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# DETERMINANTS OF ENTREPRENEURIAL INTENTIONS AMONG RURAL WOMEN IN PUNJAB: THE ROLES OF PERSONAL ATTITUDE, SUBJECTIVE NORMS, PERCEIVED BEHAVIORAL CONTROL, AND SOCIAL MEDIA

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## Abstract

This study examines the determinants of entrepreneurial intentions among rural women in Punjab by analyzing the influence of personal attitude, subjective norms, perceived behavioral control, and social media. Data were collected from 456 rural women using a structured questionnaire, and the relationships among the variables were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that personal attitude is the strongest predictor of entrepreneurial intention, followed by social media, which exerts both a direct effect and a moderating influence on entrepreneurial intentions. Subjective norms and perceived behavioral control demonstrate relatively weaker effects. The model explains 55.4% of the variance in entrepreneurial intention, indicating substantial explanatory power. The results highlight the critical role of positive entrepreneurial attitudes and digital engagement in fostering entrepreneurial aspirations among rural women. The study contributes to the entrepreneurship literature by providing empirical evidence from Punjab and offers practical implications for policymakers and development agencies seeking to promote women entrepreneurship and rural economic development.

**Keywords:** *Entrepreneurial Intention; Rural Women; Personal Attitude; Rural Women; Personal Attitude*

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## Introduction

Encouraging rural women towards entrepreneurship has become a global focus. For example, Ekshop, a platform in Bangladesh for empowering rural women is being used to foster women's empowerment and rural economic progress. It enables nationwide internet access, encourages women to become entrepreneurs, and promotes digitalization. (Fernández et al, 2023). Any country's social and economic inclusion depends heavily on entrepreneurship. In the Indian context, entrepreneurship activities within SHGs (Self-help Groups) have significantly contributed to improving the lifestyle and socioeconomic status of rural women (Ghosh et al, 2023; Singh and Majumdar, 2015). It is also gaining increasing interest among academics and policymakers. It is said that empowered women contribute significantly to economic growth, reduce poverty, lead to optimal utilization of scarce economic resources, foster family welfare, ensure social stability and inclusive governance and community engagement. Entrepreneurship boosts rural women's income, improves living standards, enhances skills, expands social networks, and reduces psychological burdens (Abdelfattah, 2023). Othman et al (2022) found a positive relationship between entrepreneurial skills and quality of life. Sugimoto (2020) has found that entrepreneurship in agritourism has led to rural women finding new identities along with rural revitalisation in Japan. Osei and Zhuang (2020) recommend empowering more women in agribusiness entrepreneurship to mitigate the poverty risk in developing economies. Also, López-Estrada (2023) found that women's empowerment positively impacts their personal lives and community development. Rural women can be empowered through e-business and women's entrepreneurship to enhance living standards and sustain development ultimately. Entrepreneurial intentions are widely regarded as a precursor to entrepreneurial behaviour, as emphasized by studies such as Krueger et al. (2000) and Molaei et al. (2014). These intentions, central to entrepreneurship literature, represent a state of mind that directs an individual's attention, activities, and experiences toward entrepreneurship (Fayolle and Gailly, 2015; Do and Dadvari, 2017). Entrepreneurial intention reflects the commitment of the participant (Krueger, 1993), the mental orientation of the individual (Peng, 2012), and the deliberate nature of the decision (Wilson et al., 2007) to establish a venture. This construct serves as a critical predictor of entrepreneurial action, bridging the gap between conceptual motivation and tangible entrepreneurial behaviour.

**Literature Review:** The review of 265 documents found in SCOPUS and Web of Science -based journals using keywords "Entrepreneurship" OR "Entrepreneurs" AND "Rural Women" OR "Rural female" shows that 70% of the papers were published after 2015, showing that the domain is of recent interest of academicians. India (26%) published majority of the papers in the domain of rural women entrepreneurship followed by Malaysia (8%), United States (7%), United Kingdom (7%), Iran (6%), Nigeria (6%), China (6%) and South Africa (5%). Studies on women entrepreneurs have identified unique characteristics and behavioral patterns that distinguish them from their male counterparts. Ntseane (2004) explored rural women in Botswana engaged in small businesses, determining that foundation of long-term corporate success in these communities are non-competitive networks, collective management techniques, and informal cross-border trade. Similarly, Anthopoulou (2010) studied Greek women in small businesses and found that women entrepreneurs often follow different behavioral patterns and priorities compared to men. Specifically, they place greater emphasis on maintaining a balance between professional obligations and family responsibilities, rather than solely pursuing economically rational goals or conventional business success. Cooke (2005) investigates the available opportunities and hindrances for women managers to take up managerial position in Chinese context. The author found that several legislative, social and psychological variables prohibit women for undertaking managerial roles. Nayak and Nayak (2025) analysed data of 1250 Indian rural women and concluded that perceived capability, individual competencies and social perception significantly positively influenced sustainable entrepreneurial intentions. Herath (2024) investigated the impact of sixteen identified barriers on rural women's entrepreneurial intentions in Sri Lanka, using primary data from 213 participants of a government-led skills development program. Results reveal that a lack of confidence in the business idea and insufficient practical knowledge significantly hinder entrepreneurial intent, while marital status also shows a statistically significant influence. Drawing on data from 183 rural women entrepreneurs in Oman, Durrah et al (2024) identified both intrinsic and extrinsic motivations influencing their entrepreneurial engagement. Findings show that external push factors like financial need and job dissatisfaction, along with internal attitudes such as self-efficacy and perceived social support, significantly shape entrepreneurial behaviour.

Driga et al. (2009) investigate the influence of institutional factors on the entrepreneurial activity of rural men and women in Spain. The study reveals that Spanish rural women are less engaged in entrepreneurial activities compared to their male counterparts and exhibit lower optimism regarding their entrepreneurial abilities. However, the findings also indicate that the fear of failure does not significantly deter rural women from participating in entrepreneurship. Fan et al. (2024), through mixed method approach, established that gender perception significantly moderates entrepreneurial willingness, while emotional family support strongly enhances both perceived aspiration and feasibility. There are numerous studies in this domain but none has attempted to study the entrepreneurial intentions of rural women in Punjab state. Keeping this into consideration, the present study attempts to study the entrepreneurial intentions of rural women entrepreneurs in Punjab state.

**Objectives:** Following are the specific objectives of the study:

- To analyze the influence of personal attitude on the entrepreneurial intentions of rural women in Punjab.
- To evaluate the impact of subjective norms on the entrepreneurial intentions of rural women in Punjab.
- To examine how perceived behavioral control affects the entrepreneurial intentions of rural women in Punjab.
- To investigate the moderating effect of social media usage on the relationship between psychological factors and entrepreneurial intentions among rural women in Punjab.

**Research Methodology:** A sample of 456 rural women was taken from Punjab State. Data has been collected using an adapted version of the Aijaz, 1991 questionnaire. Reliability analysis was conducted using Cronbach's Alpha and Composite Reliability through SmartPLS-SEM. The statements were validated using face-to-face validation and Convergent and Discriminant Validity. The reliability will be checked using Cronbach alpha through SPSS version 24. The impact was measured through measurement models and relationship was established through structural equation modelling using Smart PLS-SEM.

**Reliability and Validity:** All constructs pass reliability and convergent validity criteria (Cronbach  $\alpha > 0.7$ , AVE  $> 0.5$ ). The HTMT values are all below 0.90 i.e acceptable discriminant validity.

Fornell-Larcker criterion shows that each construct's square root of AVE is greater than correlations with other constructs, thus confirms discriminant validity. There is no major discriminant validity issues. All indicator outer loadings are greater than 0.7 (except  $ei1=0.654$ ,  $s21=0.696$ ), suggesting good convergent validity. T-values all greater than 1.96 and p-values are greater than 0.05, confirming indicator reliability. Outer Weights for reflective constructs are significant ( $p < 0.001$ ), showing each indicator contributes meaningfully to its construct. The measurement model is reliable and valid, suitable for interpretation of the structural model.

**Analysis and Findings:**

**Path Coefficients**

	EI
PA	0.354
PBC	0.109
SM	0.232
SN	0.135
SM x PA	-0.163
SM x SN	0.140
SM x PBC	-0.030

As per the table given above, the Coefficient ( $\beta$ ) for PA  $\rightarrow$  EI is 0.354 which shows the strongest predictor of EI. Attitude toward entrepreneurship is the key driver.

The coefficient ( $\beta$ ) for PBA  $\rightarrow$  EI is 0.109 which shows the weak positive effect. Perceived behavioral control matters, but less than attitude.

The coefficient ( $\beta$ ) for SM  $\rightarrow$  EI is 0.232 which shows moderate direct effect. Social media directly increases EI.

The coefficient ( $\beta$ ) for SN  $\rightarrow$  EI is 0.135 which is a weak but positive effect. Social norms play a supportive but smaller role.

The coefficient ( $\beta$ ) for SM  $\times$  PA  $\rightarrow$  EI is -0.163 which shows negative moderation. Social media reduces the strength of the PA  $\rightarrow$  EI link.

The coefficient ( $\beta$ ) for SM  $\times$  SN  $\rightarrow$  EI is 0.140 which shows positive moderation. Social media strengthens the SN  $\rightarrow$  EI link

The coefficient ( $\beta$ ) for SM  $\times$  PBC  $\rightarrow$  EI is -0.030 which shows negligible moderation. Social media does not meaningfully moderate PBC's effect

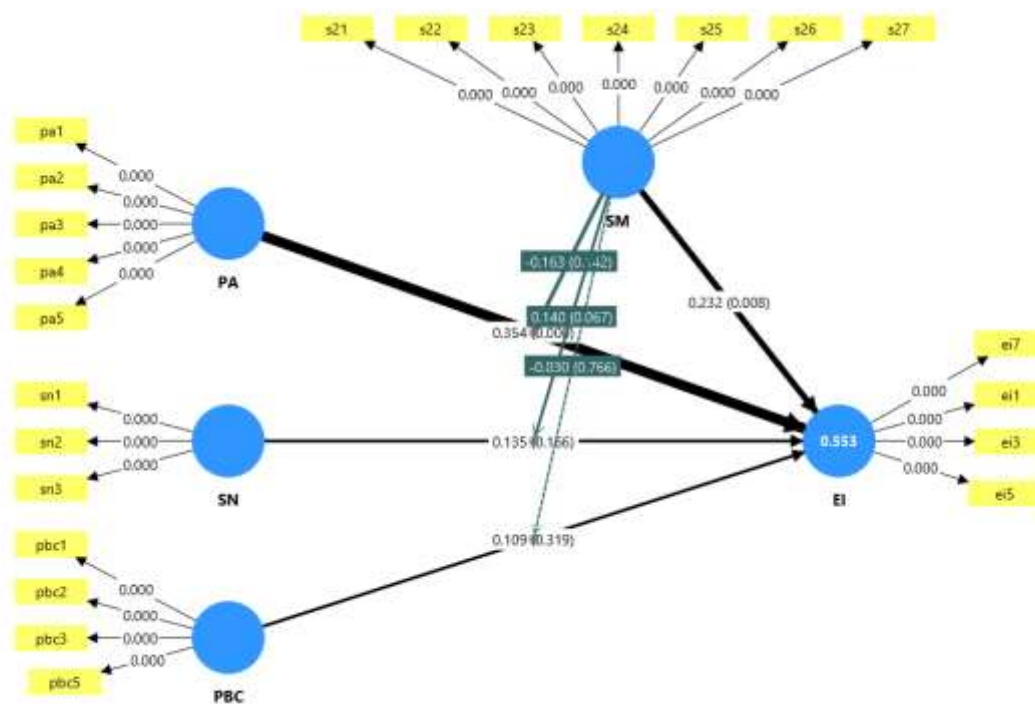
The value of  $R^2$  for EI = 0.554 (Adjusted 0.528). This means 55.4% of the variance in Entrepreneurial Intention is explained by the predictors. This explanatory power is substantial as recommended by PLS-SEM.

Hence it is concluded that the Personal Attitude (PA) is the strongest driver of entrepreneurial intention. If people feel positively about entrepreneurship, they are most likely to pursue it. Social Media (SM) has a dual role: Directly boosts EI ( $\beta = 0.232$ ) and negatively moderates PA  $\rightarrow$  EI (too much exposure may reduce the effect of attitude). It further positively moderates SN  $\rightarrow$  EI (peer influence amplified by social media). Perceived Behavioral Control (PBC) has only a small effect ( $\beta = 0.109$ ). This suggests self-efficacy plays a limited role in this sample compared to attitudes and social media. Subjective Norms (SN) have a weak direct effect ( $\beta = 0.135$ ). But become

more important when interacted with social media. To summarise:

- SM weakens PA  $\rightarrow$  EI.
- SM strengthens SN  $\rightarrow$  EI.
- SM does not affect PBC  $\rightarrow$  EI.

The model is statistically strong ( $R^2 = 55.4\%$ ). Attitude toward entrepreneurship (PA) is the most influential factor. Social media is both a direct enabler and a moderator in shaping entrepreneurial intention. PBC and SN are weaker drivers individually but gain importance through social media interaction.



**Bootstrapping**

Following table shows the result of bootstrapping

Bootstrapping	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
PA -> EI	0.354	0.349	0.100	3.533	0.000
PBC -> EI	0.109	0.116	0.109	0.997	0.319
SM -> EI	0.232	0.239	0.088	2.645	0.008
SM x PA -> EI	-0.163	-0.150	0.111	1.470	0.142
SM x PBC -> EI	-0.030	-0.039	0.100	0.298	0.766
SM x SN -> EI	0.140	0.142	0.076	1.832	0.067
SN -> EI	0.135	0.135	0.098	1.384	0.166

The analysis of bootstrapping is presented below:

**Path Coefficients (Structural Model)**

Path	$\beta$ (Original Sample)	T-value	p-value	Significant?
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PA → EI	0.354	3.533	0.000	Yes, significant
PBC → EI	0.109	0.997	0.319	No
SM → EI	0.232	2.645	0.008	Yes
SM x PA → EI	-0.163	1.470	0.142	No
SM x PBC → EI	-0.030	0.298	0.766	No
SM x SN → EI	0.140	1.832	0.067	Marginally (trend)
SN → EI	0.135	1.384	0.166	No

It means that PA (Personal Attitude) and SM (Self-Motivation) positively influence EI (Entrepreneurial Intention). PBC (Perceived Behavioral Control) and SN (Subjective Norms) are not significant in this model. Interaction effects with SM mostly non-significant, except SM x SN shows a trend (p=0.067). Paths with CI excluding zero confirm significance: PA → EI (0.146-0.545), SM → EI (0.061-0.411). Others include zero, indicate non-significance.

### Model Fit

	Saturated model	Estimated model	Interpretation
SRMR	0.078	0.079	Acceptable
d_ULS	1.700	1.704	N/A
d_G	0.812	0.812	N/A
Chi-square	586.365	586.831	Saturated vs estimated very close
NFI	0.718	0.718	Acceptable

Model shows reasonable fit for PLS-SEM.

### Conditional/Moderation Effects (SM at +1 SD, Mean, -1 SD)

Path	SM +1 SD	SM Mean	SM -1 SD
PA → EI	0.191 (ns)	0.354 (sig)	0.517 (sig)
PBC → EI	0.079 (ns)	0.109 (ns)	0.138 (ns)
SN → EI	0.275 (trend)	0.135 (ns)	-0.005 (ns)

As indicated above PA → EI is stronger at lower SM levels (-1 SD), weaker at higher SM (+1 SD). It suggests a negative interaction (already seen in SM x PA path  $\beta$  = -0.163, not significant though). SN → EI increases with higher SM (+1 SD) but not significant.

The table shows that the PA and SM have significant direct effects:

- PA → EI (strongest predictor)
- SM → EI

PBC and SN have non-significant effects:

- PBC → EI
- SN → EI
- All interaction terms except marginal trend for SM x SN

The moderation insights shows that PA effect decreases as SM increases. Conditional effects highlight possible buffering role of self-motivation, though not strongly significant.

Further the measurement model is solid as outer loadings are mostly >0.7, weights significant → constructs are measured reliably.

Thus, it is concluded that Entrepreneurial intention (EI) in the model is mainly driven by personal attitude (PA) and Social-Media (SM). Subjective norms (SN) and perceived behavioral control (PBC) are not strong drivers in this context. Interactions show some trends but are largely non-significant.

### Quality and effect size

R-Square	R-square	R-square adjusted
EI	0.553	0.527

The R2 is about 55% of variance in entrepreneurial intention is explained by PA, PBC, SM, SN, and their interaction terms. This is moderate-to-strong explanatory power for social science research.

**F-Square**

	f-square	Explanation
PA -> EI	0.109	Small to moderate effect on EI
PBC -> EI	0.010	Negligible effect
SM -> EI	0.057	Small effect
SM x PA -> EI	0.018	Small effect
SM x PBC -> EI	0.001	Very small moderation effect
SM x SN -> EI	0.025	Very small moderation effect
SN -> EI	0.021	Negligible effect

Overall, it is concluded that the model has the predictive power. Model explains 55% of EI variance. PA is the strongest predictor; PBC and SN are weaker. The moderation effect shows that SM interactions (SM x PA, SM x SN, SM x PBC) have very small effects, suggesting SM has limited moderating influence. Reliability & Validity is excellent to good for all constructs. HTMT and Fornell-Larcker indicate that discriminant validity is satisfied. The results of Collinearity shows that the Inner model VIFs acceptable. However, PA outer items slightly high but tolerable. SRMR and NFI indicate acceptable model fit; overall, the model is robust.

**References**

1. Abdelfattah, F., Al Halbusi, H., & Al-Brwani, R. M. (2023). Cognitive style and fostering of technological adaptation drive E-entrepreneurship of new mature business. *International Journal of Innovation Studies*, 7(3), 230–243.
2. Anthopoulou, T. (2010). Rural women in local Heraklion production: Between entrepreneurial initiatives and family strategies. A case study in Greece. *Journal of Rural Studies*, 26(4), 394–403. <https://doi.org/10.1016/j.jrurstud.2010.03.004>
3. Cooke, F. L. (2005). Women's managerial careers in China in a period of reform. *Asia Pacific Business Review*, 11(2), 149–162. <https://doi.org/10.1080/1360238042000291216>
4. Do, B. R., & Dadvari, A. (2017). The influence of the dark triad on the relationship between entrepreneurial attitude orientation and entrepreneurial intention: A study among students in Taiwan University. *Asia Pacific Management Review*, 22(4), 185–191. <https://doi.org/10.1016/j.apmr.2017.02.001>
5. Driga, O., Lafuente, E., & Vaillant, Y. (2009). Reasons for the relatively lower entrepreneurial activity levels of rural women in Spain. *Sociologia Ruralis*, 49(1), 70–96. <https://doi.org/10.1111/j.1467-9523.2008.00475.x>
6. Durrah, O., Ghouse, S. M., & Alkhalaf, T. (2024). Motivations and behaviours of rural women entrepreneurs in Oman. *International Journal of Gender and Entrepreneurship*, 16(3), 402–421. <https://doi.org/10.1108/ijge-04-2023-0106>
7. Fan, X., Qin, H., Zhang, J., & Zhong, F. (2023). The effect of family support on rural women's Tourism entrepreneurial intention in China. In *Routledge eBooks* (pp. 246–269). <https://doi.org/10.4324/9781003286721-23>
8. 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.12053>
9. Fernández, P., García de la Garza, D., & Fernández Acín, J. (2023). Survey: Market risk premium and risk-free rate used for 80 countries in 2023. SSRN. <https://doi.org/10.2139/ssrn.4407839>
10. Ghosh, S., Mahapatra, M. S., Tandon, N., & Tandon, D. (2023). Achieving sustainable development goal of women empowerment: A study among self-help groups in India. *FIIB Business Review*. <https://doi.org/10.1177/23197145231169074>
11. Herath, L. K. (2024). Barriers to entrepreneurial intentions of rural women: a case study in North Western Province, Sri Lanka. *Economics and Business Quarterly Reviews*, 7(1). <https://ssrn.com/abstract=4728716>
12. Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
13. López-Estrada, P., Fernández-Mora, L., & Pérez-Hidalgo, E. (2023). Empowered women in a rural community: A case study in Sarapiquí, Costa Rica. *The Qualitative Report*, 28(10), 2848–2870. <https://doi.org/10.46743/2160-3715/2023.6677>
14. Molaei, R., Zali, M. R., Mobaraki, M. H., & Farsi, J. Y. (2014). The impact of entrepreneurial ideas and cognitive style on students' entrepreneurial intention. *Journal of Entrepreneurship in Emerging*

- Economies*, 6, 140–162.  
<https://doi.org/10.1108/JEEE-02-2013-0007>
15. Nayak, M., & Nayak, P. M. (2025). Empowering women in rural India: characteristics and intentions for sustainable entrepreneurship. *Cogent Business & Management*, 12(1).  
<https://doi.org/10.1080/23311975.2025.2461234>
16. Ntseane, P. (2004). Being a female entrepreneur in Botswana: Cultures, values, strategies for success. *Gender and Development*, 12(2), 37–43.  
<https://doi.org/10.1080/13552070412331332180>
17. Othman, N. H., Othman, N., & Juhdi, N. H. (2022). Does entrepreneurship education affect pre-start-up behavior in Malaysia? A multi-group analysis approach. *Frontiers in Psychology*, 13, 738729.  
<https://doi.org/10.3389/fpsyg.2022.738729>
18. Peng, Z., Lu, G., & Kang, H. (2012). Entrepreneurial intentions and its influencing factors: A survey of university students in Xi'an, China. *Creative Education*, 3, 95–100.  
<https://doi.org/10.4236/ce.2012.38B021>
19. Singh, A., & Majumdar, S. (2015). Technology and innovation for creating social change: Concepts and theories. In S. Majumdar, S. Guha, & N. Marakkath (Eds.), *Technology and innovations for social change* (pp. 1-18). Springer.  
[https://doi.org/10.1007/978-3-319-23052-9\\_1](https://doi.org/10.1007/978-3-319-23052-9_1)
20. Sugimoto, A. (2022). Success and succession: Agritourism, heterotopia, and two generations of rural Japanese female entrepreneurs. *Asian Anthropology*.  
<https://doi.org/10.1080/1683478x.2021.2013957>