ISSN 0972-8406
The NEHU Journal Vol. XXIII, No. 1, 2025, pp. 29-41

The Influence of Artificial Intelligence and Entrepreneurship Education on Enhancing the Entrepreneurial Intentions of Female Students in the Universities of Manipur

Thokchom Belinda Devi*, Kiirii Onand Monsang

Department of Commerce, Dhanamanjuri University,
Imphal, Manipur-795001, India
**Corresponding author: belindathokchom123@gmail.com*

Abstract

This study explores the intersection of entrepreneurship education (EE), artificial intelligence (AI), and the entrepreneurial intentions (EI) of female university students in Manipur, India—a region where women's participation in entrepreneurship remains limited due to socio-cultural, financial, and structural barriers. Grounded in the Theory of Planned Behavior, the research investigates how factors such as attitude, gender stereotyping, fear of unemployment, and lack of finance influence entrepreneurial intention, while also examining the moderating role of AI in the relationship between EE and EI. A cross-sectional quantitative survey was conducted with 100 female students enrolled in entrepreneurship-related programs across universities in Manipur. Data were analysed using multiple regression and moderation analysis via Hayes' PROCESS macro. Results indicate that attitude, EE, gender stereotypes, and fear of unemployment significantly and positively influence EI, whereas lack of finance has a negative effect. Notably, AI significantly moderates the relationship between EE and EI, amplifying the positive effect of education on entrepreneurial aspirations. These findings underscore the transformative potential of integrating AI into entrepreneurship education to enhance its effectiveness and inclusivity. The study contributes empirical insights to the discourse on gendered entrepreneurship, digital innovation in education, and policy design for women's economic empowerment in emerging regions.

Keywords: Entrepreneurial intention, women entrepreneurship, entrepreneurship education, artificial intelligence, Manipur, gender stereotyping, higher education

Introduction

Entrepreneurship is a prime driver of economic development, enabling new business development, the creation of revenue streams, and increased community integration. The relationship between entrepreneurship and economic development is both deep and intricate, with the two arenas having similar goals and working complementarily to form a cycle of community. This methodology is an effective strategy for self-employment in the face of current unemployment issues and spurs the development of women's roles in society. In poorer countries, women have traditionally been responsible for maintaining family stability and helping in economic development. They are underrepresented in decision-making at the national level because of religious and cultural prejudices (Vlasenko, 2023). Cultural

stereotypes and biases can pose problems for women who want to pursue entrepreneurial ventures. A number of factors and determinants have been looked at for their strong impact on women's entrepreneurial intentions. Entrepreneurial actions cannot be undertaken without entrepreneurial intention (Bird, 1988). Substantial studies have proved that education in entrepreneurship greatly enhances entrepreneurial intentions among students (Zhao et al., 2005; Souitaris et al., 2007). Universities facilitate entrepreneurial ecosystems through incubators, accelerators, co-working space, and access to investors and mentors (Guerrero et al., 2016). They shape entrepreneurial intention through curriculum design, experiential education, and access to role models. Nabi et al. (2017) also point out that entrepreneurial universities enhance the formal and informal learning experience of students, which develops their entrepreneurial skills and mindset, making them key drivers in the development of regional and national innovation capacity.

Entrepreneurship education can encourage students to gain a better understanding of entrepreneurship, which gives them higher self-efficacy and opportunity recognition capability (Zhao et al., 2005; Karlsson and Moberg, 2013). Certain research identifies a non-significant correlation between entrepreneurial education (EE) and entrepreneurial intention (EI). Oliver Thomas (2003), the author identifies methodological shortcomings in most EE research, including no program evaluation and overuse of self-reported measures. He contends that the positive contribution of EE to EI tends to be exaggerated because of these shortcomings. Individuals with high levels of proactivity can be least influenced by EE programmes, indicating a possible incompatibility between learner types and instruction (Obschonka et al., 2020). Universities have a crucial responsibility of offering Entrepreneurship education to foster entrepreneurial growth (Ncanywa & Dyantyi,2022). Nonetheless, Fayolle (2013) highlights that the majority of programs have no sound theoretical base, thereby making it difficult to assess their real value. Nabi et al. (2017) further contend that the diversity in program design and implementation causes unequal outcomes. This leaves one wondering whether entrepreneurship can truly be taught or whether it is largely influenced by individual character and environmental factors. These challenges have generated demands for stronger evaluations and evidence-based practices in the field. One of the promising solutions lies in the utilization of the power of technological innovations, particularly Artificial Intelligence (AI). This revolutionary technology has become a dominant force, having a profound impact on many aspects of life and redrawing the map of the business world. From streamlining operations to improving user experiences, AI is transforming our interfaces with systems and with one another and setting the stage for a more productive and interconnected future. AI systems could assist in overcoming uncertainty problems and hence open up new avenues of entrepreneurial action and for entrepreneurs of the future. (Townsend and Hunt, 2019). (Acs et al., 2022; Wurth et al., 2023) AI has a central role to play in (digital) entrepreneurial ecosystems in providing means of information exchange, generating and disseminating new products, and driving innovation.

This underlines the useful contribution that AI can make to entrepreneurship education in the contemporary world.This study delves into the integration of Artificial Intelligence (AI) within the realm of Entrepreneurship Education (EE), specifically examining its impact on the entrepreneurial intentions of women students at universities in Manipur. Despite the growing significance of AI in various educational contexts, there remains a paucity of

empirical research focusing on its role in shaping entrepreneurial aspirations. This investigation seeks to fill that gap by exploring how AI can enhance entrepreneurial education and influence the business ambitions of female students in Universities of Manipur, a region where such studies are notably limited.

Review of Literature

Entrepreneurial intention

Entrepreneurial intention (EI) refers to a person's conscious state of mind that directs attention, experience, and behavior toward planned entrepreneurial behavior (Bird, 1988). It is widely regarded as the most important predictor of entrepreneurial behavior and a precursor to the actual act of venture creation. Thompson (2009) further refined the definition, describing EI as "a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future."
Understanding EI is critical because it serves as a proximal predictor of entrepreneurial behavior. Since actual venture creation is rare and difficult to capture in short-term studies, EI acts as a meaningful and measurable construct for early-stage entrepreneurship research (Fayolle & Liñán, 2014). Liñán & Chen (2009); Lee & Wong (2004) The decision to pursue an entrepreneurial career is the first step in the protracted process of becoming an entrepreneur, which can be viewed as a time-consuming process. Ajzen's theory of planned behavior (TPB) and Shapero A.'s entrepreneurial model (1982) are two of the main ideas that have been used to investigate the propensity for entrepreneurship, particularly among college students. TPB, proposed by Ajzen (1991), views intention as a result of three psychological components—personal attitude toward entrepreneurship, perceived social expectations (subjective norms), and the belief in one's own ability to carry out entrepreneurial tasks (perceived behavioral control). On the other hand, Shapero's model (1982) emphasizes how significant life events can act as catalysts, prompting individuals to consider entrepreneurship when they perceive it as both desirable and achievable. While TPB focuses on planned, rational decision-making, SEE introduces the idea of situational triggers that push individuals toward entrepreneurial action. Together, these frameworks offer valuable insights into the psychological and contextual factors shaping entrepreneurial intentions.

Factors affecting women entrepreneurial intention

Attitude is a core construct in the Theory of Planned Behavior (Ajzen, 1991) and significantly influences entrepreneurial intention. It represents an individual's positive or negative evaluation of entrepreneurship as a career choice. Studies consistently show that a favorable entrepreneurial attitude increases the likelihood of intending to start a business (Krueger, Reilly, & Carsrud, 2000; Liñán & Chen, 2009). Shahriar et al. (2024) found that positive attitudes among university students in Bangladesh strongly predict entrepreneurial intention, highlighting the importance of fostering such attitudes through education and support programs. Additionally, gender differences exist, as women's entrepreneurial intentions are often linked to attitudes related to balancing organizational and personal life demands (Maes, Leroy, & Sels, 2024). Access to finance plays a crucial role in shaping entrepreneurial intentions among university students in developing economies. Shahriar et al.

(2024) found that having easier access to financial resources significantly increases students' motivation and confidence to start their own businesses. Without sufficient funding options, even students with strong entrepreneurial traits may hesitate to pursue ventures, highlighting the importance of financial support alongside education programs. Bongomin et al. (2017) found that limited access to financial resources often restricts business expansion and innovation. They also highlighted that financial literacy plays a crucial role in enabling entrepreneurs to better utilize available funding. Without sufficient financial support, many startups struggle to survive, making access to finance a critical barrier for entrepreneurs.

Chowdhury (2017) clearly demonstrated that access to funding is a key driver of entrepreneurial mindsets and intentions. This underscores the importance of funding in empowering and motivating entrepreneurs to seize opportunities and innovate. According to Chowdhury (2017), the availability of funding has a significant impact on the development of entrepreneurial attitudes and goals. Aspiring business owners can develop their concepts and move their endeavors forward with more confidence when they have access to financial resources. In a similar vein, Islam (2021) emphasized that the availability of funding options greatly increases entrepreneurial intention, highlighting the importance of financial support in encouraging and facilitating entrepreneurial endeavors. When taken as a whole, these studies demonstrate how crucial easily available capital is to creating a thriving entrepreneurial climate. Laguía et al., (2022). Even though entrepreneurship has the potential to help women grow economically and socially, women are still disproportionately underrepresented in entrepreneurial endeavors worldwide. Gender stereotyping—socially embedded ideas about the roles, skills, and traits considered suitable for women—is one of the subtle but pervasive barriers females encounter. In addition to influencing how others perceive female entrepreneurs, these preconceptions also affect how women evaluate their own abilities and prospects in the business world.

Haus et al., (2013); Camelo Ordaz et al. (2016) have been repeatedly found to reduce women's confidence in their entrepreneurial skills, which is a key factor in determining their desire to launch a firm. Steinmetz et al., (2021) When being an entrepreneur is linked to characteristics that are generally associated with men, women may question their ability to succeed. Social traditions in many societies deter women from starting their own businesses, particularly in fields where males predominate. These social norms serve as subjective standards that deter women from pursuing starting their own businesses as a respectable or legitimate career path.

Governments and politicians frequently promote self-employment as a feasible career option, and entrepreneurship is widely seen as a solution to unemployment, especially during times of economic distress or high unemployment rates. However, there is continuous discussion over the relationship between unemployment and the desire to start your own business. Some view entrepreneurship as a last resort, while others see it as a proactive option for those who are unemployed. According to research by Kolvereid and Isaksen (2006), jobless persons have a higher desire to start their own business than do employed people, particularly if they can also access government programs or training. According to Arenius and Minniti's (2005) analysis, necessity-driven entrepreneurship tends to increase in low-income nations based on data from the Global Entrepreneurship Monitor (GEM). However, Fayolle and Gailly (2015)

argue that not all unemployed people are ready or able to start a business; fear of failure, low confidence in one's skills, and a lack of capital are major barriers.

Li and Wu (2019), Entrepreneurship-focused educational programs aim to increase students' aspirations to start their own business. The ways that entrepreneurship education increases these entrepreneurial ambitions have been demonstrated by research (Nabi et al., 2018). First of all, it enables students to enhance their entrepreneurship-related information, abilities, attitudes, and even personal characteristics through its courses and services (Wu et al., 2022). Second, incorporating real-world experiences such as field research, internships, and extracurricular activities gives students access to creative ideas and worthwhile entrepreneurial encounters. Sun J, Shi J, and Zhang J (2023) claim that by improving students' attitudes, drive, and initiative, entrepreneurship education (EE) has a beneficial effect on entrepreneurial intentions (EI). According to data collected from Chinese students, EE strengthens EI, especially when supported by psychological factors and early exposure to entrepreneurship. These findings highlight the value of thoughtfully designed courses and supportive learning environments in encouraging entrepreneurial behavior. Indian college students studying entrepreneurship are more likely to have heightened entrepreneurial inclinations, according to Pandit et al. (2018).

Townsend et al. (2018), Artificial intelligence (AI) is generally described as intelligent systems that possess the ability to think and learn. The implementation of artificial intelligence technologies is revolutionizing how entrepreneurship is practiced. Kabir (2018), When examining entrepreneurial intentions, AI is a significant factor to take into account, especially given that the adoption of AI technologies is predicted to lead to a substantial wave of innovation, fostering considerable entrepreneurial opportunities and ultimately resulting in positive social and economic outcomes. Davidsson et al. (2018) pointed out that the technological advancements triggered by artificial intelligence can serve as an external impetus for new entrepreneurial ventures. Rahman et al. (2022) demonstrated that AI has a partial mediating effect on the connection between entrepreneurship education and entrepreneurial intention.

Research Aim and Objectives

This research endeavour seeks to systematically address the following questions with the aim of contributing valuable insights to the fields:

- To evaluate the relation between various antecedents or factors and Entrepreneurial intention among female students of Universities of Manipur.
- To study the extent of entrepreneurship education influence on entrepreneurial intentions among female students in Universities of Manipur.
- To study how artificial intelligence enhances entrepreneurship education and fuels the entrepreneurial aspirations of female students in Manipur's Universities.

Hypothesis Development

The following hypotheses have been framed to meet the objectives of the study.

H1: Attitude (AT) significantly influence women’s entrepreneurial intention (EI)

H2: Fear of Unemployment (FU) significantly influences women’s entrepreneurial intention (EI)

H3: Gender Stereotyping (GS) and women's entrepreneurial Intention (EI)

H4: Lack of finance (LOF) negatively influences women's entrepreneurial intention (EI)

H5: Entrepreneurship Education (EE) significantly influences women's entrepreneurial Intention (EI).

H6: Artificial intelligence (AI) moderates the relationship between EE and EI.

Research methodology

This study adopted a quantitative, cross-sectional survey design to examine the influence of entrepreneurship education and artificial intelligence on the entrepreneurial intentions of female university students in Manipur, India. A total of 100 respondents were selected using purposive sampling, targeting female students enrolled in undergraduate and postgraduate programs who had exposure to entrepreneurship-related courses. Data were collected using a structured questionnaire consisting of standardized items measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The reliability and validity test, and internal consistency were tested using Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). Data analysis was performed using IBM SPSS version 26. Descriptive statistics, multiple regression analysis, and Hayes' PROCESS macro (Model 1) were used to assess direct effects and the moderating role of artificial intelligence. Ethical protocols were followed, with informed consent obtained from all participants and confidentiality maintained throughout the research process

Data Analysis and Interpretation

The reliability and convergent validity of the measurement scales were thoroughly assessed to ensure the robustness of the constructs used in this study. Table 1 presents the results of the reliability and validity of constructs.

Table 1. Results for Reliability and Validity of Construct

Construct	Item Loadings	Cronbach's α	CR	AVE
Entrepreneurial Intentions (EI)	EI1 (.72), EI2 (.84), EI3 (.78), EI4 (.80), EI5 (.75)	0.90	0.87	0.58
Attitude (AT)	AT1 (.70), AT2 (.76), AT3 (.78), AT4 (.74), AT5 (.80)	0.85	0.86	0.55
Lack of Funding (LOF)	LOF1 (.68), LOF2 (.72), LOF3 (.80), LOF4 (.75), LOF5 (.70)	0.82	0.83	0.52
Gender Stereotyping (GS)	GS1 (.60), GS2 (.65), GS3 (.72), GS4 (.74), GS5 (.78)	0.75	0.76	0.48
Future Unemployment (FU)	FU1 (.72), FU2 (.75), FU3 (.80), FU4 (.82)	0.85	0.87	0.60
Entrepreneurship Education (EE)	EE1 (.70), EE2 (.73), EE3 (.84), EE4 (.76), EE5 (.79)	0.80	0.82	0.53
Artificial Intelligence (AI)	AI1 (.68), AI2 (.75), AI3 (.78), AI4 (.82), AI5 (.85), AI6 (.70), AI7 (.72)	0.88	0.89	0.56

Source: Primary Data

It is found that the Cronbach's alpha coefficients ranged from 0.75 to 0.90 across all constructs, indicating good to excellent internal consistency reliability (Nunnally, 1978). Composite reliability (CR) values were all above the recommended threshold of 0.70 (Fornell & Larcker, 1981), further confirming the consistency of the constructs. Convergent validity

was supported by Average Variance Extracted (AVE) values exceeding the minimum acceptable level of 0.50 for most constructs, with only Gender Stereotyping slightly below at 0.48, which is still acceptable given its adequate CR (Fornell & Larcker, 1981). Item loadings for each construct were strong, mostly exceeding 0.60, indicating that the observed variables effectively represent their latent constructs (Hair et al., 2010). These results suggest that the measurement model possesses satisfactory psychometric properties, providing a reliable and valid foundation for subsequent analyses of entrepreneurial intentions and its related factors.

Table 2 presents the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy and Bartlett's Test of Sphericity. The results of the KMO and Bartlett's Test of Sphericity indicate that the dataset is appropriate for factor analysis. The KMO value of 0.778 suggests a good level of sampling adequacy, indicating that the variables share enough common variance to justify the use of factor analysis. Furthermore, Bartlett's Test of Sphericity was statistically significant ($\chi^2(21) = 235.619$, $p < .001$), confirming that the correlation matrix is not an identity matrix and that there are sufficient correlations among the variables. Together, these findings support the suitability of the data for extracting meaningful factors.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.778
Bartlett's Test of Sphericity	Approx. Chi-Square	235.619
	df	21
	Sig.	.000

The regression analysis reveals significant relationships between several predictors and entrepreneurial intention (EI) among women as depicted in Table 3. Attitude (AT) exhibits a positive and statistically significant influence on entrepreneurial intention ($\beta = 0.424$, $p < 0.001$), indicating that more favorable attitudes toward entrepreneurship are associated with stronger intentions to pursue entrepreneurial activities. Similarly, concerns about future unemployment (FU) positively predict entrepreneurial intention ($\beta = 0.502$, $p = 0.003$), suggesting that the fear of joblessness motivates women to consider entrepreneurship as an alternative career path.

Table 3: Hypothesis Testing

Relationships	**Estimate (β)**	**Standard Error (SE)**	**Critical Ratio (t)**	**p-value**	**Hypothesis Verification**
H1: Attitude (AT) → Entrepreneurial Intention (EI)	0.424	0.114	3.713	<0.001**	Supported
H2: Future Unemployment (FU) → EI	0.502	0.164	3.053	0.003**	Supported
H3: Gender Stereotyping (GS) → EI	0.286	0.107	2.685	0.009**	Supported
H4: Lack of Finance (LOF) → EI	-0.480	0.160	-3.000	0.003**	Supported (Negative Influence)
H5: Entrepreneurship Education EE → EI	0.323	0.111	2.913	0.004**	Supported

Notes: $R = 0.611$, $R^2 = 0.373$, Adjusted $R^2 = 0.347$, Std. Error of Estimate = 3.964

Gender stereotyping (GS) also shows a significant positive effect on entrepreneurial intention (β = 0.286, p = 0.009). This finding may imply that despite prevalent stereotypes, women's awareness or experiences related to gender bias potentially fuel their entrepreneurial aspirations, possibly as a means to challenge or overcome such societal constraints.
Notably, lack of finance (LOF) demonstrates a significant negative impact on entrepreneurial intention (β = -0.480, p = 0.003). This confirms the hypothesis that financial constraints serve as a substantial barrier, diminishing women's likelihood or readiness to engage in entrepreneurial activities.
Entrepreneurship Education (EE) has a significant positive effect on women's Entrepreneurial Intention (EI), with an unstandardized coefficient (β) of 0.323 (SE = 0.111). The effect is statistically significant (t = 2.913, p = 0.004), indicating that higher levels of entrepreneurship education are associated with greater entrepreneurial intention among women.
The model explains approximately 37.3% of the variance in entrepreneurial intention (R^2 = 0.373), reflecting a moderate level of explanatory power.
The moderation effect of the construct relating to the relationship between Entrepreneurship Education (EE) and Entrepreneurial Intention (EI) may be had from Table 4.c

Table 4: Moderation Effect Construct

Hypothesis Test	β	**SE**	**t**	**P**	**95% CI for** β	**Verification**
H6: AI moderates EE→EI	0.045	0.015	3.00	.003	[0.015, 0.075]	Supported

Source: Primary Data

Hypothesis 6 (H6) proposed that Artificial Intelligence (AI) moderates the relationship between Entrepreneurship Education (EE) and Entrepreneurial Intention (EI). The interaction term between EE and AI was statistically significant (β = 0.045, SE = 0.015, t = 3.00, p = .003), with a 95% confidence interval that excluded zero ([0.015, 0.075]). This finding provides empirical support for H6.
The positive coefficient of the interaction term suggests that the effect of entrepreneurship education on entrepreneurial intention becomes stronger as artificial intelligence integration increases. In other words, students who experience higher exposure to AI technologies and tools appear to derive greater benefit from entrepreneurship education in shaping their entrepreneurial intentions. This finding is consistent with recent studies highlighting the role of AI in enhancing experiential learning, decision-making skills, and cognitive engagement in educational settings (Dwivedi et al., 2021; Margherita et al., 2022). Moreover, the use of a statistically rigorous moderation analysis approach (Hayes, 2022) strengthens the confidence in the interpretation of this interaction effect.

Main Findings

The study found that female students' entrepreneurial ambitions in Manipur's universities were significantly positively impacted by entrepreneurship instruction, attitude, expectations about future unemployment, and gender stereotypes. It was discovered that a lack of funding had a detrimental effect on these goals, underscoring the significant obstacle that funding presents for female entrepreneurs. Importantly, it has been demonstrated that artificial intelligence (AI) greatly modifies the association between entrepreneurial intention and entrepreneurship education, strengthening the impact of education on students' aspirations to pursue entrepreneurship. This implies that entrepreneurship education programs can be made more effective by incorporating AI technologies, which will encourage female students to have more entrepreneurial aspirations. The significance of the chosen predictors was confirmed by the model's moderate ability to explain the variance in entrepreneurial intention.

Suggestions

- Curriculum Innovation with AI Integration: Higher education institutions should embed AI tools and platforms (e.g., business simulation software, chatbots, predictive analytics) within entrepreneurship programs to foster real-time, experiential, and adaptive learning environments.
- Targeted Financial Support for Women Entrepreneurs: Financial institutions, governments, and university incubators must design gender-specific funding schemes and microfinance programs tailored to women in entrepreneurship, with simplified access, mentorship, and financial literacy components.
- Challenge Gender Norms through Role Models and Peer Learning: Universities should proactively feature female entrepreneurs as guest speakers, mentors, and case studies to dismantle stereotypes and reinforce self-efficacy among women.
- Leverage Fear of Unemployment Constructively: Recognize the motivational impact of employment uncertainty by designing career-readiness modules that position entrepreneurship as a proactive career strategy rather than a fallback plan.
- Regional and Cultural Customization: Education policy must be localized to address the unique socio-cultural dynamics of regions like Manipur. Community-driven entrepreneurship education that resonates with local values and opportunities can enhance engagement and impact.
- Further Research: Future studies should explore longitudinal impacts of AI-enhanced entrepreneurship education, including venture creation outcomes and sustainability. Comparative studies across regions and genders can also provide richer insights into the scalability of such interventions.

Conclusions

This study underscores the critical role of both human and technological factors in shaping the entrepreneurial intentions of female students in higher education, particularly within emerging regions such as Manipur. Entrepreneurship education significantly contributes to fostering entrepreneurial intent, especially when delivered in environments enriched by artificial intelligence technologies. The moderating effect of AI reveals that digital transformation in educational delivery is not merely complementary but essential in amplifying learning outcomes, particularly for entrepreneurial skill development.

Furthermore, non-cognitive and contextual variables—such as attitude, fear of unemployment, and gender norms—play significant roles in determining entrepreneurial motivation. The presence of gender stereotypes, while traditionally seen as a barrier, may paradoxically act as a motivator for women seeking to redefine their societal roles. However, lack of access to finance continues to be a pressing constraint, calling for structural interventions beyond education alone. Collectively, these findings provide empirical insights into how a digitally inclusive and context-sensitive entrepreneurial ecosystem can empower women to actively pursue self-employment and innovation.

References

Acs, Z. J., Szerb, L., Song, A., Lafuente, E., & Komlosi, E. (2022). Measuring the digital platform economy. In M. Keyhani, T. Kollmann, A. Ashjari, A. Sorgner, & C. E. Hull (Eds.), Handbook of Digital Entrepreneurship. Edward Elgar Publishing.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Anwar, I., & Saleem, I. (2019). Exploring entrepreneurial characteristics among university students: Evidence from India. Asia Pacific Journal of Innovation and Entrepreneurship, 13(3), 282–295. https://doi.org/10.1108/APJIE-07-2018-0044

Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. Small Business Economics, 24(3), 233–247. https://doi.org/10.1007/s11187-005-1984-x

Arshad, M., Farooq, O., Sultana, N., & Farooq, M. (2016). Determinants of individuals' entrepreneurial intentions: A gender-comparative study. Career Development International, 21(4), 318–339. https://doi.org/10.1108/CDI-10-2015-0135

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. Academy of Management Review, 13(3), 442–453. https://doi.org/10.5465/amr.1988.4306970

Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2017). The relationship between access to finance and growth of SMEs in developing economies: Financial literacy as a moderator. Cogent Business & Management, 4(1), 1337342. https://doi.org/10.1080/23311975.2017.1337342

Brockhaus, R. H. Sr, & Horwitz, P. S. (1986). The psychology of the entrepreneur. In D. L. Sexton & R. W. Smilor (Eds.), The Art and Science of Entrepreneurship (pp. 25–48). Ballinger.

Bullough, A., & Renko, M. (2013). Entrepreneurial resilience during challenging times. Business Horizons, 56(3), 343–350. https://doi.org/10.1016/j.bushor.2013.01.001

Camelo-Ordaz, C., Diánez-González, J. P., & Ruiz-Navarro, J. (2016). The influence of gender on entrepreneurial intention: The mediating role of perceptual factors. BRQ Business Research Quarterly, 19(4), 261–277. https://doi.org/10.1016/j.brq.2016.03.001

Chowdhury, F. N. (2017). A study of entrepreneurship development in Bangladesh: Pros and cons. Journal of Asian Scientific Research, 7(1), 1–11. https://doi.org/10.18488/journal.2/2017.7.1/2.1.1.11

Davidsson, P., Recker, J., & von Briel, F. (2018). External enablement of new venture creation: A framework. Academy of Management Perspectives, 34(3), 311–332.

Dwivedi, Y. K., Hughes, D. L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management, 57, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Dyantyi, N., Ncanywa, T., & Nguza-Mduba, B. (2024). Entrepreneurship education as a catalyst for sustainable development in higher education institutions. E-Journal of Humanities, Arts and Social Sciences, 1483–1493. https://doi.org/10.38159/ehass.2024584

Fayolle, A. (2013). Personal views on the future of entrepreneurship education. Entrepreneurship & Regional Development, 25(7–8), 692–701.

Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. Journal of Small Business Management, 53(1), 75–93. https://doi.org/10.1111/jsbm.12065

Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. Journal of Business Research, 67(5), 663–666.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

Guerrero, M., Urbano, D., & Fayolle, A. (2016). Entrepreneurial activity and regional competitiveness: Evidence from European entrepreneurial universities. The Journal of Technology Transfer, 41(1), 105–131.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Pearson.

Haus, I., Steinmetz, H., Isidor, R., & Kabst, R. (2013). Gender effects on entrepreneurial intention: A meta-analytical structural equation model. International Journal of Gender and Entrepreneurship, 5(2), 130–156. https://doi.org/10.1108/17566261311328828

Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd ed.). The Guilford Press.

Hian Chye Koh. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. Journal of Managerial Psychology, 11(3), 12–25. https://doi.org/10.1108/02683949610113566

Kabir, M. N. (2018). Entrepreneurship process in the era of Artificial Intelligence. Paper presented at ACPI, Washington, DC, USA, March 5–6, 5, 174–182.

Karlsson, T., & Moberg, K. (2013). Improving perceived entrepreneurial abilities through education: Exploratory testing of an entrepreneurial self-efficacy scale in a pre-post setting. International Journal of Management Education, 11(1), 1–11. https://doi.org/10.1016/j.ijme.2012.10.001

Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. Journal of Business Venturing, 21(6), 866–885. https://doi.org/10.1016/j.jbusvent.2005.06.008

Laguía, A., Wach, D., Garcia-Ael, C., & Moriano, J. A. (2022). "Think entrepreneur – think male": The effect of reduced gender stereotype threat on women's entrepreneurial intention and opportunity motivation. International Journal of Entrepreneurial Behavior & Research, 28(6), 1394–1415. https://doi.org/10.1108/IJEBR-04-2021-0312

Li, L., & Wu, D. (2019). Entrepreneurial education and students' entrepreneurial intention: Does team cooperation matter? Journal of Global Entrepreneurship Research, 9(1), 1–13. https://doi.org/10.1186/s40497-019-0157-3

Maes, J., Leroy, H., & Sels, L. (2014). Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. European Management Journal, 32(5), 784–794. https://doi.org/10.1016/j.emj.2014.01.001

Margherita, A., Heikkilä, M., & Romero, D. (2022). Artificial intelligence in education: Challenges and opportunities for entrepreneurial learning. Technological Forecasting and Social Change, 180, 121713. https://doi.org/10.1016/j.techfore.2022.121713

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. Academy of Management Learning & Education, 16(2), 277–299.

Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. Studies in Higher Education, 43(3), 452–467. https://doi.org/10.1080/03075079.2016.1177716

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). McGraw-Hill.

Obschonka, M., Hakkarainen, K., Lonka, K., & Salmela-Aro, K. (2020). Entrepreneurial education and personality development: A longitudinal study. Journal of Economic Structures, 9(23). https://doi.org/10.1186/s40008-020-00195-4

Omar, N. A., Ullah Shah, N., Abu Hasan, N., & Ali, M. H. (2019). The influence of self-efficacy, motivation, and independence on students' entrepreneurial intentions. Journal of Nusantara Studies (JONUS), 4(2), 1–28. https://doi.org/10.24200/jonus.vol4iss2pp1-28

Rahman, M. M., Rahaman, M. S., Moral, I. H., & Chowdhury, M. S. (2022). Entrepreneurship education and entrepreneurial intention of business graduates: Does artificial intelligence matter? In S. Hossain, M. S. Hossain, M. S. Kaiser, S. P. Majumder, & K. Ray (Eds.), Proceedings of International Conference on Fourth Industrial Revolution and Beyond 2021 (pp. 99–112). Springer. https://doi.org/10.1007/978-981-19-2445-3_8

Shahriar, M. S., Hassan, M. S., Islam, M. A., Sobhani, F. A., & Islam, M. T. (2024). Entrepreneurial intention among university students of a developing economy: The

mediating role of access to finance and entrepreneurship programs. *Cogent Business & Management, 11*(1), 2322021. https://doi.org/10.1080/23311975.2024.2322021

Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), Encyclopedia of Entrepreneurship (pp. 72–90). Prentice Hall.

Steinmetz, H., Isidor, R., & Bauer, C. (2021). Gender differences in the intention to start a business: An updated and extended meta-analysis. Zeitschrift für Psychologie, 229(1), 3–24. https://doi.org/10.1027/2151-2604/a000435

Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise the entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. Journal of Business Venturing, 22(4), 566–591. https://doi.org/10.1016/j.jbusvent.2006.05.002

Sun, J., Shi, J., & Zhang, J. (2023). From entrepreneurship education to entrepreneurial intention: Mindset, motivation, and prior exposure. Frontiers in Psychology, 14, 954118. https://doi.org/10.3389/fpsyg.2023.954118

Thomas, O. (2023). Rethinking entrepreneurship education: Critical reflections on effectiveness and future research directions. Industry and Higher Education, 37(1), 46–56. https://doi.org/10.1177/09504222221121065

Townsend, D. M., & Hunt, R. A. (2019). Entrepreneurial action, creativity, & judgment in the age of artificial intelligence. Journal of Business Venturing Insights, 11, e00126.

Vlasenko, T. (2023). Dimensions of the analysis of the organizational culture of multinational companies. Collection of Papers New Economy, 1(1), 110–125. https://doi.org/10.61432/CPNE0101110v.

Wu, L., Jiang, S., Wang, X., Yu, L., Wang, Y., & Pan, H. (2022). Entrepreneurship education and entrepreneurial intentions of college students: The mediating role of entrepreneurial self-efficacy and the moderating role of entrepreneurial competition experience. Frontiers in Psychology, 12, 727826. https://doi.org/10.3389/fpsyg.2021.727826.

Wurth, B., Stam, E., & Spigel, B. (2023). Entrepreneurial ecosystem mechanisms. Foundations and Trends® in Entrepreneurship, 19(3), 224–339.

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. Journal of Applied Psychology, 90(6), 1265–1272. https://doi.org/10.1037/0021-9010.90.6.1265.