

Assessment of Behavioural, Cognitive and Affective Attitude of Engineering Graduates Towards Entrepreneurship

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Abstract

Overwhelmed with the crisis of unemployment, to boost up the exports, a country to be self-reliant, a lot of efforts have been kept by the governments to encourage and ignite the entrepreneurial skills among the students who are key human capital assets of a country. Besides, to gain sustainability goals, a key emphasis on entrepreneurship education has been focused on to imbibe the entrepreneurial culture among students. Although several studies attempted to study the behavioural, cognitive and affective attitudes of students towards entrepreneurship, it is a need to conduct research every time as the new generation of students comes out for employability every year. The present research paper aims to understand the cognitive, affective and behavioural attitudes of the students studying engineering in Hyderabad city. The exploratory research method has been adopted with a sample study of two hundred and sixty students of different engineering streams. Primary data was collected using a structured questionnaire with a Likert scale rating. The findings of the study indicate that the behavioural attitude of the students to aspire to be entrepreneurs is higher, followed by cognitive and affective attitudes. Further in this article, an attempt was made to study each item pertaining to the behavioural, cognitive and affective attitudes of the students. Item analysis has been carried out with emphasis on each statement. Entrepreneurial education programs need to be further strengthened on a continuous cycle.

Keywords: Graduates, Education, Entrepreneurship, Behavioural, Cognitive, Affective, Attitude

Introduction

Entrepreneurship is a buzzword aiming self-employment, boosting towards start-ups and growth in the country's economy. Human capital of any country is valuable assets. The future of the country's growth relies on students' creation of wealth in the form of starting new businesses, problem-solving, grabbing opportunities, creating new products and services and generating employment opportunities. The goal of education should be to make the students settle into a career. Every country university college perhaps supports and encourages students by getting engaged in entrepreneurial programmes and activities. When entrepreneurship programmes become active, students get engaged with business; besides, disengagement results in unemployment.

There needs to be a change in attitude to shape the young mind-sets of students to aspire to be entrepreneurs. An action begins immediately when students have a passion to excel and start the business, overcoming the hurdles and risks associated with it, as there are first-generation entrepreneurs. Today there is a presence of supportive mechanisms provided by governments, innovation hubs, accelerators, mentors and start-up policies aiming to be supportive to students. Objectives of the study include observing the attitude of students towards entrepreneurial intention. To ascertain the controls that limits the entrepreneurial intention among the students.

Why focus on entrepreneurship? Address the answers to the questions, like with a change in demand and lifestyles, to solve the complex problems, solve new problems and

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bring new products and services; perhaps indeed the entrepreneurs are highly needed in the market. Radical innovations and global changes are brought by only entrepreneurs, not by any other professionals.

Applying enterprising traits like initiative, creativity, risk-taking and invention to the workplace while utilising the right abilities to succeed in that setting and culture is known as entrepreneurship. In recent years, entrepreneurship has become more significant. Entrepreneurship is frequently seen as a valuable tool and option for generating revenue in the pursuit of methods to increase employment for youth. Supporting youth entrepreneurship is increasingly frequently seen as an additional means of integrating students into the labour market and combating poverty, as small businesses typically account for the majority of all employment creation.

While being a young business owner can provide challenges, they are by no means overwhelming; people who are resolute and persistent in the face of adversity. They are aware that their readiness to learn from their mistakes and their faith in their ability to succeed in spite of all obstacles is their greatest assets. Applying enterprising traits like initiative, creativity, risk-taking and invention to the workplace while utilising the right abilities to succeed in that setting and culture is known as entrepreneurship. Cole (1946) defines “Entrepreneurship is the purposeful activity of an individual or a group of associated individuals, undertaken to initiate, maintain or aggrandise profit by production or distribution of economic goods and services.”

Literature Review

Al-Qadasi et al. (2023) claimed entrepreneurship education nurtures the students in shaping their minds to start new businesses. Students need both cognitive and emotional dimensions to understand the entrepreneurial intention. Rambe and Ndofirepi (2019) Significant differences exist among the achievement, innovation, self-esteem and personal control variables of entrepreneurial attitude.

Robinson et al. (1991) suggest perhaps cognitive attitudes don't affect, besides affective and behavioural attitudes that influence students' entrepreneurial intentions, Ode

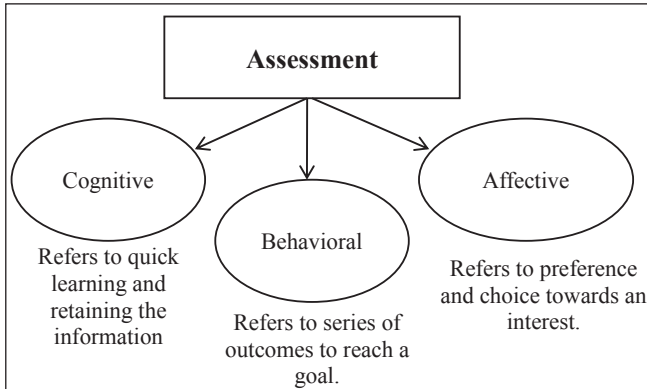
and Adegbe (2023). Behaviour refers to a series of activities taken up that are directed to attain a particular goal. Human behaviour is generally affected by three factors: if the behaviour is the result of a cause, it indicates needs; besides, if the behaviour is motivated, it's drive or passion; and at last, if the behaviour is directed, it's towards goal attainment.

Shariff and Saud (2009) found differences of attitude among the students who minored in entrepreneurship and other students who are not into entrepreneurship. Self-confidence, need for achievement and personal attitude affect the student's behaviours, Ferreira et al. (2012). Mgaya and Magembe (2007) mentioned attitude differences among students affect promoting entrepreneurship education. Trivedi (2017) claims the positive attitude of students influences them to take up new initiatives for start-ups, besides the university and college environment providing a supportive climate. Cacciotti and Hayton (2015) discussed fear of failure's influence on the cognitive and behavioural attitude of an individual. Zen et al. (2023) state that students need not just the theoretical programmes on education; classroom training has to be enhanced, (Meinam (2023)). Intelligent, skilled students need to be given proper guidance and exposure to be more involved in entrepreneurial activities.

To have a holistic development the integration of certain behavioural, cognitive and unique skills of entrepreneurship helps to develop the student's mind-set, Duval-Couetil et al. (2010) explained the assessment of entrepreneurship education done at course –level, individual level and evaluation of entrepreneurship programmes. Kostoglou and Siakas (2008) discovered that students who scored lower performance results were more involved in entrepreneurship than those who excelled by traditional academic assessment. Le Poutre et al. (2010) entrepreneurial intention over entrepreneurship programmes linked the student familiarity to entrepreneurial intention. Cromie (1987) initiated whether or not students have motives to become an entrepreneurs. Women are less concerned with making change and often choose entrepreneurship as a result of career dissatisfaction.

Behaviour plays a key role in students and is a core dimension to apprehend the process of players in nurturing student talents. In this context Klemp

(1980) stated students who gain knowledge through proper education and experience become successful entrepreneurs; besides, such possession of skills and personality traits helps further to succeed Taylor (1911).



Source: Author compilation.

Fig. 1

Cognitive behavioural attitude has a negative impact on the student’s attitude towards entrepreneurial intentions, Yu and Wang (2019). Cognitive behaviour reflects upon students’ skills, abilities, knowledge and beliefs towards entrepreneurial education and intention. Prior to making changes in the university curriculum with respect to entrepreneurship education, understanding the interaction between cognitive and affective behaviour of students. Certain demographic variables, such as students profiles, age, gender, parental occupation income levels and self-motivation, are a few factors essential to studying and enhancing entrepreneurship training skills and programmes to help students take up real action.

Affection reflects upon a student’s identification of the problem and grabs the opportunity, implementing ideas into action. The past experience, success and failure situations, personality of an individual and having strong self-determination and self-motivation can change the negative attitude perception of students. Castro et al. (2022) discovered that there is no substantial association between the entrepreneurial attitude and academic performance of the students. Souitaris et al. (2007) several behavioural theories and education programs have wider consequences for teaching the entrepreneurial lesson in the classroom. The goal of self-actualisation can be achieved by the students when they are self-employed.

Several programmes have been adopted in Asian and African countries to catch the young generation, for

instance, the “Junior Achievement Program” in the USA and Young Enterprises in the UK (Vepa 1988). Perhaps similar to that, young students are selected and trained for three months under the programme called the Kakinada Experiment that scatters the seed for entrepreneurship development programmes in India. The idea to start an organisation is bringing up the ideas of young minds with unique and creative ideas together, developing those ideas into benefit-seeking products.

Methodology

The survey contains questions in five parts that assess the respondent’s views on three parameters: behavioural, cognitive and affective entrepreneurial attitudes, and their entrepreneurial intentions on entrepreneurship education after completing the course. Rate each statement on a five-point scale from *strongly disagree* to *strongly agree*. The overall scale reliability calculated by Cronbach’s alpha is around .722. Based upon the objectives, two hypotheses have been developed.

Population Definition: The present study has adopted a stratified random sample technique without proportionate sampling. The information was obtained from respondents via filing out a questionnaire. The respondents were told about the data’s aims. Infinite Population - $N = Z^2 \times P^n / (1 - P^n) / e^2 N = 1.642 \times 0.5^n (1 - 0.5^n) / 0.05^2$, the calculated sample is 273. After eliminating outliers and details that are missing, only an overall size of 259 is taken into consideration for further analysis.

Descriptive Statistics

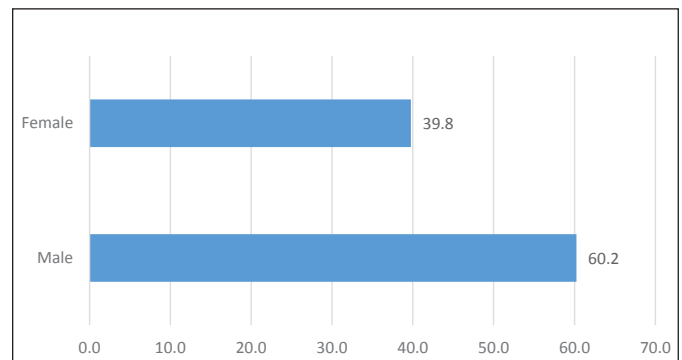


Fig. 2: Respondnets - Gender

Fig. 2 depicts that the participation of male students (60%) is higher than female students (39%), while

Fig. 3 represents the age group of students who are twenty years highly interested and undertook the education course and participated in the survey. Based on the primary data collected from respondents through questionnaire.

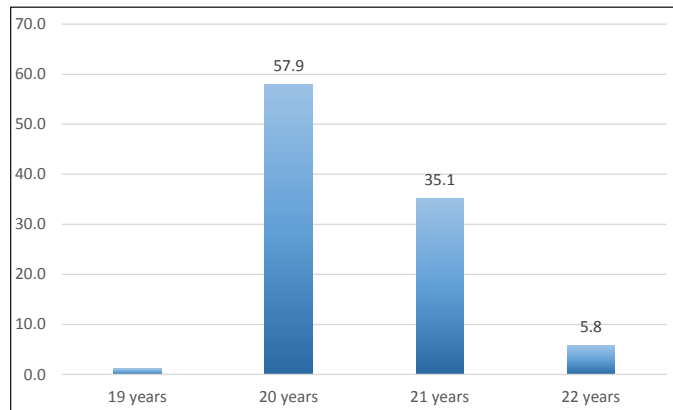


Fig. 3: Respondents Age

H1₀: There is no significant relationship between age and behavioural, affective and cognitive attitudes of graduates

towards entrepreneurship.

For evaluating the hypothesis, the Pearson Chi-Square statistic is calculated; where the p value for the chi-square statistic is .000, smaller than alpha value .05. The result of test statistics indicates there is enough significant relationship between age and behavioural, affective and cognitive attitude of graduates towards entrepreneurship. Furthermore, the null hypothesis has not been accepted.

Table 1: Chi Square Statistics

	Age	Behavioural	Cognitive	Affective
Chi-Square	10.400 ^a	124.854 ^b	144.492 ^c	177.692 ^d
df	1	26	23	24
Asymp. Sig.	.001	.000	.000	.000

Source: Primary data – SPSS Output.

H2₀: There is no significant impact of behavioural, affective and cognitive attitude of graduates on entrepreneurial intention.

Table 2: ANOVA - Hypothesis 2

		Sum of Squares	df	Mean Square	F	Sig.
Behavioral	Between Groups	2311.672	27	85.617	2.397	.000
	Within Groups	8286.343	232	35.717		
	Total	10598.015	259			
Cognitive	Between Groups	1520.415	27	56.312	1.936	.005
	Within Groups	6747.473	232	29.084		
	Total	8267.888	259			
Affective	Between Groups	1811.787	27	67.103	2.129	.002
	Within Groups	7313.597	232	31.524		
	Total	9125.385	259			

Source: Primary data – SPSS Output.

The ANOVA table indicates the results as among all three parameters, behavioural attitude has no impact on entrepreneurship since the df (27,232), F = 2.397 p < 0.05 value. Besides the cognitive attitude df (27,232), F = 1.936 p > 0.05 value and the affective attitude df (27,232), F = 2.129 p > 0.05 value of graduates show significant attitude

on entrepreneurial intention. Jena (2020) mentioned that students expressed positive impact of entrepreneurship education on entrepreneurial intention.

H3₀: There is a significant impact of behavioural, affective and cognitive attitude of graduates on entrepreneurial education.

Table 3: ANOVA Hypothesis 3

		Sum of Squares	df	Mean Square	F	Sig.
Behavioral	Between Groups	4305.597	27	159.467	5.879	.000
	Within Groups	6292.419	232	27.122		
	Total	10598.015	259			

		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Cognitive	Between Groups	2178.711	27	80.693	3.074	.000
	Within Groups	6089.178	232	26.246		
	Total	8267.888	259			
Affective	Between Groups	3703.974	27	137.184	5.871	.000
	Within Groups	5421.410	232	23.368		
	Total	9125.385	259			

Source: Primary data – SPSS Output.

Note. The values stated in table are derived from primary data using SPSS, the outcomes of the data have shown.

Proving Hypothesis 3, the ANOVA results depict all three parameters, behavioural attitude $df(27,232)$, $F = 5.879$ $p > 0.05$ value, besides Cognitive attitude $df(27,232)$, $F = 3.074$ $p > 0.05$ value and affective attitude $df(27,232)$, $F = 5.871$ $p > 0.05$ value of graduates show significant

attitude on entrepreneurial education. As a result, since all three parameters (behavioural, cognitive and affective attitude) impact on entrepreneurial education, as such null hypothesis proved to be precise.

Results

Table 4: Entrepreneurial Attitude - Behavioural Component

<i>Sr. No.</i>	<i>Items</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Cronbach's Alpha</i>
1.	I enjoyed lectures on entrepreneurship.	4.1120	.81591	.903
2.	Lectures on entrepreneurship. I received have increased any interest to pursue an entrepreneurial career.	3.8846	.88431	
3.	I consider entrepreneurship as a very important subject the same as major subjects..	3.9462	.88148	
4.	Entrepreneurship education I have undergone have prepared me to make informed decisions when I graduated.	3.9073	.87110	
5.	I am happy to learn entrepreneurial skills.	4.2231	.71676	
6.	I consider entrepreneurship a career option.	3.8115	.98201	
7.	Entrepreneurship education I received has interest me to venture into entrepreneurship.	3.7462	.93256	
8.	My entrepreneurship lectures have helped me to meet and interact with successful entrepreneurs.	3.3115	1.20129	
9.	The subject teacher helps me to meet successful entrepreneurs who provide motivation to become possible entrepreneurs.	3.5269	1.15048	

Source: Primary data – SPSS Output.

Note. The values stated in table are derived from primary data using SPSS, the outcomes of the data descriptive of each item have shown.

Table 4 represents the mean and standard deviation of all items related to behavioural attitude from an observation, item no 5, “I am happy to learn entrepreneurial skills.” Mean \bar{x} scores are higher followed by item no 1 “I enjoyed lectures on entrepreneurship” scored second highest mean \bar{x} score. Yet on other side item no 8 “My entrepreneurship lectures have helped me to meet and interact with successful entrepreneurs” scored low mean \bar{x} scores, Students perhaps need to improve in building professional networks, read successful stories

as well failure stories of entrepreneurs to learn quick lessons and remain more informative in accessing explicit knowledge. The overall Cronbach's alpha for behavioural component sub-scale is $\alpha = .903$, the reliability of the subscale is excellent. It's necessary to study the behaviour attitude as it brings the social and cultural norms of the individuals. Although the aspiration levels are high yet students prefer an immediate job soon after completion of studies to overcome financial stress.

Table 5: Entrepreneurial Attitude - Cognitive Component

<i>Sr. No.</i>	<i>Items</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Cronbach's Alpha</i>
1.	Entrepreneurs education have taught me to create services and or products that can satisfy the needs of customers.	3.8808	.90751	.896
2.	Entrepreneurship education have enabled me to identify business related opportunities.	3.9962	.77359	
3.	Entrepreneurship education have taught me to develop business plans successfully.	3.9462	.81787	
4.	Due to entrepreneurship education. I now have skills to create a new business.	3.6923	.85058	
5.	With the entrepreneurship education, I now have skills to create a new business.	3.7654	.86254	
6.	Entrepreneurship education has taught me to perform feasibility studies.	3.7346	.86254	
7.	Through Entrepreneurship education my skills, knowledge and interest in entrepreneurship have all improve.	4.0038	.75847	
8.	Activities have stimulated my interest in entrepreneurship.	3.7500	.89346	
9.	Overall I am very satisfied with how entrepreneurship education is being taught.	3.8962	.90087	

Source: Primary data – SPSS Output.

Note. The values stated in table are derived from primary data using SPSS, the outcomes of the data descriptive of each item have shown.

Cognitive attitude refers to the grasping power of students in learning new concepts, understanding them and implementing them into practice. Item no. 7: “Through entrepreneurship education, my skills, knowledge and interest in entrepreneurship have all improved.” ranked high mean score of 4.0038, besides item no. 4 “Due to entrepreneurship education. I now have the skills to create a new business” scored a low mean score of

3.6923, indicating there is scope for further development of entrepreneurial skills among the students, a need for proper guidance and awareness with regard to country initiatives, and support mechanisms provided to start up new ventures. Observing item 2 and 3 also scored a good mean score, stating the entrepreneurship education is helping the students in identifying business opportunities.

Table 6: Entrepreneurial Attitude - Affective Component

<i>Sr. No.</i>	<i>Items</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Cronbach's Alpha</i>
1.	I desperately want to work for myself.	3.9346	1.01321	.844
2.	The idea of owning my own business is planning.	3.8962	.91785	
3.	I really consider self-employment as something very important / desirable.	4.2038	.85694	
4.	The entrepreneurship education has effectively help me feel satisfied with self-employment.	3.9923	.86543	
5.	I like entrepreneurship education.	4.1115	.75020	
6.	Lectures on entrepreneurship makes me anxious.	3.4769	1.16722	
7.	The idea of having entrepreneurship education excites me.	3.8185	.87708	
8.	It frustrates me that entrepreneurship is part the curriculum offered subjects.	2.6462	1.33767	
9.	The subject teacher varies my overall feelings towards the subject.	3.6269	.99188	

Source: Primary data – SPSS Output.

Note. The values stated in table are derived from primary data using SPSS, the outcomes of the data descriptive of each item have shown.

The affective component refers to the student’s preferences towards the entrepreneurship subject. Preferences can be either positive or negative, like, or dislike; the analysis of each item is measured with the mean value. The affective component subscale consists of 9 items; reliability of the

scale is measured with Cronbach’s alpha .844, found to be very good. Item 5, “I like entrepreneurship education”, scored the highest mean (4.115), a positive outcome indicating that most of the students preferred to study entrepreneurship education. Besides, most of the students

also showed interest in starting self-employment. No doubt there is less interest in pursuing entrepreneurship courses among students, although the interest and passion exist among them; yet there might be a few factors that hinder students from starting their own businesses.

Findings

Behavioural, cognitive and affective attitude effects on entrepreneurial education; significant relationship between age and behavioural, affective and cognitive attitudes of graduates towards entrepreneurship; and entrepreneurship education are helping students towards gaining interest and passion. The behavioural component excels comparatively to the cognitive and affection components.

Discussion

There is a dire need to change the teaching methodologies to cultivate entrepreneurial skills and enhance the knowledge of students to start new ventures, Donald et al. (2024). The two major restraints that limit the students from entering into business are low locus of control and family support. The entrepreneurial fire is revealed by the student's passion, interest, level of experience and knowledge and extroverted behaviour. The student's personality traits do influence the ability to grab the opportunities. Mere demographic variables do not reflect on entrepreneurial intention, besides several factors, such as business incubators, the role of government, training and new entrepreneurship courses. There is a myth regarding student perception of being safer with salaried employment than taking risks in starting new start-ups; such an attitude needs to be changed. Students quite often express that lack of seed capital, poor infrastructure and low experience were the big challenges faced by them. Stakeholders need to organise workshops, seminars and conferences on entrepreneurship to create more awareness among students of all levels, graduates and postgraduates.

Conclusion

Strengthening entrepreneurial skills among the students is a necessity to organise several entrepreneurship development programmes to prompt motivation and build competencies among the aspiring budding entrepreneurs.

The teaching methodology has to be imparted in such a way as to impart to them technical and real-time problem-solving, role plays, team-based learning, case studies of a few successful as well as failure stories, and pitch deck presentations to help the students to gain more knowledge. The need for achievement and self-motivation compels students to be strong among the students to be entrepreneurs. Motivational aspects include several variables, such as independence, freedom, aspiring to become one's boss and not giving up policy. To be successful, besides personality traits, luck and charm, students build good social networks (friends, colleagues, peers and family members) to support them in business. Thus, unique attention needs to be given to the trainers, teachers and facilitators who are involved in creating an entrepreneurial mind-set among the students.

Limitations and Scope for Future Research

The current study includes a few limitations that limit further extending the research work. Initially, the focus has been made on engineering students of computer science and information technology streams to identify the behavioural attitudes. However, the total sample size taken is smaller as compared to the total sample; further, there is scope to conduct the research study on other streams of engineering.

References

- Al-Qadasi, N., Zhang, G., Al-Awlaqi, M. A., Alshebami, A. S., & Aamer, A. (2023). Factors influencing entrepreneurial intention of university students in Yemen: The mediating role of entrepreneurial self-efficacy. *Frontiers in Psychology, 14*, 1111934.
- Cacciotti, G., & Hayton, J. C. (2015). Fear and entrepreneurship: A review and research agenda. *International Journal of Management Reviews, 17*(2), 165-190.
- Cole, A. H. (1946). An approach to the study of entrepreneurship: A tribute to Edwin F. Gay. *The Journal of Economic History, 6*(S1), 1-15.
- Cromie, S. (1987). Motivations of aspiring male and female entrepreneurs. *Journal of Organizational Behavior, 8*(3), 251-261.
- Ferreira, J. J., Raposo, M. L., Gouveia Rodrigues, R., Dinis, A., & Do Paco, A. (2012). A model of entrepreneurial

- intention: An application of the psychological and behavioral approaches. *Journal of Small Business and Enterprise Development*, 19(3), 424-440.
- Jena, R. K. (2020). Measuring the impact of business management student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275.
- Klemp, P. J. (1980). Cohen: Sensible words: Linguistic practice in England, 1640-1785 (Book Review). *General Linguistics*, 20(1), 56.
- Kostoglou, V., & Siakas, K. V. (2008, April). Graduates' entrepreneurship: Investigating self-employment of university graduates. In *Proceedings of the 2nd International FINPIN Conference—Promoting Entrepreneurship by Universities* (pp. 45-51).
- Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The global entrepreneurship monitor social entrepreneurship study. *Small Business Economics*, 40, 693-714.
- Lyons, R., Lynn, T., & Mac an Bhaird, C. (2015). Individual level assessment in entrepreneurship education: An investigation of theories and techniques. *Journal of Entrepreneurship Education*, 18(1), 136-156.
- Meinam, M., Ojha, S. N., Ananthan, P. S., Sharma, A., Meinam, T., Singh, Y. J., & Mir, S. A. (2023). Attitudes of the postgraduate students of Manipur University towards entrepreneurship. *Indian Journal of Extension Education*, 59(3), 63-68.
- Mgaya, K. V., & Magembe, B. A. (2007). Attitudes of university students towards entrepreneurship. *World Review of Entrepreneurship, Management and Sustainable Development*, 3(2), 192-206.
- Ode, E., Shitu, S., & Adegbe, O. B. (2023). Examining the influence of entrepreneurship education on entrepreneurial intention: A gender-focused analysis of intentions among undergraduate students. *Journal of Entrepreneurial Innovations*, 4(S1).
- Rambe, P., & Ndofirepi, T. M. (2021). Explaining social entrepreneurial intentions among college students in Zimbabwe. *Journal of Social Entrepreneurship*, 12(2), 175-196.
- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice*, 15(4), 13-32.
- Romero-Castro, N., Miramontes-Viña, V., & López-Cabarcos, M. Á. (2022). Understanding the antecedents of entrepreneurship and renewable energies to promote the development of community renewable energy in rural areas. *Sustainability*, 14(3), 1234.
- Shariff, M. N. M., & Saud, M. B. (2009). An attitude approach to the prediction of entrepreneurship on students at institution of higher learning in Malaysia. *International Journal of Business and Management*, 4(4), 129-135.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business venturing*, 22(4), 566-591.
- Taylor, F. W. (1911). *The principles of scientific management*. NuVision Publications, LLC.
- Trivedi, R. H. (2017). Entrepreneurial-intention constraint model: A comparative analysis among post-graduate management students in India, Singapore and Malaysia. *International Entrepreneurship and Management Journal*, 13(4), 1239-1261.
- Yu, T. L., & Wang, J. H. (2019). Factors affecting social entrepreneurship intentions among agricultural university students in Taiwan. *International Food and Agribusiness Management Review*, 22(1), 107-118.
- Zen, A., Rahayu, P. P., Mutoffar, M. M., Astutik, W. S., & Ausat, A. M. A. (2023). Entrepreneurship in existentialism philosophy: Examining life and business. *Innovative: Journal of Social Science Research*, 3(2), 2230-2240.

Appendix A

Assessment of Behavioural, Cognitive and Affective Attitude of Engineering Graduates Towards Entrepreneurship

(Questionnaire)

The survey contains questions in 5 parts that assess the respondent's views on entrepreneurship education, their

behavioural and cognitive entrepreneurial attitudes and their entrepreneurial intentions after completing their studies. Rate each statement on a 5-point scale from *Strongly Disagree to Strongly Agree*.

Name: _____

Gender: _____ Age _____

Qualification: _____ Branch: _____

_____ Contact No: _____

Part – 1 Entrepreneurship Education

<i>Sr. No</i>	<i>Items</i>	<i>SD (1)</i>	<i>D (2)</i>	<i>N (3)</i>	<i>A (4)</i>	<i>SA (5)</i>
1.	Entrepreneurship Creates job.					
2.	Entrepreneurship means to be self-employed.					
3.	Entrepreneurship can make someone to be self-independent.					
4.	Entrepreneurship contributes to economic development.					
5.	Entrepreneurs gather resources to create wealth.					
6.	Entrepreneurs attends functions to meet business partner.					
7.	Entrepreneurs uses his or her create ability to publicize.					
8.	Entrepreneurs help see opportunities where others do not see.					
9.	Entrepreneurs rule the world economy.					

Part – 2 Entrepreneurial Attitude – Behavioural Component

<i>Sr. No</i>	<i>Items</i>	<i>SD (1)</i>	<i>D (2)</i>	<i>N (3)</i>	<i>A (4)</i>	<i>SA (5)</i>
1.	I enjoyed lectures on entrepreneurship.					
2.	Lectures on entrepreneurship. I received have increased any interest to pursue an entrepreneurial career.					
3.	I consider entrepreneurship as a very important subject the same as major subjects.					
4.	Entrepreneurship education I have undergone have prepared me to make informed decisions when I graduated.					
5.	I am happy to learn entrepreneurial skills.					
6.	I consider entrepreneurship a career option.					
7.	Entrepreneurship education I received has interest me to venture into entrepreneurship.					
8.	My entrepreneurship lectures have helped me to meet and interact with successful entrepreneurs.					
9.	The subject teacher helps me to meet successful entrepreneurs who provide motivation to become possible entrepreneurs.					

Part – 3 Entrepreneurial Attitude – Cognitive Component

<i>Sr. No</i>	<i>Items</i>	<i>SD (1)</i>	<i>D (2)</i>	<i>N (3)</i>	<i>A (4)</i>	<i>SA (5)</i>
1.	Entrepreneurs education have taught me to create services and or products that can satisfy the needs of customers.					
2.	Entrepreneurship education have enabled me to identify business related opportunities.					
3.	Entrepreneurship education have taught me to develop business plans successfully					
4.	Due to entrepreneurship education. I now have skills to create a new business.					
5.	With the entrepreneurship education, I now have skills to create a new business.					
6.	Entrepreneurship education has taught me to perform feasibility studies.					
7.	Through Entrepreneurship education my skills, knowledge and interest in entrepreneurship have all improve.					
8.	Activities have stimulated my interest in entrepreneurship.					
9.	Overall I am very satisfied with how entrepreneurship education is being taught.					

Part – 4 Entrepreneurial Attitude – Affective Component

<i>Sr. No</i>	<i>Items</i>	<i>SD (1)</i>	<i>D (2)</i>	<i>N (3)</i>	<i>A (4)</i>	<i>SA (5)</i>
1.	I desperately want to work for myself.					
2.	The idea of owning my own business is planning.					
3.	I really consider self-employment as something very important / desirable.					
4.	The entrepreneurship education has effectively help me feel satisfied with self-employment.					
5.	I like entrepreneurship education.					
6.	Lectures on entrepreneurship makes me anxious.					
7.	The idea of having entrepreneurship education excites me.					
8.	It frustrates me that entrepreneurship is part the curriculum offered subjects.					
9.	The subject teacher varies my overall feelings towards the subject.					

Part – 5 Entrepreneurial Intention

<i>Sr. No</i>	<i>Items</i>	<i>SD (1)</i>	<i>D (2)</i>	<i>N (3)</i>	<i>A (4)</i>	<i>SA (5)</i>
1.	My professional goal is to become as an entrepreneur.					
2.	I will make every effort to start and run my own business.					
3.	I am determined to establish a business in the future.					
4.	I am seriously considering of putting up a business in the future.					
5.	I am ready to do anything to be an entrepreneur.					
6.	If I will open a business, I have a chance to become successful.					
7.	Being an entrepreneur would make me great.					
8.	I have ideas about how to start a business in the future.					
9.	It would be difficult for me to develop business ideas.					