The TPB has been used in previous studies to assess the intent of students to undertake EE in higher education (Ajike et al., 2015; Padilla-Angulo, 2019). However, a paucity of evidence exists on Allied Health student's intent to undertake entrepreneurship and self-employment as an option to employment with an employee. This study is unique in that it has predicted the intent of Allied Health students through the three constructs of the TPB, not only contributing to the paucity of literature but also providing evidence to support academics when developing authentic curriculum.

In this study, attitude was one of the most powerful constructs in predicting the students' intent to study entrepreneurship and potentially start-up their own business after graduation. The findings indicate that there is a statistically significant relationship between allied health student's undertaking EE, attitude towards entrepreneurship and entrepreneurial intention. This is supported by the literature identifying a correlation between university students' entrepreneurship education on entrepreneurial intentions (Boubker, Arroud, & Ouajdouni, 2021). Further, it has also been reported previously that entrepreneurial intent is influenced by the student's entrepreneurial attitude (Zollo, Laudano, Ciappei, & Zampi, 2017).

This study measured the student's attitude towards EE, embedding EE in their current degree, the role of the university in promoting entrepreneurship and their attitudes towards being a business owner. It had both direct and indirect effects on intention and behaviour of undertaking EE and being a business owner. This means increasing one area of their attitude will increase the intention and behaviour of students' intent. Attitude also had a significant and direct effect on subjective norms and perceived behavioural control.

This study is not without limitations. Firstly, this study included students from a regional university, who intend to stay locally upon graduation. Given that the majority of allied health professionals will potentially live and work in major cities (Australian Institute of Health and Welfare, 2019) future studies including students in major cities may be required see if there are any mediation and/or moderation effects. Secondly, the tool used to gather data was an anonymous online survey, providing quantitative data for analysis. Future qualitative studies may be required to further understand detailed requirements of EE for allied health students to ensure future development of EE in the curriculum will meet the needs of students.

CONCLUSION

The results of this study including a cohort of undergraduate allied health students in a regional university revealed that a majority intend to start their own business upon graduation. This highlights the need to provide EE. However, students preferred EE to be included at a post graduate level, providing educational institutions with an initial indication of demand. Our findings showed that the constructs of attitude, subjective norms, and PBC could predict 48.9% of intention variance of allied health students undertaking EE. According to the results of this

study, the TPB can be used as a useful model to predict the intention and behaviour of allied health students in undertaking EE. Since attitude was the most prominent constructs in predicting students' intent to study entrepreneurship and potentially commencing their own business, it would be prudent to consider this construct when developing specific curriculum supporting allied health student's entrepreneurial experience in allied health educational programs.

We envisage our findings influencing the evolution of health science education to create graduates primed for success in business-oriented healthcare environments. This transformation holds the potential to bridge the gap between clinical proficiency and business acumen, producing a cohort of work-ready health science professionals who can adeptly navigate the complexities of modern healthcare enterprises.

Abbreviations

- A-attitude
- CPD - Continuing Professional Development
- EE - entrepreneurship education
- PBC - perceived behavioural control
- TPB - Theory of Planned Behaviour
- TRA - Theory of Reasoned Action
- SN - subjective norm.

Declarations

- **Availability of data and materials** - The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.
 - **Competing interests** - None of the authors have any competing interests in the manuscript.
 - **Funding** – 'Not applicable'
 - **Authors' contributions** – The authors confirm contribution to the paper as follows: study conception and design: Associate Professor Anthony Weber;
 - **Data collection:** Dr Malia Ho, Julie Nguyen;
 - **Analysis and interpretation of results:** Associate Professor Anthony Weber; Dr Malia Ho;
 - **Draft manuscript preparation:** Associate Professor Anthony Weber, Dr Malia Ho Julie Nguyen;
 - All authors reviewed the results and approved the final version of the manuscript.
- Acknowledgements** - 'Not applicable'

REFERENCES

- Abdelkarim, A. (2021). From entrepreneurial desirability to entrepreneurial self-efficacy: the need for entrepreneurship education—a survey of university students in eight countries. *Entrepreneurship Education, 4*(1), 67-88.
- Ajike, D. E., Kelechi, N. G., Hamed, A., Onyia, V., & Kwarbai, J. D. (2015). Entrepreneurship education and entrepreneurial intentions: The role of theory of planned behaviour. *International Journal of Advanced Research in Social Engineering and Development Strategies, 3*(1).
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human behavior and emerging technologies, 2*(4), 314-324.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology, 22*(5), 453-474.
- Boubker, O., Arroud, M., & Ouajdouni, A. (2021). Entrepreneurship education versus management students' entrepreneurial intentions. A PLS-SEM approach. *The International Journal of Management Education, 19*(1), 100450.
- Causby, R. S., Dars, S., Ho, M., Walmsley, S., Munteanu, S., & Banwell, H. A. (2023). Consensus-based statements for assessing clinical competency in podiatry-related work integrated learning. *Journal of Foot and Ankle Research, 16*(1), 43.
- Chang, Y. Y., Wannamakok, W., & Kao, C. P. (2022). Entrepreneurship education, academic major, and university students' social entrepreneurial intention: the perspective of Planned Behavior Theory. *Studies in Higher Education, 47*(11), 2204-2223.
- Davies, M. J., Fleming, H., Jones, R., Menzie, K., Smallwood, C., & Surendar, S. (2013). The inclusion of a business management module within the master of pharmacy degree: a route to asset enrichment?. *Pharmacy practice, 11*(2), 109.
- Hicks, C., Siganga, W., & Shah, B. (2004). Enhancing pharmacy student business management skills by collaborating with pharmacy managers to implement pharmaceutical care services. *American Journal of Pharmaceutical Education, 68*(1-5), BD1.
- Hynes, B., Kennedy, N., & Pettigrew, J. (2016). The role of business schools in framing entrepreneurial thinking across disciplines: the case of allied health professions. *Innovative business education design for 21st century learning, 75-91*.
- Kan, M. P., & Fabrigar, L. R. (2020). Theory of planned behavior. In *Encyclopedia of personality and individual differences* (pp. 5476-5483). Cham: Springer International Publishing.
- Li, M., Schulz, R., Wang, J., & Lu, Z. K. (2019). Pharmacy students' intentions to utilize pharmacoeconomics, pharmacoepidemiology, and health outcomes in future jobs. *Currents in Pharmacy Teaching and Learning, 11*(10), 995-1001.
- Maina, M. F., Guàrdia Ortiz, L., Mancini, F., & Martinez Melo, M. (2022). A micro-credentialing methodology for improved recognition of HE employability skills. *International Journal of Educational Technology in Higher Education, 19*(1), 10.
- Padilla-Angulo, L. (2019). Student associations and entrepreneurial intentions. *Studies in Higher Education, 44*(1), 45-58.
- Ralston, S. J. (2021). Higher education's microcredentialing craze: A postdigital-Deweyan critique. *Postdigital Science and Education, 3*(1), 83-101.
- Sandhu, J. S., Hosang, R., & Madsen, K. A. (2015). Solutions that stick: activating cross-disciplinary collaboration in a graduate-level public health innovations course at the University of California, Berkeley. *American journal of public health, 105*(S1), S73-S77.
- Shealy, K. M., & McCaslan, M. (2018). Incorporating an entrepreneurial certificate into the pharmacy curriculum. *American Journal of Pharmaceutical Education, 82*(8), 6701.
- Skoglund, E., Fernandez, J., Sherer, J. T., Coyle, E. A., Garey, K. W., Fleming, M. L., & Sofjan, A. K. (2019). Factors that Influence PharmD Students' Intention to Attend Lectures Using the Theory of Planned Behavior. *American Journal of Pharmaceutical Education*.
- Vaicekauskaite, R., & Valackiene, A. (2018). The need for entrepreneurial education at university. *Journal of teacher education for sustainability, 20*(1), 82-92.

- Varadarajan, S., Koh, J. H. L., & Daniel, B. K. (2023). A systematic review of the opportunities and challenges of micro-credentials for multiple stakeholders: learners, employers, higher education institutions and government. *International Journal of Educational Technology in Higher Education*, 20(1), 13.
- Winborg, J., & Hägg, G. (2023). The role of work-integrated learning in preparing students for a corporate entrepreneurial career. *Education+ Training*, 65(4), 674-696.
- Paray, Z. A., & Kumar, S. (2020). Does entrepreneurship education influence entrepreneurial intention among students in HEI's? The role of age, gender and degree background. *Journal of International Education in Business*, 13(1), 55-72.
- Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International entrepreneurship and management journal*, 10, 623-641.
- Zollo, L., Laudano, M. C., Ciappei, C., & Zampi, V. (2017). Factors affecting universities' ability to foster students' entrepreneurial behaviour: An empirical investigation. *Journal of management development*, 36(2), 268-285.

Received: 27-May-2024, Manuscript No. IJE-24-15012; **Editor assigned:** 30-May-2024, Pre QC No. IJE-24-15012 (PQ); **Reviewed:** 14-Jun-2024, QC No. IJE-24-15012; **Revised:** 19-Jun-2024, Manuscript No. IJE-24-15012 (R); **Published:** 25-Jun-2024