

Espoused Model of Women Entrepreneurship: Antecedents to Women Entrepreneurial Intention and Moderating Role of Entrepreneurial Self-Efficacy

Authors

Naman Sharma

Department of General Management and Strategy, Indian Institute of Foreign Trade, Kolkata Campus, Kolkata, India

Ekta Sinha

Business School for the Creative Industries, University for the Creative Arts, London, UK,
and

Kumar Shalender

Chitkara Business School, Chitkara University, Chandigarh, India

Citation

Sharma, N., Sinha, E. and Shalender, K. (2023), "Espoused model of women entrepreneurship: antecedents to women entrepreneurial intention and moderating role of entrepreneurial self-efficacy", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEC-01-2023-0011>

Purpose – The purpose of this paper is to develop and propose an espoused model of women's entrepreneurship (EMWE) and test its predictive power on women's entrepreneurial intentions. Also, we examine the moderating role of entrepreneurial self-efficacy, given its dynamic nature that can be influenced by training.

Design/methodology/approach – Data was collected from 303 female students from undergraduate/postgraduate programs in reputed Indian higher education institutions using a self-administered questionnaire.

Findings – The study confirmed that all four factors- perceived entrepreneurial potential, perceived relational support, perceived educational support and perceived structural support- positively related to the women's entrepreneurial intentions. Simultaneously, results confirmed the moderating effect of entrepreneurial self-efficacy.

Implications – The study presents that more women may be inclined toward adopting entrepreneurship as their career based on their potential and self efficacy if adequate educational, relational, and structural support was provided.

Originality/ Value – Existing studies in entrepreneurship have focused primarily on men. This work fills this gap and not only proposes but empirically examines the espoused model of women entrepreneurship (EMWE) in the Indian context. It also provides evidence of a significant impact of perceived entrepreneurial potential and perceived relational support on women's entrepreneurial intentions and posits the role of entrepreneurial self-efficacy as an important moderator, unlike past studies.

Keywords: Women Entrepreneurship, Entrepreneurial Intentions, Entrepreneurial Potential, Self-efficacy, Relational Support, Structural Support, India, Entrepreneurship.

Introduction

In recent years, researchers have placed an increased focus on the field of entrepreneurship (Dana, 2002; Dana *et al.*, 2020) and have viewed it as a driving factor for the desired economic development. According to Arenal *et al.* (2017), entrepreneurship is the key to the social and economic progress of any country; leading to the introduction of new technology and innovation, the creation of new jobs, and the overall improvement of living standards (Urbano, *et al.* 2019). By including gender equality in the Sustainable Development Goals of the United Nations, women's entrepreneurship has received greater attention in the global economy (United Nations, 2015). It has resulted in placing women as key drivers in various fields including economic and social development. Today, there is a sharp recognition among women to pursue economic independence, and the advent of women entrepreneurs has become a worldwide trend. Although several SDGs include gender-sensitive targets, one of them (SDG 5), is devoted specifically to women's issues, in particular to improving the lot of women

through improved life quality, eradication of income restrictions, and elimination of gender pay gaps (Venkatesh *et al.*, 2017). The challenges faced by women are more severe in developing countries like India. One of the ways to empower women is through entrepreneurship. Women entrepreneurs are considered an essential driver of the society and economy that warrants support from the entrepreneurial ecosystem (Sinha, 2012). Cabrera and Mauricio (2017) indicated the potential failure of economic growth in a country without the involvement of its women (Agarwal and Lenka, 2018). Thus, in recent times, many government initiatives in developing countries like India were directed towards educating, supporting, and motivating their women towards setting up their enterprises. The women entrepreneurship platform (WEP) by Niti Aayog under the Startup India program is one such initiative that aims to provide an ecosystem for women entrepreneurs in India. However, the participation and success rate of women entrepreneurs are still on the lower side in India. Zhao *et al.* (2005) indicated that though women's participation in entrepreneurship varies across regions, it is usually always less than their counterparts (Nowiński, *et al.* 2019; Schoon and Duckworth 2012; Thébaud 2010). According to the Statista Research Department (2021), women in India owned 20.37% of all micro, small and medium businesses as compared to nearly 80% held by men. Past studies offer some justification for the above. According to Palalić *et al.* (2017), men are more inclined towards self-employment than women. Also, a study conducted by Hechavarria and Ingram (2018) on nascent entrepreneurship activity from 14 years of global entrepreneurship monitor (GEM) data across 75 countries, showed that women entrepreneurs are more likely to get affected by the number of entrepreneurship ecosystem components (Moreira *et al.*, 2019). It also showed that startup rates for women dropped by 15% from 2019 to 2020, and held constant in 2021. Women also experienced sharper declines than men in their intentions to start a business within three years and overall startup rates in 2020, but not in upper-middle income countries. There is a notion that entrepreneurs possess the equal ability to access resources regardless of their gender, but the practice is different (Brush *et al.*, 2018). Further, Kirkwood (2009) found that women tend to be less confident about owning a business compared to their counterparts. Additionally, extant literature indicates towards existing entrepreneurial intention among young women, Shirokova *et al.*, (2016) suggested that although women are interested in starting their enterprise, the majority of them do not act on their intention by the time they complete their studies (Shinnar *et al.* 2018). Furthermore, numerous studies in the field of gender and entrepreneurship have reported the gender gap related to entrepreneurial intentions (Dilli and Westerhuis, 2018; Santos *et al.*, 2016). Kurczewska and Białek (2014), in their study, presented that adult females exhibit lower

entrepreneurial intentions than their male counterparts. Such differences and gender gap have been explained in earlier studies by focusing primarily on personality traits (Nowinski 2019) and factors such as risk-taking ability (Serino & Buccino 2019) and motivation (e.g., Lu and Chen, 2013) alone; thus, neglecting a gamut of contextual factors including educational support (Nowinski *et. al.*, 2019), perceived entrepreneurial potential (Kebaili *et. al.*, 2017), support from family (Henderson and Robertson, 2000) and structure support (Agarwal and Lenka, 2018) that exert an impact on the entrepreneurial intentions (Wennekers and Thurik, 1999) of women. Such diffused and scattered literature warrants an empirical examination to understand the state of entrepreneurial intentions among women besides demographic (such as personality and age) and cognitive factors (such as risk taking ability and motivation). Also, most studies specifically examines the entrepreneurial intention among women in the context of developed countries (e.g., Gonzalez-Serrano *et. al.*, 2017), leaving a room for enquiry for developing countries like India.

Further, Hisrich (1990) posited that a person's entrepreneurial intentions can be impacted by his/her contextual factors too, which are linked with his/her respective credentials and present lives. Considering this view, we found entrepreneurial self-efficacy as presenting an interesting opportunity for inquiry to understand the dynamic trait of women that can lead to entrepreneurial intention. Hollenbeck and Hall (2004) suggest that, unlike other personality traits, self-efficacy is dynamic in nature and can be influenced by means of training and context.

This study aims to fill these gaps by presenting an overarching framework that identifies the factors that have the maximum potential to influence entrepreneurial intention among women especially in developing economies like India and empirically validates the same. Thus, this study has two imperative research objectives:

1. To understand the factors that have the most potential to impact entrepreneurial intention among women in India.
2. To understand the moderating role of entrepreneurial self-efficacy on the relationship between the identified significant factors and entrepreneurial intention among women in India.

The rise of women-led enterprises across the globe has attracted the interest of several researchers. Thus, it is essential to identify the factors that affect the entrepreneurial intentions of young women. With the help of the theory of planned behaviour (TPB) and entrepreneurial potential theory (EPT), this paper proposes and empirically tests the “*espoused model of women*

entrepreneurship (EMWE)” in the Indian context and establishes that ‘support’ alone would not trigger entrepreneurship among women, but entrepreneurial potential and self-efficacy also play an important role in their overall intentionality. This is imperative as potential and self-efficacy across domains are not static traits, but dynamic ones that can change over time with the help of necessary training (Hollenbeck and Hall, 2004). In the section below, we develop hypotheses for testing with the help of relevant literature and theoretical underpinnings.

Theoretical Underpinning and Hypotheses development

What is Women Entrepreneurship?

Like entrepreneurship, women entrepreneurship- a subset of entrepreneurship, too suffers limitations regarding commonly accepted definitions. Past researchers have defined it in various ways. According to Moore *et al.* (2011), women entrepreneurs are those who utilize their skills, resources and knowledge to develop or produce novel business prospects. They are actively engaged in operating their businesses. Similarly, Sharma (2013), proposed that women who initiate, organize and manages any business with potential risk can be termed as a woman entrepreneur. According to Rummana (2014), any woman who owns at least 51% of the annual turnover of any private company and generates employment by managing the business can be termed a woman entrepreneur. Available definitions of women entrepreneurship indicate towards initiation and management of an enterprise by women. However, some studies point out that women entrepreneurs vary in terms of their attributes, motivation, entrepreneurial potential, and the problems faced by them as compared to men. Thus, it is important to elicit significant support factors that can lead to women's entrepreneurial intention.

Entrepreneurship In India and status of Women entrepreneurship

We chose India for this study given its dynamic business landscape, fueled by surging entrepreneurship initiatives, staggering investment flow, technological development, consolidation activities, and a fast-expanding domestic market. As per Global Entrepreneurship Monitor India Report (Shukla *et al.*, 2023), India is becoming increasingly important on the global entrepreneurship map. The Indian government has designated the period from 2010 to 2020 as the "decade of innovation," leading to the establishment of specialized government institutions and agencies such as the Ministry of Skill Development and Entrepreneurship and The Delhi Skill and Entrepreneurship University. To foster entrepreneurship in the country, the government introduced various developmental schemes like Atal Innovation Mission (AIMs), Startup India, Stand up India, Self-Employment and Talent Utilisation (SETU), and Mudra

Bank. These initiatives aim to attract aspiring entrepreneurs and promote startup activities in India (Chhabra *et al.*, 2021). The government has implemented numerous schemes and policies to encourage young individuals to venture into their own enterprises, contributing to the rapid growth of the Indian economy and establishing it as a promising hub for entrepreneurship. Additionally, private organizations have also played a significant role in cultivating an entrepreneurial culture in India, particularly through the establishment of incubation centers in prominent information technology (IT) hubs (Agarwal *et al.*, 2020).

However, despite all these efforts, the results are far from satisfactory as far as women entrepreneurship is concerned. The entrepreneurship literature has noted that firms headed by women tend to be smaller and grow more slowly (Venkatesh *et al.*, 2017). India continues to face significant gender-related disparities. Females, despite accounting for a substantial fraction of the populations, confront numerous challenges with the highest being limited access to credit (Cole & Mehran, 2009; Venkatesh *et al.*, 2017). Ministry of Micro, Small and Medium Enterprises' annual reports highlights a poor representation of women in MSME ownership (MSME Annual Report 2019-2020). The main reason can be attributed to the established social norms where women are expected to work towards fulfilling their responsibilities for family along with their earning potential (Sinha and D'Souza, 2017). Also, lack of financial assistance, lack of family support and lack of proper education are some of the critical factors that inhibit women entrepreneurship in India (e.g., Sinha, 2012). According to a report by the National Association of Software and Services Companies (Nasscom) in collaboration with Zinnov, only 18% of startups in India are led by at least one woman founder or co-founder (Johny, 2023). The report also found that between 2019 and 2022, only 17% of investment deals in India were raised by startups with women leaders. However, the potential is immense as far as women participation in the Indian economy is concerned. According to McKinsey Global, India can potentially add US\$ 700 billion to global GDP by increasing women's participation in the labour force. Such participation can help families come out of poverty to contribute to higher household income. Moreover, literacy rates among women grew at 8.8% in 2021 in India (IBEF, 2022), which further highlights the bright prospects of the country. But to reap these benefits, it would be critical to address some of the significant factors that can support women entrepreneurship in India. This study aims to address this gap via developing and empirically validating an overarching framework- EMWE.

Entrepreneurial Intention

Extant research both in the field of public policy and entrepreneurship supports the promotion of entrepreneurship to achieve economic growth (Luthje and Franke 2003; Gerba 2012; Stamboulis and Barlas 2014). Shepherd *et al.* (2019) posited that entrepreneurial intention is the result of “entrepreneurial endeavours”, which involve the investment of financial, cognitive and other resources to initiate and engage in a potential opportunity. Entrepreneurial intention is embedded in environmental conditions where an entrepreneur requires to assess and undertake a certain amount of risks (Fatoki 2010). Entrepreneurial intention shows an individual’s motivation to choose entrepreneurship as a career (Agarwal *et al.*, 2020). People with entrepreneurial intentions gather required resources, plan to take calculated risks and establish their ventures (Karabulut, 2016). An entrepreneurial intention can be based on several factors such as past experiences (Politis 2005), individual attributes (Krueger *et al.*, 2000) and available support to the person (Turker *et al.* 2005).

Theory of planned behaviour and entrepreneurial intention

The entrepreneurial intention of a person finds its roots in the theory of planned behaviour (TPB) (Turker and Selcuk, 2009; Ajzen, 1991). TPB firmly backs the idea that human behaviour can be programmed, intentional and over which individuals have the power to exert self-control. TPB indicates that human intentions to behaviour can be steered by three kinds of beliefs: normative (expectations of others), behavioural (likely consequences) and control (factors that may enable or hinder the performance) (Lortie and Castogiovanni, 2015). A person with an entrepreneurial intention directs his/her potential, control, attention and actions towards a specific goal or purpose (Bird, 1988) to achieve something. Choo and Wong (2009) indicated that entrepreneurial intentions are vital as it assists in the exploration and assessment of information necessary for the creation of a business. Turker and Selcuk (2009) suggested that “the entrepreneurial intention stems from the perception of feasibility and desirability of a person and this path is affected by the cultural and social context.” (pg. 146). Additionally, Krueger and Brazeal (1994), also borrowed from TPB in their proposed model of entrepreneurial potential. Thus, the entrepreneurial intention could be termed as planned behaviour. In the current study, we posit women's entrepreneurial intention as a function of four support factors- entrepreneurial potential, relational support, educational support and structural support.

Espoused Model of Women Entrepreneurship and Hypotheses Development

Perceived Entrepreneurial potential- Krueger and Brazeal (1994) through the entrepreneurial potential theory (EPT) suggested that “Entrepreneurial potential requires potential entrepreneurs” (Chhabra *et. al.*, 2020). Potential Entrepreneurs are those individuals who have the desire and feasibility to become an entrepreneur but lack action. But According to EPT, individuals with high entrepreneurial potential (EP) have greater intention towards pursuing entrepreneurship. Individuals with higher EP are optimistic, good persuaders and can marshal resources well (Krueger and Brazeal, 1994). EP within individuals results in a greater desire for recognition and achievement, better goal-setting, continuous planning and the ability to establish valued networks (Santos, 2008). Thus, we hypothesize:

H1. The entrepreneurial intention of women positively relates to the perceived entrepreneurial potential

Perceived Educational support- Liñán *et al.* (2011) suggest that education can affect the said norms, traits, and attitudes by fostering skills and knowledge (Santos *et al.*, 2018). Based on the assumption that entrepreneurship skills can be taught and learned (Agarwal *et al.*, 2020; Gerba 2012), researchers and policymakers suggest a push for entrepreneurial education to generate interest towards entrepreneurship and prepare young female students towards adopting self-employment (Streeter and Jaquette, 2004; McKeown *et al.* 2006). Education plays an essential role in imparting entrepreneurial knowledge among students. However, the role of education in gender preference towards entrepreneurship yields contradictory results (Nowinski *et al.* 2019). While most studies indicated that men benefit more from entrepreneurship education than women (e.g., Westhead and Solesvik 2016), some studies suggest the opposite (Nowinski *et al.* 2019; Packham *et al.* 2010). Nevertheless, inadequate business knowledge and perception of associated risks could be a significant deterrent for young entrepreneurs (Wang and Wong, 2004). Realizing the importance of the same, Robles and Zárraga-Rodríguez (2015), in their study, attempt to identify the critical entrepreneurship competencies required by higher education institutions to develop appropriate entrepreneurship education programs for students. From the gender perspective, Wang and Wong (2004) found that in the case of women, a lack of entrepreneurial knowledge accounts for low levels of entrepreneurial intentions. Dilli and Westerhuis (2018) also confirmed that in knowledge-intensive businesses, women exhibit low entrepreneurial intentions than their counterparts. Thus, based on the above review background and keeping in mind the importance of education, we hypothesized that:

H2. The entrepreneurial intention of women positively relates to perceived educational support.

Perceived Structural support- The entrepreneurial ecosystem at the regional and country-level plays a vital role in supporting entrepreneurial intentions. Radadiya (2012) found that government policies and programs help in changing the perspective of women entrepreneurs in India. The government, along with other NGOs and support organizations, conducts various training programs focusing on competency development for women entrepreneurs (Agarwal and Lenka, 2018). Turker and Selcuk (2009) confirmed that entrepreneurship is shaped by various political and economic mechanisms wherein there are many opportunities and threats. A person's intention is affected by the perception of adequate conditions and the favourability of the market (Turker and Selcuk, 2009). Accessibility to financial resources, market access, business opportunities, policy support, etc. may act as a motivator for a person who is interested in opting for entrepreneurship as a career path. We thus have hypothesized that:

H3. The entrepreneurial intention of women positively relates to the perceived structural support provided.

Perceived Relational support- Society plays a vital role in the life of a women entrepreneur. Studies have found that social norms in some developing economies dictate that entrepreneurship is more suited to men than women (Shinnar *et.al.*, 2012; Dana, 2014). Feder and Nițu-Antonie (2017) also indicated that in the case of entrepreneurial intentions, subjective norms play a more decisive role for women than men (Jones *et al.*, 2011). In the Asian context, previous studies have established that women have not been treated with equal freedom and opportunity as men concerning economic activities (Dana, 2014; Sinha and D'Souza, 2017; Ratten *et. al.*, 2018). Therefore, the role of the family in promoting entrepreneurship becomes essential. Research evidence shows that after personal experience, the family is considered the second most influencing factor for career choice (Henderson and Robertson, 2000). Schoon and Duckworth (2012) found that support from the family, either in the form of money or values and behaviours, may be an enabler for entrepreneurship. This finding may be significant as such support from family and friends are required to go beyond societal expectations and adopt entrepreneurship. Thus, based on the above review we hypothesized that:

H4. The entrepreneurial intention of women positively relates to perceived relational support.

Moderating Role of Entrepreneurial Self-efficacy

Pati and Kumar (2010), define self-efficacy as “one’s belief in one’s ability and competence to perform successfully and effectively in situations and across different tasks in a job” (pg. 128). This definition elicits the core of the self-efficacy construct by pointing out the distinction between components' competence and the ability to organize and execute courses of action for a specific domain or task. This argument pointed out that people are likely to select a situation in which they can exert high personal control but avoid the reverse (Yang, 2016; Bandura, 1977). This indicated that an individual can have high self-efficacy in one domain but low in another. An individual with higher self-efficacy in a given domain believes in their capabilities to mobilise required resources to control the events of his/her life (Yang, 2016). Bandura (1977) found self-efficacy as an important contributor towards intention. Further, Boyd and Vozikis (1994) suggested that an individual’s entrepreneurial self-efficacy can moderate the relationship between the enablers and entrepreneurial intention. While there is a dearth of specific investigations that examine the moderating role of entrepreneurial self-efficacy on the relationship between contextual factors and entrepreneurial intentions for women, initial findings suggest that women have both lower entrepreneurial self-efficacy and lower entrepreneurial intentions (Kickul *et al.*, 2004; Chowdhury and Endres, 2005). Some evidence suggests that women as compared to men are more likely to limit their entrepreneurial intentions because they consider that they do not have the required skills (e.g., Bandura, 1992). However, it has been found that entrepreneurs with great entrepreneurial self-efficacy are more likely to identify the market gap and seize self-prospects. Thus, it is important to examine the moderating role of entrepreneurial self-efficacy for women. Hence, we hypothesize:

H5. The relationship of perceived entrepreneurial potential to women's entrepreneurial intention is moderated by entrepreneurial self-efficacy

H6. The relationship of perceived educational support to women's entrepreneurial intention is moderated by entrepreneurial self-efficacy

H7. The relationship of perceived relational support to women's entrepreneurial intention is moderated by entrepreneurial self-efficacy

H8. The relationship of perceived structural support to women's entrepreneurial intention is moderated by entrepreneurial self-efficacy

The espoused model of women entrepreneurship (EMWE), representing the relationship between independent variables and entrepreneurial intentions and moderating role of entrepreneurial self-efficacy for young women entrepreneurs is presented in Figure 1.

Control Variable

We have identified seven demographic variables (age, educational qualification, education domain, parents' education, family's primary source of income, job experience, and business experience) which could have an extraneous effect on the entrepreneurial intentions of female students and thus, considered as control variables in the proposed model.

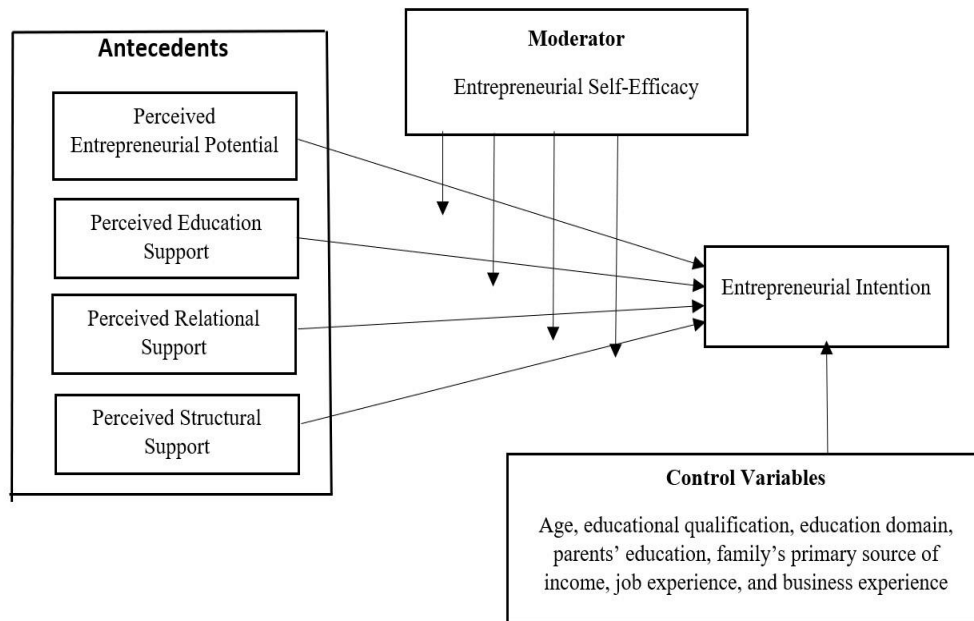


Figure 1: Espoused Model of Women Entrepreneurship (EMWE)

Methodology

Research sample and design

Most of the studies in the field of entrepreneurship are focused on male entrepreneurs (Turker and Selcuk, 2009). According to Israr and Saleem (2018), students are considered the most capable segment in terms of entrepreneurial supply among the various age groups of people interested in starting their businesses. Henderson and Robertson (2000) also stressed that the future depends on the creativity and innovation of the young population. Liles (1974), indicated that people between the age group of 25 to 44 are most likely to start their own business. Henderson and Robertson (2000) also stated "... the future working environment will depend on the creativity and individuality of the young" (p.279). So, it becomes imperative to focus on people who are between 25 to 44 years of age to develop an understanding of factors affecting their intentions to take up entrepreneurship in future.

The study used a cross-sectional research design. Mukyala *et al.* (2017) describe cross-sectional research design as a study that analyses data from the population/representative sample at one specific point in time. It is an effective design as it allows researchers to collect data on multiple variables simultaneously. This enables the examination of various factors and their relationships within a specific population or sample to estimating the prevalence of a particular condition, behavior, or characteristic within a population. By collecting data from a large and representative sample through cross-sectional research design, researchers can gain a better understanding of the distribution of the variable of interest (Mukyala *et al.* 2017).

Data Collection

To collect data, we approached reputed educational institutions in India that represented rich diversity of students like, gender, area (rural and urban), educational background and region as India is a very diverse country. Out of 20 randomly selected institutions (5 from each zone i.e. North, South, East and West) only 7 institutions finally responded to our request. We noticed that amongst these 7 institutions, 5 were located in north India, while 1 each were located in western part (offering only business program) and in southern India which also were willing to share data but from only two programmes. We decided to proceed with 5 institutions in northern India as they were providing us with a diverse sample (please note that despite their regional presence, the student enrolment for these institutions were open to the entire country). Further, as highlighted by Chhabra *et al.* (2020), most of the studies on entrepreneurship in India focus on male entrepreneurs and are designed around eastern and southern region like, Meghalaya, Kerala, Andhra Pradesh and Karnataka. So, examining institutions from north India added value. Finally, data was collected from female students studying in the selected 5 different higher education institutions in North India. The convenience sampling method was used to distribute a self-administered questionnaire to 350 female students (bachelor and master degree programs) across 5 disciplines including Engineering, Medical Science & Pharma, Business & Economics, Law, and Humanities as offered by the selected institutions. These 5 disciplines allow sufficient diversity in the educational background of respondents to understand their intentions towards entrepreneurship. The convenience sampling method has been previously used in similar studies such as Nowiński *et al.* (2019) and Anwar *et al.* (2020). The questionnaire explaining the purpose of the research was distributed to the participants. Researchers also assured participants of the privacy and confidentiality of the information provided. We randomly distributed 70 questionnaires each for all 5 disciplines. After eliminating the half-filled and wrongly filled questionnaires, in the end, 303 questionnaires

were found eligible for further analysis which is within the prescribed sample size limit of 200-300 by Hoyle (1995), suitable for path modelling.

Measures

The questionnaire for the study comprised two main sections. The first section collected a total of seven demographic variables age, educational qualification, education domain, parents' education, family's primary source of income, job experience, and business experience were studied. The second part of the questionnaire used scales to measure the factors relating to EMWE and entrepreneurial intentions.

The scales used in the study are a slightly modified version of the validated scales used in research for different samples and contexts. The reliability and validity of respected scales were tested to ensure their usability for the study.

EMWE

To measure the four dimensions of EMWE, i.e., perceived entrepreneurial potential (PEP), perceived educational support (PES), perceived relational support (PRS), and perceived structural support (PSS), we slightly modified the items developed by Santon (2008), Luthje & Franke (2003) and Turker and Selcuk (2009). In total, 13 items were used to measure the four dimensions (Appendix 1). All items were measured using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item for perceived educational support is '*My university provides the necessary knowledge about entrepreneurship.*' A sample item for perceived relational support is '*If I decide to be an entrepreneur, my family will support me.*' A sample item from perceived structural support is '*Taking loans from Indian banks is not difficult for entrepreneurs.*' and a sample item from perceived entrepreneurial potential is '*I have the ability to persuade others.*'

Entrepreneurial Intention

The entrepreneurial intention of female students was measured using six items proposed by Liñán and Chen (2009) and further revised by Liñán *et al.* (2011). All the items were measured using the 5 points Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The sample item includes '*My professional goal is to be an entrepreneur.*'

Entrepreneurial Self-efficacy

The entrepreneurial self-efficacy scale was measured by using an eight-item scale by Chen *et al.*, (2001). All the items were measured using the 5 points Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The sample item includes, '*I will be able to achieve most of the goals that I set for myself.*'

Control Variables

The study controlled for seven variables (age, educational qualification, education domain, parents' education, family's primary source of income, job experience, and business experience) to minimize the influence of confounding factors that may affect the relationship between the independent and dependent variables, leading to inaccurate or misleading results. According to Ruiner (2019), family background, education and business experience may impact the entrepreneurial intention among women. Also, Rømer-Paakkanen and Takanen-Köörperich (2022) suggested that family's economic condition and age of the entrepreneur can influence the entrepreneurial intention among women. So it was necessary to control for the above stated variables in order to achieve greater validity for our proposed research model.

However, we checked the influence of all the controlled variables on the entrepreneurial intentions of female students by employing multiple regression. The F-test conducted for the test was found to be non-significant concluding that control variables did not significantly account for the variance in the entrepreneurial intentions of women in our sample. This ensured greater accuracy and generalizability of our research.

Analysis and Results

Descriptive Statistics

Table 1 provides the background information of the respondents and descriptive statistics. Of the total 303 students covered in the study, 75.24% (n=228) were pursuing bachelor's degrees while 24.75% (n=75) were pursuing their master's degrees. Business education & economics (32.67%) followed by engineering (26.07%) were the two major domains from which the responses were received. The majority of the respondents' families (37.29%) had a business/self-employment background, and additionally, 16.17% had past business experience. Since a majority of respondents were undergraduates, only 29 persons were having a work experience of more than 4 years.

Table 1: Descriptive statistics

Variables	Frequency	%
Age		
21 or less	213	70.29
22-24	62	20.46
25-27	19	6.27
28-30	7	2.31
31 or more	2	0.66
Educational Qualification		
Bachelor (Pursuing)	228	75.24
Master (Pursuing)	75	24.75
Education domain		
Engineering	79	26.07
Medical Science & Pharma	53	17.49
Business & Economics	99	32.67
Law	13	4.29
Arts & Humanities	59	19.47
Parents' education		
At least one parent has a Master's degree	117	38.61
At least one parent has a bachelor's degree	71	23.43
At least one parent has passed an intermediate school	33	10.89
At least one parent has passed high school	29	9.57
Both parents have education less than in high school	53	17.49
Family's primary source of income		
Self-employed/Business	113	37.29
Private sector employee	91	30.03
Government employee	57	18.81
Retired	5	1.65
Others	37	12.21
Job experience		
0-2 Years	233	76.89
2-4 Years	41	13.53
4 years or more	29	9.57
Business experience		
Yes	49	16.17
No	254	83.83

Note: N=303 female student respondents

Common method bias, reliability and validity

We employed the Harman single-factor test to overcome any issues related to common bias. As one component accounted for 24.693% of the total variance reported, it relieves any doubt about the common bias issue in the data set as the difference is less than recommended 50% (Lavuri *et al.*, 2022).

Further, as suggested by Lin et Wu (2004), the results obtained from the confirmatory factor analysis indicated a good fit. The obtained fit indices were $X^2/df=1.331$, GFI = 0.913, AGFI = 0.904, NFI=0.963, RMSEA= 0.033, CFI = 0.983, TLI = 0.979, RFI = 0.933 and IFI = 0.977.

Similarly, the obtained values of Cronbach's alpha (CA) (>0.70), average variance extraction (AVE) (>0.5) and composite reliability (CR) (>0.6) values were also found to be over the threshold values (Table 2) as suggested by Hair *et al.* (2010).

Table 2: Validity and reliability statistics

Latent variable	Factor loadings	Cronbach α	AVE	Composite reliability
Entrepreneurial Intentions	0.70	0.833	0.69	0.79
	0.83			
	0.92			
	0.82			
	0.81			
	0.76			
Perceived Entrepreneurial potential	0.79	0.753	0.57	0.83
	0.73			
	0.81			
Perceived Educational support	0.74	0.793	0.73	0.72
	0.76			
	0.73			
Perceived Relational support	0.81	0.799	0.69	0.93
	0.79			
Perceived Structural Support	0.88	0.739	0.67	0.83
	0.84			
	0.91			
	0.87			
Entrepreneurial Self-efficacy	0.73	0.757	0.69	0.81
	0.71			
	0.85			
	0.75			
	0.83			
	0.89			
	0.92			
	0.81			

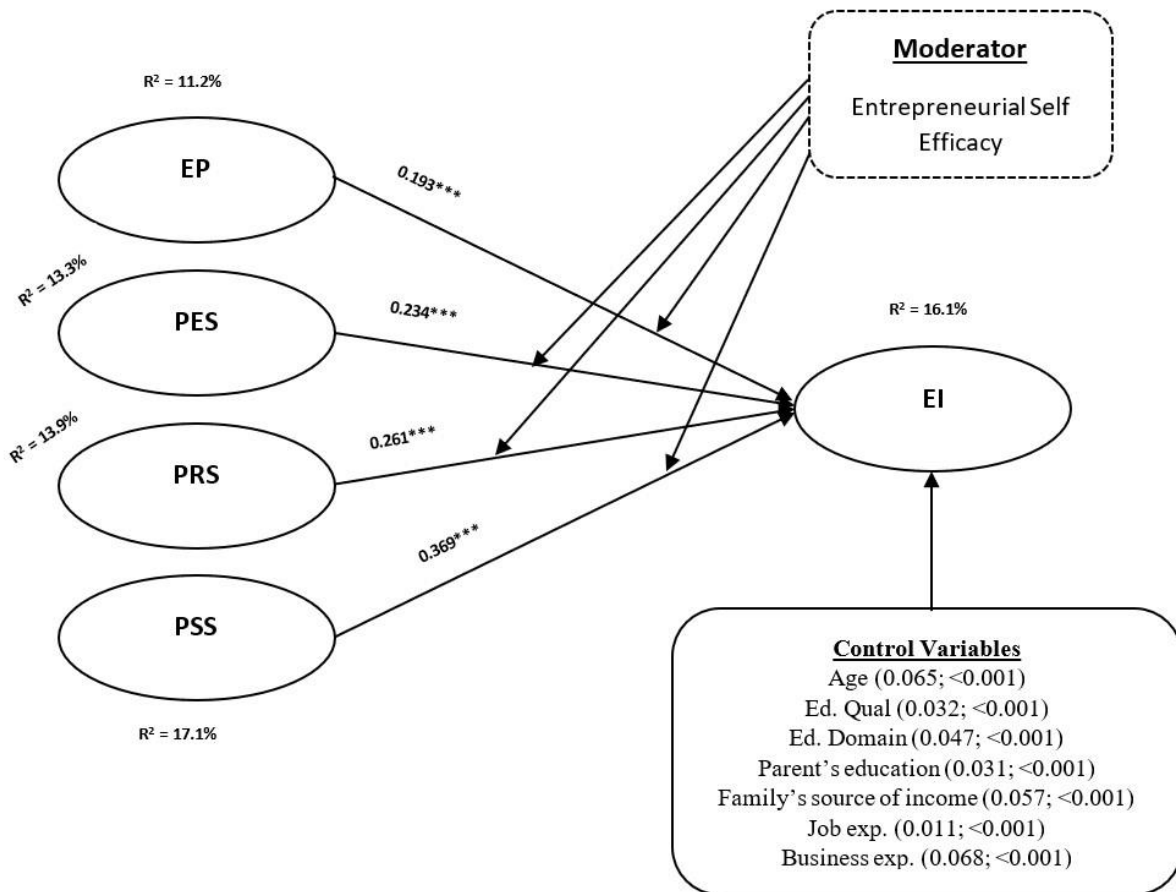
Hypotheses testing

The suggested hypotheses for this study were analysed through a co-variance-based structural equation model (CB-SEM). SEM is applied to analyse the compound model, including the relationship between the proposed constructs (Gong, 2020). Table 3 and Figure 2 show the results of this study's SEM model through path values, standard error, and t-value. Our hypotheses findings suggested that all hypotheses are supported. For H1, findings show that the entrepreneurial intention of women significantly and positively relates to the PEP ($\gamma = 0.193$, t-value = 2.601, $p < 0.001$). Likewise, for the H2, the entrepreneurial intention of women positively relates to the PES, which supports the study ($\gamma = 0.234$, t-value = 3.141, $p < 0.001$). Similarly, for H3, our findings support that the entrepreneurial intention of women positively relates to the PSS provided ($\gamma = 0.261$, t-value = 3.671, $p < 0.001$). Further, it is proved that the entrepreneurial intention of women positively relates to PRS (H4: $\gamma = 0.369$, t-value = 4.013,

$p < 0.001$). H5-H8 tests the moderating effects of entrepreneurial self-efficacy. All hypotheses were supported through our investigation (Table 3) showing that ESE moderates the relationship between the four independent variables and EI.

Table 3: Standardized Regression weights

Hypotheses	Path	β	SE	t-value	Sig.	Supported
H1	EP \rightarrow EI	0.193	0.041	2.601	$p < 0.001$	Yes
H2	ES \rightarrow EI	0.234	0.053	3.141	$p < 0.001$	Yes
H3	RS \rightarrow EI	0.261	0.052	3.671	$p < 0.001$	Yes
H4	SS \rightarrow EI	0.369	0.047	4.013	$p < 0.001$	Yes
H5	EP \rightarrow ESE \rightarrow EI	0.033	0.043	0.752	$p < 0.001$	Yes
H6	ES \rightarrow ESE \rightarrow EI	0.041	0.045	0.458	$p < 0.001$	Yes
H7	RS \rightarrow ESE \rightarrow EI	0.039	0.054	0.633	$p < 0.001$	Yes
H8	SS \rightarrow ESE \rightarrow EI	0.056	0.041	0.788	$p < 0.001$	Yes



Note: *** indicates $p < 0.001$.

Figure 2: Structural Model

Discussion and Implication

Our study is rooted in the view that entrepreneurial intention is volitional, driven by cognitive and structural mechanisms that can be explained by the Theory of Planned Behavior. In line with this view, this study provides new insights into the literature by providing a well-organized conceptual model- EMWE- for measuring entrepreneurial intention among women entrepreneurs. The model addresses the role of perceived entrepreneurial potential, perceived educational, structural and relational support in explaining entrepreneurial intention among women. It also examines the moderating role of entrepreneurial self-efficacy in influencing women's entrepreneurial intention. The attained result also highlights the significant implications for theory and practice as well as indicates a broad future direction for other researchers.

Theoretical contribution

Through empirically validating the theoretical model- EMWE- that includes both the support model as well as entrepreneurial potential and self-efficacy; the present study offers significant contributions to the literature. First, as a novel contribution, we have investigated the role of perceived entrepreneurial potential in influencing women entrepreneurial intention. This study attempts to draw the attention of academics and researchers towards a new approach to carrying out their work in this field with this newfound insight. Second novel contribution comes in the form of the findings that suggest the extent to which support systems affect the entrepreneurial intentions of women. The hypotheses testing shows that the availability of structural support for entrepreneurship in India plays an important role as far as the entrepreneurial intentions of women are concerned followed by relational support and educational support (see Table 3). Third, unlike the findings for a developing economy by Turker and Selcuk (2009), which emphasized that only two factors, i.e., perceived educational support and perceived structural support are significant in predicting the entrepreneurial intention of students, we found that perceived relational support is also significant in predicting the entrepreneurial intentions of women in India. This finding is consistent with the findings of Anlesinya *et. al.* (2019) as support from family and friends plays an important role in the journey of an entrepreneur and it cannot be neglected. Thus, the current study also contributes to the existing entrepreneurship support model. This is an important finding as India has a collectivistic culture based on social cohesion and interdependence (Chadda and Deb, 2013). The finding suggests that in a career-

related decision taken by an individual, there will be some influence from her family and friends and the same has been proved through H3.

This study by empirically validating the espoused model of women entrepreneurship (EMWE) proves that perceived entrepreneurial potential and the support system together play an important role in women taking up entrepreneurship. This novel and important finding must be taken up further to extend research on women entrepreneurship in India and developing economies in general.

Lastly, we also contributed to the literature by expanding the breadth of previous studies on entrepreneurial self-efficacy. Attitude toward entrepreneurial behaviour like self-efficacy is the self-commanding tendency to commit or restrain oneself from performing a certain activity (Boyd and Vozikis, 1994). Our study shows the moderating effect of ESE on the relationship between EMWE and the entrepreneurial intentions of women entrepreneurs.

Practical Implications

Our study concludes that structural support is crucial for women pursuing entrepreneurship in India, confirming its significance (Chhabra et al., 2021). This necessitates action from all stakeholders, including government agencies, banks, economists, NGOs, and the private sector. Policy implications include reducing regulatory burdens and introducing initiatives such as dedicated business incubators. Also, given the status of women in India, to promote women entrepreneurship, this study will contribute to new knowledge on the drivers of women entrepreneurship from different perspectives. From Government perspective, this model will help in designing appropriate policies for promoting Women Entrepreneurship in India. Additionally, the highlights the role of education for women entrepreneurship. The role of education in women's entrepreneurship requires further attention. From educational institutions' perspective the findings would help them to expand beyond creating awareness by identifying and nurturing interested women students through targeted schemes and programs like establishing incubation centres (Anwar et al., 2020; Almobaireek and Manolova, 2013). Policy intervention is needed at the educational level to provide systemic support.

Furthermore, our study highlights the influence of familial connections and societal norms on women intending to venture into entrepreneurship (Agarwal and Lenka, 2018). From family and societal point of view, policy recommendations should include campaigns aimed at shifting societal perspectives and dismantling barriers presented by male dominance. To address challenges related to initial funding, policy measures can be implemented to foster a conducive

environment for financial support from informal sources, such as friends and family. Recent positive shifts in societal attitudes towards women's education and employment in India (Chadda and Deb, 2013) should be harnessed to motivate parental support for their daughters' entrepreneurial aspirations. Incorporating these changes will enhance not just individual businesses, but also India's economy and society by fostering gender equity and unleashing untapped entrepreneurial potential.

Further, our study found that entrepreneurial self-efficacy moderated the relationship between the identified significant factors and entrepreneurial intention among women. This suggests that women who ultimately choose an entrepreneurial path have higher entrepreneurial self-efficacy than those who do not. This is in line with other similar research (e.g., Wilson *et al.*, 2007). Also, it should be noted that self-efficacy may have an impact even after a career decision to pursue an entrepreneurial career has been taken, for example, impact of self-efficacy on persistence. As Bandura implies, making a decision is not the same as implementing the decision, and self-efficacy can have an even greater effect throughout the implementation stages (Bandura *et al.*, 2001). Similarly, Wilson *et al.* (2007), suggests that given the difficulty of entrepreneurial ventures, high self-efficacy is important throughout the full cycle of the endeavor. That is, women entrepreneurs with high entrepreneurial self-efficacy may be more successful in their entrepreneurial pursuits than those with low self-efficacy.

Limitations and Future Research Directions

One of the primary limitations of the study is its focus on intentionality. Turker and Selcuk (2009) argued the possibility that a high entrepreneurial intention shown by a respondent can still lead to an alternate career path. However, it was suggested that the limitation could be addressed by using multiple items to measure the intention. The current study used a six-item scale by Liñán *et al.* (2011) to enhance accuracy. Further, a major methodological limitation of the study is its cross-sectional design. Future studies, to be more insightful, shall be conducted longitudinally. Another major limitation of the study was its convenience sampling. As only five higher education institutions were surveyed, the results obtained have limited potential for generalization. The study is also limited in the sense that it only considered young female respondents without any further stratification of caste or class, which may play a role in developing economies like India. Future studies may include some other variables such as academic and extracurricular performance, academic rigor, etc. that can affect entrepreneurial intentions. India is a land of diverse cultures and regional social diversity. States like Gujarat

are known to deliver more entrepreneurs than other states. Thus, future studies may also explore the role of culture in predicting entrepreneurial intentions. Also, as far as entrepreneurial self-efficacy is concerned, we found that it boosts entrepreneurial intention among women. However, it would be interesting to examine whether women with higher self-efficacy in relevant areas are more likely to choose entrepreneurship, or does their entrepreneurial self-efficacy grow after embarking on their careers?

Conclusion

The study of female students pursuing higher education in India to understand the factors affecting their entrepreneurial intentions confirms all our proposed hypotheses. It shows that all three types of support (educational, relational, and structural) along with entrepreneurial potential and entrepreneurial self-efficacy are needed to support entrepreneurship among Indian women. Besides, policymakers should prioritise educational and structural support to create women entrepreneurs of the future.

References

- Agarwal, S., & Lenka, U. (2018), "Why research is needed in women entrepreneurship in India: a viewpoint," *International Journal of Social Economics*, Vol. 45 No. 7, pp. 1042-1057.
- Agarwal, S., Ramadani, V., Gerguri-Rashiti, S., Agrawal, V. and Dixit, J. K. (2020), "Inclusivity of entrepreneurship education on entrepreneurial attitude among young community: evidence from India", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 14, No. 2, pp. 299-319.
- Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- Almobaireek, W. N., and Manolova, T. S. (2013), "Entrepreneurial motivations among female university youth in Saudi Arabia", *Journal of Business Economics and Management*, Vol. 14 (sup1), pp. S56-S75.
- Anwar, I., Saleem, I., Islam, K. B., Thoudam, P. and Khan, R. (2020), "Entrepreneurial intention among female university students: examining the moderating role of entrepreneurial education", *Journal for International Business and Entrepreneurship Development*, Vol. 12 No. 4, pp. 217-234.
- Arenal, A., Feijoo, C., Ramos, S., Moreno, A., & Armuña, C. (2017), "An investigation of the evolution of the entrepreneurship policy agenda in the EU - relevant milestones, key areas and the way forward.", Institute of Small Business and Entrepreneurship Conference.
- Bandura, A. (1977), "*Social learning theory*", Englewood Cliffs: Prentice Hall.
- Bandura, A. (1992), "Exercise of personal agency through the self-efficacy mechanism", In R. Schwartz (Ed.), *Self-efficacy: Thought control of action* (pp. 3-38). Washington, DC: Hemisphere.
- Bandura, A., Barbaranelli, C., Caprara, G., & Pastorelli, C. (2001), "Self-efficacy beliefs as shapers of children's aspirations and career trajectories", *Child Development*, Vol. 72, No. (1), pp. 187-206.
- Bird, B. (1988), "Implementing entrepreneurial ideas: the case for intention", *The Academy of Management Review*, Vol. 13 No. 3, pp. 442-53.

- Boyd, N. G. and G. S. Vozikis (1994). "The influence of self-efficacy on the development of entrepreneurial intentions and actions," *Entrepreneurship Theory and Practice*, Vol. 18, No. 4, pp. 63-77.
- Brush, C., Edelman, L. F., Manolova, T., & Welter, F. (2018), "A gendered look at entrepreneurship ecosystems", *Small Business Economics* In Press (pp. 1–16).
- Cabrera, E. and Mauricio, D. (2017), "Factors affecting the success of women's entrepreneurship: a review of literature", *International Journal of Gender and Entrepreneurship*, Vol. 9 No. 1, pp. 31-65. <https://doi.org/10.1108/IJGE-01-2016-0001>
- Chadda, R. K., & Deb, K. S. (2013), "Indian family systems, collectivistic society and psychotherapy.", *Indian journal of psychiatry*, Vol. 55 No. 2, pp. 299–S309. <https://doi.org/10.4103/0019-5545.105555>
- Chen, G., Gully, S. M., & Eden, D. (2001), "Validation of a new general self-efficacy scale", *Organizational research methods*, Vol. 4, No. 1, pp. 62-83.
- Chhabra, S., Raghunathan, R. and Rao, N. V. M. (2020), "The antecedents of entrepreneurial intention among women entrepreneurs in India", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 14, No. 1, pp. 76-92.
- Chhabra, M., Dana L. P., Malik, S. and Chaudhary N. S. (2021), "Entrepreneurship education and training in Indian higher education institutions: a suggested framework", *Education + Training*, Vol. 63 No. 7/8, pp. 1154-1174.
- Choo and Wong. (2009), "Entrepreneurial intention: Triggers and barriers to new venture creation in Singapore.", *Singapore Management Review*, Vol. 28 No. 2.
- Chowdhury, S. & Endres, M. (2005), "Gender difference and the formation of entrepreneurial self-efficacy", Presented at the *United States Association of Small Business (USASBE) Annual Conference*, Indian Wells, CA.
- Dana, L. P. (2002), *When Economies Change Paths: Models of Transition in China, the Central Asian Republics, Myanmar & the Nations of Former Indochina Franchise*. World Scientific.
- Dana, L.P. (2014), "Asian models of entrepreneurship. From the Indian union and Nepal to the Japanese archipelago. Context, policy and practice", *Asia-Pacific Business Series*, Vol. 9 No. 25, pp. 1-17.
- Dana, L. P., Sharma, N., & Acharya, S. R. (Eds.). (2020), *Organising entrepreneurship and MSMEs across India* (Vol. 11). World Scientific.
- Dilli, S., & Westerhuis, G. (2018). "How institutions and gender differences in education shape entrepreneurial activity: A cross-national perspective.", *Small Business Economics*, Vol. 2017, pp. 1–22. <https://doi.org/10.1007/s11187-018-0004-x>.
- Fatoki, O. O. (2010), "Graduate entrepreneurial intention in South Africa: motivations and obstacles", *International Journal of Business and Management*, Vol. 5 No. 9, pp. 87. Retrieved from <https://pdfs.semanticscholar.org/9ea5/1930a6409a8935dffed43405d66d19ec6087.pdf>
- Feder, Emőke-Szidónia, and Renata-Dana Nițu-Antonie (2017), "Connecting Gender Identity, Entrepreneurial Training, Role Models and Intentions.", *International Journal of Gender and Entrepreneurship*, Vol. 9 No.1, pp. 87–108. <https://doi.org/10.1108/IJGE-08-2016-0028>.
- Shukla, S., Bharti, P., & Dwived, A. K. (2023). *Global Entrepreneurship Monitor India Report 2021/2022*.
- Gonzalez-Serrano, M.H., Crespo Hervas, J., Perez-Campos, C. and Calabuig-Moreno, F. (2017), "The importance of developing the entrepreneurial capacities in sport sciences university students", *International Journal of Sport Policy and Politics*, Vol. 9 No. 4, pp. 625-640, doi: 10.1080/19406940.2017.1316762.
- Hair, B., W.B. Black, B.Y.A. Anderson, and R.L. Tatham. (2010), *Multivariate Data Analysis*, New York: Prentice Hall.

Henderson, R. and Robertson, M. (2000), "Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career", *Career Development International*, Vol. 5 No. 6, pp. 279-87.

Hisrich, R.D. (1990), "Entrepreneurship/intrapreneurship", *American Psychologist*, Vol. 45 No. 2, pp. 209-22.

Hollenbeck, G. & Hall, D.T. (2004), "Self-confidence and leader performance", *Organizational Dynamics*, Vol. 33, No. 3, pp. 254-269.

Hoyle, R. H. (1995), "The structural equation modeling approach: Basic concepts and fundamental issues", In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (p. 1–15). Sage Publications.
Israr, M., & Saleem, M. (2018), "Entrepreneurial intentions among university students in Italy.", *Journal of Global Entrepreneurship Research*, Vol.8 No. 1, 20.

IBEF (2022), "WOMEN ENTREPRENEURS SHAPING THE FUTURE OF INDIA", *India Brand Equity Foundation. Women Entrepreneurs Shaping The Future Of India | IBEF*

Johny, R. M., (2023), "Boost for female entrepreneurs; report says 18% Indian startups are women-led", *Hindustan Times*. [Boost for female entrepreneurs; report says 18% Indian startups are women-led - Hindustan Times](#)

Jones, MV, Coviello, N, Tang, YK. (2011), "International. Entrepreneurship research (1989–2009)", a domain ontology and thematic analysis.", *Journal of Business Venturing*, Vol. 26 No. 4, pp. 632–659.

Karabulut, A. T. (2016), "Personality traits on entrepreneurial intention", *Procedia-Social and Behavioral Sciences*, Vol. 229, pp. 12–21.

Kebaili, B., Al-Subyae, S.S. and Al-Qahtani, F. (2017), "Barriers of entrepreneurial intention among Qatari male students", *Journal of Small Business and Enterprise Development*, Vol. 24 No. 4, pp. 833-849.

Kickul, J., Wilson, F, & Marlino, D. (2004), "Are misalignments of perceptions and self-efficacy causing gender gaps in entrepreneurial intentions among our nations' teens?", Presented at *USASBE Annual Conference*, Dallas, TX.

Kirkwood, J. (2009), "Is a lack of self-confidence hindering women entrepreneurs?", *International Journal of Gender and Entrepreneurship*, Vol. 1 No. 2, pp. 118-133. Doi: <https://doi.org/10.1108/17566260910969670>

Krueger, N.F.Y. and Brazeal, D.V. (1994), "Entrepreneurial potential and potential entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 18 No. 3, pp. 91-104.

Krueger, N., Reilly, M. D. and Carsrud, A. L. (2000), "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, Vol. 15, pp. 411-432.

Lavuri, R., Chiappetta Jabbour, C.J., Grebinevych, O. and Roubaud, D. (2022), "Green factors stimulating the purchase intention of innovative luxury organic beauty products: implications for sustainable development", *Journal of Environmental Management*, Vol. 301, p. 113899, doi: 10.1016/j.jenvman.2021.113899.

Liles, P.R. (1974), *New Business Venture and the Entrepreneur*, Irwin, Homewood, IL.

Liñán, F., & Chen, Y. W. (2009), "Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions", *Entrepreneurship: Theory and Practice*, Vol. 33 No. 3, pp. 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>.

Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011), "Factors affecting entrepreneurial intention levels: A role for education.", *International Entrepreneurship and Management Journal*, Vol. 7 No. 2, pp. 195–218. <https://doi.org/10.1007/s11365-010-0154-z>.

Lortie, J., & Castogiovanni, G. (2015), "The theory of planned behavior in entrepreneurship research: What we know and future directions.", *International Entrepreneurship and Management Journal*, pp. 935–957. <https://doi.org/10.1007/s11365-015-0358-3>.

Lu, W. and Chen, W. (2013), "A Study on Female Entrepreneurs' Behavior in Micro-Enterprises in Taiwan – An Application of Planned Behavior Theory", *The Journal of Global Business Management*, Vol. 9, No. 1, pp. 2014-219.

Luthje, C. and Franke, N. (2003), "The making of an entrepreneur: testing a model of entrepreneurial intention among engineering students at MIT", *R&D Management*, Vol. 33 No. 2, pp. 135-47.

Ministry of MSME, India. (2020). *Annual report 2019-20*. https://msme.gov.in/sites/default/files/FINAL_MSME_ENGLISH_AR_2019-20.pdf

Moore, D.P., Moore, J.L. and Moore, J.W. (2011), "How women entrepreneurs lead and why they manage that way", *Gender in Management: An International Journal*, Vol. 26 No. 3, pp. 220-233.

Moreira, J., Marques, C. S., Braga, A. and Ratten, V. (2019), "A systematic review of women's entrepreneurship and internationalization literature", *Thunderbird Int. Bus. Review*, Vol. 61, pp. 635–648.

Mukyala, V., Bananuka, J., Basuuta, M., Tumwebaze, Z. and Bakalikwira, L. (2017), "Accountability of local government authorities: a developing economy perspective", *African Journal of Business Management*, Vol. 11 No. 12, pp. 266-274.

Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D. and Czeglédi, C. (2019), "The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries", *Studies in Higher Education*, Vol. 44 No. 2, pp. 361-379.

Palalić, R., Ramadani, V., Đilović, A., Dizdarević, A. and Ratten V., (2017), "Entrepreneurial intentions of university students: a case-based study", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 11, No. 3, pp. 393-413.

Pati, S. P. and Kumar, P. (2010), "Employee Engagement: Role of Self-efficacy, Organizational Support & Supervisor Support", *The Indian Journal of Industrial Relations*, Vol. 46, No. 1, pp. 126-137.

Politis, J. D. (2005), "Dispersed leadership predictor of the work environment for creativity and productivity", *European Journal of Innovation Management*, Vol. 8 No. 2, pp. 182-204.

Radadiya, S. (2012), "Women entrepreneurs in India", *International Journal of Management, IT and Engineering*, Vol. 2 No. 11, pp. 399-413.

Ratten, V., Dana, L.P. and Ramadani, V. (Eds) (2018), *Women Entrepreneurship in Family Business*, Routledge, London.

Robles, L. and Zárraga-Rodríguez, M. (2015), "Key competencies for entrepreneurship", *Procedia Economics and Finance*, Vol. 23, pp. 828–832. [https://doi.org/10.1016/S2212-5671\(15\)00389-5](https://doi.org/10.1016/S2212-5671(15)00389-5).

Römer-Paakkanen, T. and Takanen-Köörperich, P. (2022), "Women's entrepreneurship at an older age: women linguists' hybrid careers", *Qualitative Research in Organizations and Management: An International Journal*, Vol. 17, No. 2, pp. 253-273.

Ruiner, C. (2019), "To be or not to be... self-employed: impact of family background on women entrepreneurs", *Leadership, Education, Personality: An Interdisciplinary Journal*, Vol. 1, No. (1-2), pp. 5–14.

Rummana, R. (2014), "Theorizing women entrepreneurship-in pursuit of a definition in the light of literature-the case of Bangladesh", *International Journal of Advanced Technology and Engineering Research*, Vol. 5, pp. 246-253

Santos, P. C. F. (2008), "Uma escala para identificar potencial empreendedor (tese de doutorado)", *Universidade Federal de Santa Catarina, Florianópolis*.

Santos, Francisco J., Muhammad Azam Roomi, and Francisco Liñán. (2016), "About Gender Differences and the Social Environment in the Development of Entrepreneurial Intentions.", *Journal of Small Business Management*, Vol. 54 No. 1, pp. 49–66. <https://doi.org/10.1111/jsbm.12129>.

Santos, G., Marques, C. S., & Ferreira, J. J. M. (2018), "What are the antecedents of women's entrepreneurial orientation?", *International Entrepreneurship and Management Journal*, Vol. 14 No. 4, pp. 807–821. <https://doi.org/10.1007/s11365-017-0481-4>.

Schoon, Ingrid, and Kathryn Duckworth. (2012), "Who Becomes an Entrepreneur? Early Life Experiences as Predictors of Entrepreneurship.", *Developmental Psychology*, Vol. 48 No. 6, pp. 1719–26. <https://doi.org/10.1037/a0029168>.

Serino, L. and Buccino, G. (2019), "Entrepreneurial Intentions among Italian Students: The Role of Gender", *International Journal of Academic Research Business and Social Sciences*, Vol. 9 No. 3, pp. 1309–1326.

Sharma, Y. (2013), "Women entrepreneur in India", *IOSR Journal of Business and Management*, Vol. 15 No. 3, pp. 9-14.

Shepherd, D. A., Wennberg, K., Suddaby, R., & Wiklund, J. (2019), "What are we explaining? A review and agenda on initiating, engaging, performing, and contextualizing entrepreneurship", *Journal of Management*, Vol. 45, No. 1, pp. 159–196.

Shinnar, Rachel, Olivier Giacomin, and Frank Janssen. (2012), "Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture.", *Entrepreneurship: Theory and Practice*, Vol. 36 No. 3, pp. 465–93. <https://doi.org/10.1111/j.1540-6520.2012.00509.x>.

Shinnar, R.S., Hsu, D.K., Powell, B.C. and Zhou, H. (2018), "Entrepreneurial intentions and start-ups: Are women or men more likely to enact their intentions?", *International Small Business Journal*, Vol. 36 No.1, pp.60-80.

Shirokova, G., Osiyevskyy, O. and Bogatyreva, K. (2016), "Exploring the intention–behavior link in student entrepreneurship: Moderating effects of individual and environmental characteristics.", *European Management Journal*, Vol. 34 No. 4, pp.386-399.

Sinha, E. (2012), "Women Entrepreneurship with special reference to Bardoli, Gujarat, *IMR's Management Research Journal*, Vol 3, No. 1, pp. 30-35.

Sinha, E., and D'Souza, K. C. (2017), "Urban Women and Digitization: Pointers from Mumbai", *In Proceedings of the 10th International Conference on Theory and Practice of Electronic Governance*. pp. 285-291. ACM.

Stamboulis, Y., and A. Barlas. (2014), "Entrepreneurship Education Impact on Student Attitudes", *The International Journal of Management Education*, Vol. 12 No. 3, pp. 365–73.

Streeter, D.H. and Jaquette, J.P. Jr (2004), "University-wide entrepreneurship and education: alternative models and current trends", *Southern Rural Sociology*, Vol. 20 No. 2, pp. 44-71.

Statista Research Department (2021). Share of Women-Owned MAMEs in India FY 2021. Retrieved from [India - share of women-owned MSMEs 2021 | Statista](#).

Thébaud, S. (2010), "Masculinity, bargaining, and breadwinning: Understanding men's housework in the cultural context of paid work.", *Gender & society*, Vol. 24 No. 3, pp.330-354.

Turker, D., Onvural, B., Kursunluoglu, E. and Pinar, C. (2005), "Entrepreneurial propensity: a field study on the Turkish university students", *International Journal of Business, Economics and Management*, Vol. 1 No. 3, pp. 15-27.

Turker, D., Selcuk, S. S. (2009), "Which factors affect entrepreneurial intention of university students?", *Journal of European Industrial Training*, Vol. 33, No. 2, pp. 142-159.

United Nations. (2015). Women and sustainable development goals. New York, NY: Author.

Urbano, D., Aparicio, S. and Audretsch, D. (2019), "Twenty-five years of research on institutions, entrepreneurship, and economic growth: what has been learned?", *Small Business Economics*, Vol. 53 No. 1, pp.21-49.

Venkatesh, V., Shaw, J. D., Sykes, T. A., Wamba, S. F. and Macharia M. (2017), “Networks, Technology, And Entrepreneurship: A Field Quasi-Experiment Among Women, *Academy of Management Journal*, Vol. 60, No. 5, 1709–1740.

Wang, C.K. and Wong, P.K. (2004), “Entrepreneurial interest of university students in Singapore”, *Technovation*, Vol. 24 No. 2, pp. 163-72.

Wennekers, A.R.M. and Thurik, A.R. (1999), “Linking entrepreneurship and economic growth”, *Small Business Economics*, Vol. 13 No. 1, pp. 27-55

Wilson, F., Kickul, J. and Marlino, D. (2007), “Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education”, *Entrepreneurship Theory and Practice*, Vol. 31, No. (3), pp. 387–406. <https://doi.org/10.1111/j.1540-6520.2007.00179.x>

Yang, J. H. (2016), “Self-Efficacy as Moderator in Entrepreneurship Education and Entrepreneurial Intention: Comparison between Korean and Chinese University Students”, *The Journal of Small Business Innovation*, Vol. 19, No. 1, pp. 17-35.

Zhao, H., Seibert, S.E. and Hills, G.E. (2005), “The mediating role of self-efficacy in the development of entrepreneurial intentions.”, *Journal of applied psychology*, Vol. 90 No. 6, pp. 1265–1272. <https://doi.org/10.1037/0021-9010.90.6.1265>

Appendix 1: Variables used

Variable	Items
Perceived Educational Support (PES)	Esp1- The education in university encourages me to develop creative ideas for being an entrepreneur Esp2- My university provides the necessary knowledge about entrepreneurship Esp3- My university develops my entrepreneurial skills and abilities
Perceived Entrepreneurial Potential (PEP)	Ep1- I have the ability to recognize a potential opportunity Ep2- I can get involved in continuous planning with desired control to achieve my goals Ep3- I can develop business networking Ep4- I can persuade others towards actions to achieve my goals
Perceived Relational Support (PRS)	Rsp1- If I decided to be an entrepreneur, my family members support me Rsp2- If I decided to be an entrepreneur, my friends support me
Perceived Structural Support (PSS)	Ssp1- In India, entrepreneurs are encouraged by a structural system including private, public, and non-governmental organizations Ssp2- Indian economy provides many opportunities for entrepreneurs Ssp3- Taking loans from banks is quite difficult for entrepreneurs in India Ssp4- Indian laws (rules and regulations) are adverse to running a business
Entrepreneurial Intentions	Int1 - Ready to do anything to be an entrepreneur. Int2 - My professional goal is to be an entrepreneur. Int3 - I will make every effort to start and run my own business. Int4 - I am determined to create a business venture in the future. Int5 - I have very seriously thought about starting a firm. Int6 - I've got the firm intention to start a firm someday.
Entrepreneurial Self-efficacy	Ese1- I will be able to achieve most of the goals that I set for myself. Ese2- When facing difficult tasks, I am certain that I will accomplish them. Ese3- In general, I think that I can obtain outcomes that are important to me Ese4- I believe I can succeed at almost any endeavour to which I set my mind. Ese5- I will be able to successfully overcome many challenges. Ese6- I am confident that I can perform effectively on many different tasks. Ese7- Compared to other people, I can do most tasks very well. Ese8- Even when things are tough, I can perform quite well