# Enhancing Entrepreneurial Orientation among Women: A Multi Regression Approach

Anshu Latiyan<sup>1,\*</sup>, Sachin Ghai<sup>1</sup>, Amar Kumar Mishra<sup>2</sup> and Roopika Kahera<sup>1</sup>

Received 29 December 2023; Accepted 21 June 2024

# **Abstract**

The survival, growth and prosperity of any region depend upon its economy. While the government undertakes every step it can take to boost the economy of a region, it cannot uplift the economy alone. The entrepreneurs play a pivotal role in assisting the government in completing this Herculean task. The contribution of entrepreneurs is even more significant in small states like Uttarakhand, which is still in its nascent state after being carved out in 2000 as the 27th state of India. The hilly terrains, remoteness from the center, and extreme climate all contribute to making its economy more contingent upon the entrepreneurial ventures of the indigenous people. While there is a surge of entrepreneurial activities in urban areas close to the plains, there is a dearth of such endeavors in the hilly areas. The situation is graver in the rural areas of the hilly region, especially for women as most of them lack awareness, resources and support and are primarily engaged in agricultural and husbandry activities. A paradigm change is required for the inclusion of

Journal of Reliability and Statistical Studies, Vol. 17, Issue 1 (2024), 137–156. doi: 10.13052/jrss0974-8024.1716 © 2024 River Publishers

<sup>&</sup>lt;sup>1</sup>Department of Management Studies, Graphic Era Deemed to be University, Dehradun, India

<sup>&</sup>lt;sup>2</sup>Department of Management Studies, ADAMAS University, Kolkata, India E-mail: anshuchaudhary2607@gmail.com; professorsachinghai@gmail.com; amrs2310@gmail.com; roopikakahera26@gmail.com

<sup>\*</sup>Corresponding Author

such women for the holistic and heuristic development of the economy. This demands a shift from an agrarian to an entrepreneurial civilization. However, entrepreneurial orientation cannot be developed overnight and in isolation. It requires the instillation of personality characteristics. In the present paper, the researchers have identified three personality variables: – self-esteem, self-efficacy, and locus of control as the antecedents of entrepreneurial orientation and, using multiple regression, have explored the contribution of these personality variables to entrepreneurial orientation among women in the hilly region of Uttarakhand. The data for the present study were collected using stratified sampling and structured questionnaires from 200 women in the age group of 18 years to 40 years. The finding revealed that the personality variables accounted for 66.5 % of the variation in entrepreneurial orientation. Further, it also revealed that locus of control (LOC) contributed most to the development of entrepreneurial orientation (EO), followed by self-efficacy and self-esteem.

**Keywords:** Entrepreneurial orientation, self-esteem, self-efficacy, locus of control.

#### 1 Introduction

Uttarakhand – the 27th state in Indian Union – accounts for 0.84 percent of Indian population, it is home to 11.7 million people, with sex ratio of 105.166, with 5.7 million females. Age wise 16 million women lie in the age group 18–40 years, with three-fourth of them living in the rural areas. With such a large population and meagre resources, the state's development is hindered minimal participation of the women in the economy. While there is a plethora of reasons for the limited involvement of rural women in the economy besides agricultural or husbandry, one of the major reasons is lack of a distinct identity. They identify with their father, husband, or sibling. Historical accounts and data demonstrate that the majority of women suffered from a variety of societal injustices, including child marriage, limited access to education, financial illiteracy etc. While majority of these social ills were prevalent in Indian society during the Middle Ages, nevertheless, modern Indian women hold eminent positions across sectors. Nowadays, women are supporting their families in socio-economic ways. The contribution of women helps a lot in improving the nutritional as well as financial status of family. Women are working as doctors, engineers, educators, entrepreneurs, managers and so on. Such participation of women in various dimensions showcase their changing role towards gender equality and women empowerment, especially in entrepreneurs, as they not only become self-dependence but also create jobs for others [1].

Entrepreneurship is the act of initiating a business venture by combining various efforts and resources. Women entrepreneurs can be understood as those women who initiate, innovate, and adopt a business practice "Women entrepreneurship" refers to a business run and overseen by women, where women hold a minimum of 51 percent of the financial stake and contribute to same number of percent of the employment opportunities created by the firm. The percentage of women working in business has significantly increased during the last ten years [2]. There has been a hike in the number of women who are either beginning new businesses or are in the process of joining established ones. Exposure to more educational opportunities, equal rights, participation in decision making, freedom of thought, speech, family support, reduced childbearing, support in terms of career settlement and delayed marriage have made woman financially as well as morally independent, leading to the growth of more and more women-owned businesses However, the scenario is not that rosy in rural areas, especially in the hilly region in Uttarakhand. This necessitates the development of women entrepreneurship in rural region of hilly state. Entrepreneurial orientation can be instilled at very swift pace in Uttarakhand given a comparatively high level of literacy. The state is rated ninth in India, with more than 72% of its people can read and write, albeit the literacy of women (60%) is significantly lower than that of their male counterparts (84%) [3]. However, apart from emphasizing literacy and awareness of various policies for skill development and social up liftmen, it is imperative to develop entrepreneurial orientation among women from the tender age. Entrepreneurship ventures require risk-taking and decision-making skills from entrepreneurs. However, these traits do not evolve overnight [4]. Government or society must nurture personality traits from the early age of girls to cultivate self-esteem, self-efficacy and internal locus of control, which will eventually lead to proactively, risk taking, and decision making, fostering more women entrepreneurs in future. This study aims to clarify the factors that influence the entrepreneurial orientation among the women for the growth of entrepreneurship. Drawing from various psychological factors, this study investigates whether the different psychological variables like Locus of Control, Self-Esteem and Self-Efficacy have any bearings on the Entrepreneurial orientation among women. While most research has explored the impact of social, family, and financial support, as well as government initiatives, on women's entrepreneurial orientation, there is a dearth of studies that have explored the role intrinsic variables in fostering entrepreneurial orientation among women.

This gap motivated the pursuing of this study. The research explores the nexus between Entrepreneurial Orientation (EO), Self-Esteem (SE), Self-Efficacy (SE) and Locus of control (LOC) among women in the rural region of hilly terrains in Uttarakhand, India.

#### 2 Literature Review

# 2.1 Self-Esteem

Self-esteem, a cornerstone of human psychology, profoundly shapes how individuals perceive themselves and navigate life's challenges. Psychologist Nathaniel Branden, a leading voice on self-esteem, articulated its essential role in personal development, describing it as "the reputation we acquire with ourselves" [5]. Branden's perspective underscores that self-esteem is not merely a transient emotion but a lasting internal assessment that profoundly influences thoughts, emotions, and behaviours. As humans, our sense of self-worth and confidence is intricately linked to our achievements, relationships, and broader contributions to the world. Setting reasonable goals, encouraging a good self-image, and admitting one's shortcomings are all necessary steps in the continuous process of developing and preserving a healthy sense of self-worth. By recognizing the enduring significance of self-esteem in the human experience, individuals can strive for continuous personal growth, resilience, and a more gratifying life [5].

# 2.2 Self-Efficacy

[6] Ground-breaking work on social cognitive theory (SCT), a theory that distinguishes between a new learning and a prior action performance, popularized the idea of self-efficacy in educational psychology. The concept of self-efficacy pertains to an individual's capacity and understanding of performing a given task within a specific field of study [7]. Put another way, the phrase describes an entrepreneur confidence in their capacity to complete a role as assigned [8]. One's decisions, responsibilities, thoughts, actions, behaviours, practices, motivation, and competences are all influenced by their level of self-efficacy [9]. It is not to be confused with two similar terms: self-esteem and self-concept. A person's general opinion of their capacity to finish a task, derived from prior experience, is known as their self-concept. Conversely, SE is linked to a person's estimation of their own worth [10].

According to [8], self-efficacy is a malleable concept that varies according to the situation and task at hand. Depending on the task's complexity and the surroundings in which it is carried out, its level may change. Self-efficacy is a reflection of one's confidence and belief in one's ability to use one's potential to accomplish goals. Self-efficacy is correlated with motivation, behaviour, and mental health.

#### 2.3 Locus of Control

The concept of LOC can be best described as a "generalized attitude, belief, or expectation about how one's behaviour connects to its outcomes" [11]. Rotter suggests that individuals vary in the extent to which they attribute the results of their actions to themselves, akin to the differences in the rewards they have experienced previously. It's proposed that a person's convictions about the significance of internal and external factors in determining outcomes are inherent aspects of their personality. Those with an internal locus of control typically believe their actions significantly shape life events, while individuals with an external locus of control are more prone to attributing life's outcomes to fate, luck, chance, or external forces. Given these psychological foundations, it is logical to associate locus of control with investments in human capital based on anticipated returns.

#### 2.4 Entrepreneurial Orientation

"Processes, practices, and decision-making activities that lead to new entry" are referred to as having an entrepreneurial orientation [12]. According to [13], a company is considered to have entered a new market when it launches previously unheard-of goods or services, technological advancements, or novel business models. Three dimensions were used in previous studies to measure the entrepreneurial orientation construct: innovativeness, proactively, and risk-taking [14]. In most studies, entrepreneurial orientation has been looked at as something that influences how well a company does, like a cause-and-effect situation. However, many of these studies haven't really delved into figuring out or assessing the in-between factors and processes that make a company perform better [13].

# 2.5 Entrepreneurial Orientation and Self-Esteem

Research indicates that having a high sense of self-worth serves as a protective barrier against many stressors that could affect one's drive or productivity at work. High self-confidence individuals are more motivated to finish tasks in a way that is compatible with their identity [20]. The relationship between self-esteem and individual entrepreneurial orientation is investigated in [21] study, Individual Entrepreneurial Orientation: Student Assessment. The findings indicate a significant positive correlation between the two variables. There is no clear relationship between self-esteem and the desire to work for one or start a business. Entrepreneurs have a variety of personality traits, including taking risks, being accountable, independent, and confident [22].

**Hypothesis 1 (H1):** There is significant relation between self-Esteem and EO.

# 2.6 Entrepreneurial Orientation and Self-efficacy

Studies conducted at a micro scale Self-efficacy and EO were shown to have a strong correlation by Malay business owners, indicating that people with higher EO also typically have higher levels of self-efficacy. Numerous studies on what motivates entrepreneurs to act in an entrepreneurial manner have found that entrepreneurial orientation – that is, being innovative, proactive, or taking chances – has a positive correlation with motivational factors like self-efficacy, achievement orientation, and internal control. According to [23], people with high accomplishment motivation are future-oriented and give tasks substantial consideration if they believe they will affect their long-term goals. Additionally, a student sample showed a strong correlation between accomplishment motivation and pro-activeness [24]. There may be a relationship between an organization's level of innovation and accomplishment motivation [25], for instance, found a favourable relationship between innovativeness and accomplishment motivation and proactive orientation.

**Hypothesis 2 (H2)**: There is significant relation between Self-Efficacy and EO.

# 2.7 Entrepreneurial Orientation and Locus of Control

The correlation between Entrepreneurial Orientation (EO) and Locus of Control (LOC) illuminates the complex interaction between an individual's entrepreneurial mindset and their sense of control over life events. EO, which includes characteristics like innovation, risk-taking, and proactiveness, mirrors an individual's predisposition toward entrepreneurial pursuits [26]. Conversely, Locus of Control, defined by [27], denotes the degree to which individuals perceive control over events in their lives. Studies suggest that

entrepreneurs frequently demonstrate an internal locus of control, crediting outcomes to their own efforts and decisions [28]. This internal locus of control corresponds with the proactive and risk-taking tendencies observed in entrepreneurial individuals.

Hypothesis 3 (H3): There is a significant relation between Locus of control and EO.

# 3 Conceptual Model

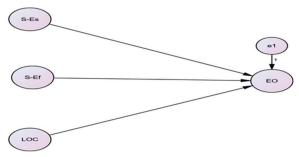


Figure 1 Conceptual model.

# 4 Research Methodology

The 380 women across Uttarakhand were contacted and send selfadministered questionnaires. The participants were briefed about the purpose of the study and were assured of confidentiality. Overall, 200 filled and valid responses were received after scrutiny at a response rate of 59%. Participants belonged to ages ranging from 18 to 40 years.

#### Constructs Used:

EO was measured using 23 items adopted from [29], Self-Esteem was measured using 20 items adopted from [30], Self-Efficacy was measured using 12 item adopted from [31] and LOC was measured using 24 item adopted from [32].

# 5 Data Analysis and Results

Table 2 shows the descriptive characteristics of the study. The statistics confirms the basic assumptions for further analyses such as normality, absence of

 Table 1
 Descriptive analysis

	Descriptive	statistics				
	Mean	St. Deviation	EO	SEs	SEf	LOC
EO	193.2	8.699	1			
SEs	16.4123	5.655	0.578***	1		
SEf	27.5	12.270	0.599***	0.102***	1	
LOC	6.77	13.195	0.326**	0.081*	0.059	1

Notes: \*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05. Legends: OCB – organisational citizenship behaviour, JS – job satisfaction, EC – emotional commitment, CC – career commitment.

 Table 2
 Regression results

OLS					
Dep. Variable:	EO	R-squared:	0.665		
Model:	OLS	Adj. R-squared:	0.660		
Method:	Least Squares	F-statistic:	129.498		
No. Observations:	199	Prob (F-statistic):	0.000		
Of Residuals:	196	Log-Likelihood:	1145.8		
Df Model:	3	D-W:	1.95		
Cova riance Type:	nonrobust				

		Unstar	ndardized	Standardized			Collinea	rity
		Coef	fficients	Coefficients			Statisti	cs
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-26.613	17.350	-1.534	0.127			
	Self Esteem	0.085	0.007	0.511	12.261	0.000	0.986	1.015
	Self- Efficacy	3.367	0.278	0.512	12.123	0.000	0.959	1.043
	LOC	11.086	2.438	0.192	4.548	0.000	0.963	1.038

 Table 3
 Collinearity diagnostics

				Variance Proportions			
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Self-Esteem	Self-Efficacy	LOC
1	1	3.562	1.000	0.00	0.02	0.01	0.00
	2	0.308	3.401	0.01	0.96	0.05	0.01
	3	0.109	5.704	0.05	0.02	0.93	0.07
	4	0.020	13.219	0.94	0.00	0.00	0.92

multi-collinearity, and excellent internal consistency (Cronbach alpha > 0.8; Nunally, 1978).

The necessary assumptions of multiple regression Linearity (Figure 3), Heteroscedasticity (Figure 4), Normality (Figure 2), Absence of Multi collaterality, (tolerance and VI Fin Table 2), absence of Auto correlation

 Table 4
 Case wise Diagnostics

Case Number	Std. Residual	EO	Predicted Value	Residual
1	2.125	330	229.92	100.080
2	-2.314	120	228.95	-108.949
10	2.114	300	200.47	99.534
47	-2.442	40	154.97	-114.970
52	2.069	190	92.60	97.403
55	-2.424	190	304.12	-114.123
61	2.098	300	201.19	98.810
68	-2.345	70	180.42	-110.416
100	2.066	250	152.71	97.287
164	-2.577	120	241.32	-121.324
169	3.061	360	215.87	144.132
200	-2.064	110	207.21	-97.206
	a. Depend	ent Vari	able: EO	

 Table 5
 Residuals statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	42.91	332.36	193.20	65.792	200
Std. Predicted Value	-2.284	2.115	0.000	1.000	200
Standard Error of Predicted	3.438	14.794	6.330	2.072	200
Value					
Adjusted Predicted Value	41.70	335.29	193.22	65.818	200
Residual	-121.324	144.132	0.000	46.731	200
Std. Residual	-2.577	3.061	0.000	0.992	200
Stud. Residual	-2.629	3.093	0.000	1.003	200
Deleted Residual	-126.294	147.197	-0.024	47.700	200
Stud. Deleted Residual	-2.670	3.164	0.000	1.008	200
Mahal. Distance	0.066	18.649	2.985	2.972	200
Cook's Distance	0.000	0.071	0.005	0.010	200
Centred Leverage Value	0.000	0.094	0.015	0.015	200
	a. Dependent	Variable: EO			

(Durwin-Waston in Table 2) were assessed first. In order to test the predictions, multiple regression was conducted with dependent variables EO and three independent variables (Self-Esteem, Self-Efficacy and Locus of control. Over all the results showed that all the independent variables were significant in predicting the EO. As shown in Table 2. Entrepreneur Orientation = -26.613 (Constant) + 0.085 (Self-esteem) + 3.367 (Self-Efficacy)+ 11.086 (Locus of control) + e. The results showed that the model was

## Histogram

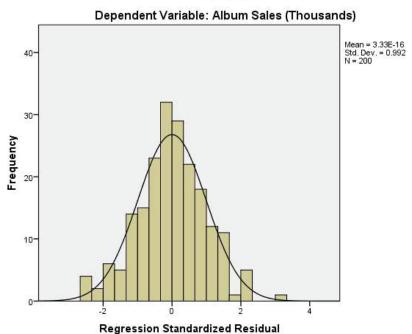


Figure 2 Histogram.

significant (f = 129.498, p = 0.001, R2 = 0.665). Further EO was significantly associated with Self-Esteem, Self-Efficacy and Locus of control (b = -26.613, t = 123, p = 0.0000). Further, the coefficient of determination also confirmed that 66.5 % variation in the EO can be explained with the three independent variables. Similarly, case wise diagnostics (Table 4) shows that only 1 case have standardized residuals outside the limit of  $\pm -3$ standard deviation which is fairly acceptable given that 95% of the cases have standardized residuals within about +/-3. A significant ANOVA, a higher R2, and lower shrinkage in adjusted R2 confirms the validity of the model (Table 2).

# 6 Findings and Conclusion

This study aimed to determine the degree of correlation between Self-Esteem, Self-Efficacy, and LOC with EO as well as investigate the role of SEs, SEf and LOC in enhancing EO. The results of the Multiple Regression using SPSS

## Normal P-P Plot of Regression Standardized Residual

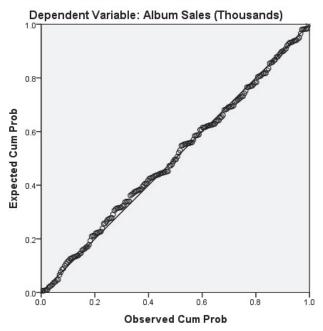


Figure 3 Normal P-P plot of regression standardized residual.

26.0 demonstrated that SEs, SEf and LOC had a positive effect on EO. Nature of the relation between these variables can be presented as follows:

$$EO = -26.613 + 0.085 SEs + 3.367 SEf + 11.0866 LOC + error$$

A multiple regression was run to predict EO from SES, SEf and LOC. This resulted in a significant model, F(3, 196) = 129.498, p < 0.01, R2 =0.665. The individual predictors were examined further and indicated that all SEs (t = 12.261, p < 0.01), SEf (t = 12.123, p < 0.01 and LOC (t = 12.123, p < 0.01) 4.598, p < 0.01) were significant predictors.

Hypothetically, first hypothesis assumed SEs to be positively related to EAC. Table 2 shows the standardized regression weight of 0.511 (t = 12.261, p-value < 0.001) quantifying the significant strength of the SEs on EO This supports Hypothesis 1.

Second Hypothesis posited a positive relation between SEf and EO. Table 2 shows the standardized regression weight of 0.512 (t = 12.123p-value < 0.001) quantifying the significant strength of the SEf on EO. This supports Hypothesis 2.

#### Scatterplot

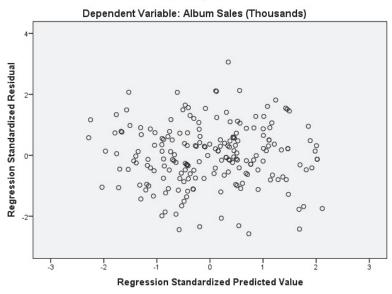


Figure 4 Scatterplot.

Similarly, Hypothesis 3 posited a positive relation between LOC and E0. Table 2 shows the standardized regression weight of 0.192 (t=4.598 p-value <0.001) quantifying the significant strength of the LOC on EO. This supports Hypothesis 3.

Together, the three variables explained 66.5% variation in EO.

Besides administrative reasons, one of the chief reasons for the formation of Uttarakhand was the economic development of the hilly region. While Government is doing everything it can do to boost the economy that encompasses infrastructure, development, law enforcement, attracting investors, preparing special economic zones; still the state is reeling under poverty with the 20th rank in GDP (3.94 lakh crore). Uttarakhand's employment trend has been unsatisfactory since it seems to be mostly driven by distress, especially in the state's hill districts. Since agriculture employs most of the new workers, it continues to be a last resort. Over time, the non-agricultural sector has seen a shift in the employment structure, however this has mostly affected male workers. The female job structure of the state has hardly changed at all, especially in the rural areas. They still serve as the foundation of the state's agriculture, especially in the hilly areas. Agriculture has hardly been able to keep up with the state's double-digit GSDP growth since its founding,

and rural communities in the hill districts have been particularly badly hit. A major chunk of the population, especially female, is unemployed or involved in agricultural activities with another chunk outside the state in search of jobs and/or greener pasture. This call for a change in paradigm shifts in the outlook of the people. There is a need to boost entrepreneurial culture in the state especially for women in the rural region of the hilly state. With the emerging emphasis on skill-based education, the future will be prosperous for those who will embark their journey of entrepreneurship. This will lead to the using of a new era where there will be more job givers than job seekers. This will also lead to women empowerment at the grassroot level.

The hill regions are full of natural resources and hardworking people which increases the likelihood of entrepreneurial hotbeds. The actualization of the potential may be stirred by first understanding the orientation of the people and channelizing all efforts to increase this orientation. Thus, it can be inferred that women with higher self-esteem, self-efficacy and locus of control tend to believe that they had control over their lives and are able to take steps to achieve their goals. The finding suggests that there is a good correlation between all the variables. Such women have a greater probability to emerge as job creators rather than mere job seekers. Thus, family, educational institutions, society and policy makers should promote the development of self-esteem, self-efficacy and locus of control among women from their tender age to facilitate a positive attitude towards entrepreneurship.

# 7 Implications

The primary objective of the present study is to give suggestions, offer recommendations, and provide assistance to educationists, policy makers and other stakeholders to transform and revitalize women entrepreneurship in rural India. The study offers ideas for future theoretical and more empirical research as well as a theoretical framework. The work has theoretically improved the body of knowledge on self-esteem, self-efficacy, and locus of control. It has advanced fresh insights and knowledge of these relationships by advancing current studies into the Indian scenario. The uniqueness of the study is that it has attempted to provide a framework focusing on intrinsic personality variables for nurturing EO among women in the rural regions of the hilly state. While previous research has investigated the impact of extrinsic factors like social support, family support, financial support, and Government initiatives on the entrepreneurial orientation of women, this study has explored the role of intrinsic variables self-esteem, self-efficacy, and locus of control in harnessing the entrepreneurial orientation among women. The study not only substantiates the studies from the past but also aims to stimulate other researchers to continue this exploration identifying the role of other intrinsic variables. Similar studies can be conducted in other rural areas of hill states such as Himachal Pradesh, Ladakh, Northeast regions that share the similar abundance of natural resources, hardworking indigenous people, geographical and infrastructural constraints.

#### 8 Limitations

- Firstly, the findings cannot be generalised as the sample size was not large enough; therefore, a replication of the study using a larger sample of women without any capping on inclusion criteria can be conducted.
- Secondly, the authors have examined the orientation of respondents and not their choice in this study. The findings may differ from their actual behaviour.
- A longitudinal future study instead of the present cross-sectional one can lead to more reliability, validity, and power to the findings.
- In this study, we have also not taken any controlled variables such as age, educational qualifications, financial status or the family background of the respondents.
- Furthermore, the researchers believe that use of hierarchical regression would have provided more insights by identifying the relative contribution of the predictors for examining incremental validity. Thus, future studies can consider these limitations.

#### References

- [1] De Clercq, D., Kaciak, E., and Thongpapanl, N. (2022). Happy at home, successful in competition: the beneficial role of happiness and entrepreneurial orientation for women entrepreneurs. International Journal of Entrepreneurial Behavior & Research, 28(6), 1463–1488.
- [2] Raman, R., Subramaniam, N., Nair, V. K., Shivdas, A., Achuthan, K., and Nedungadi, P. (2022). Women entrepreneurship and sustainable development: bibliometric analysis and emerging research trends. Sustainability, 14(15), 9160.
- [3] Mamgain, R. P. (2004). Employment, migration and livelihoods in the hill economy of Uttaranchal.

- [4] Kogut, C.S. (2022). Female entrepreneurship in emerging markets: challenges of running a business in turbulent contexts and times. International Journal of Gender and Entrepreneurship. 14(1), 95–116.
- [5] Branden, N. (1994). Working with self-esteem in psychotherapy. Directions in Clinical Psychology, 4, 1–13.
- [6] Bandura, A., Barbaranelli, C., Caprara, G. V., and Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. Child development, 72(1), 187–206.
- [7] Elrayah, M. (2022). Improving teaching professionals' satisfaction through the development of self-efficacy, engagement, and stress control: A cross-sectional study. Kuram ve Uygulamada Egitim Bilimleri, 22(1), 1-12.
- [8] Bandura, A. (2011). A social cognitive perspective on positive psychology. International Journal of Social Psychology, 26(1), 7–20.
- [9] Bandura, A., and Evans, R. I. (2006). Albert Bandura. Insight Media.
- [10] Han, B., Song, Y., Li, C., Yang, W., Ma, Q., Jiang, Z., ... and Gao, Q. (2021). Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine (CoronaVac) in healthy children and adolescents: a double-blind, randomised, controlled, phase 1/2 clinical trial. The Lancet Infectious Diseases, 21(12), 1645–1653.
- [11] Rotter, G. S., and Portugal, S. M. (1969). Group and individual effects in problem solving. Journal of Applied Psychology, 53(4), 338.
- [12] Lumpkin, G. T., and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of management Review, 21(1), 135-172.
- [13] Covin, J. G., and Wales, W. J. (2019). Crafting high-impact entrepreneurial orientation research: Some suggested guidelines. Entrepreneurship theory and practice, 43(1), 3–18.
- [14] Miller, D. (1983). The Emergence of the Entrepreneurial Orientation (EO) construct. Foundation Research in Entrepreneurship. Journal of Management Sciences.
- [15] Westfall, R. S., Millar, M., and Walsh, M. (2020). Effects of self-esteem threat on Physical Attractiveness Stereotypes. Psychological reports, 123(6), 2551–2561.
- [16] Gardner, D. G., and Pierce, J. L. (1998). Self-esteem and self-efficacy within the organizational context: An empirical examination. Group & Organization Management, 23(1), 48–70.
- [17] Lippke, S. (2020). Self-efficacy. Encyclopedia of personality and individual differences, 4713-4719.

- [18] Judge, T. A. (1997). The dispositional causes of job satisfaction: A core evaluations approach. Research in organizational behavior, 19, 151–188.
- [19] Judge, T. A., and Bono, J. E. (2001). Relationship of core self-evaluations traits self-esteem, generalized self-efficacy, locus of control, and emotional stability with job satisfaction and job performance: A meta-analysis. Journal of applied Psychology, 86(1), 80.
- [20] Ferris, D. L., Lian, H., Brown, D. J., Pang, F. X., and Keeping, L. M. (2010). Self-esteem and job performance: The moderating role of self-esteem contingencies. Personnel Psychology, 63(3), 561–593.
- [21] Vogelsang, L. (2015). Individual entrepreneurial orientation: An assessment of students (Doctoral dissertation, Humboldt State University).
- [22] Roberts, L. P., and Robinson, P. B. (2010). Home-based entrepreneurs, commercial entrepreneurs and white-collar workers: a comparative study of attitudes toward self-esteem, personal control and business growth. Journal of Small Business & Entrepreneurship, 23(3), 333–353.
- [23] Koestner, R., and McClelland, D. C. (1992). The affiliation motive.
- [24] Bateman, T. S., and Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. Journal of organizational behavior, 14(2), 103–118.
- [25] Lumpkin, G. T., and Erdogan, B. (2004). If not entrepreneurship, can psychological characteristics predict entrepreneurial orientation? A pilot study. The ICFAI Journal of Entrepreneurship Development, 1(1), 21–33.
- [26] Miller, D. (1983). The Emergence of the Entrepreneurial Orientation (EO) construct. Foundation Research in Entrepreneurship. Journal of Management Sciences.
- [27] Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological monographs: General and applied, 80(1), 1.
- [28] Chen, X. B., Mawby, P. A., Board, K., and Salama, C. A. T. (1998). Theory of a novel voltage-sustaining layer for power devices. Microelectronics journal, 29(12), 1005–1011.
- [29] Todorovic, Z. W., McNaughton, R. B., and Guild, P. (2011). ENTRE-U: An entrepreneurial orientation scale for universities. Technovation, 31(2–3), 128–137.
- [30] Heatherton, T. F., and Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. Journal of Personality and Social psychology, 60(6), 895.

- [31] Tschannen-Moran, M., Hoy, A. W., and Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. Review of educational research, 68(2), 202-248.
- [32] Ferguson, E. (1993). Rotter's locus of control scale: A ten-item twofactor model. Psychological Reports, 73(3\_suppl), 1267–1278.

# **Biographies**



Anshu Latiyan received the Bachelor's degree in BCA in 2016 and Master's degree in MBA (Major in HR and Minor in Marketing) from AKTU University, Lucknow, India in 2018. She is currently pursuing PhD in Human Resource Management from Graphic Era Deemed to be University, Dehradun, India. Her research interests include Human resource management and Organization behaviour.



Sachin Ghai is an Academician, Trainer, Startup mentor, and a Business and Life coach with over 2 decades of experience and a proven track-record in teaching and training at various levels.

# 154 Anshu Latiyan et al.

He has a Doctorate in Economics in the area of Urban Development Planning and Management. He holds a Master's degree in Economics and Bachelor's degree in Management & Information Technology. He is presently working in the capacity of Head of the Department – Management Studies and Director – Technology Business Incubator at Graphic Era Deemed to be University, Dehradun. He has been the Program Convener of the first MBA program in Innovation, Entrepreneurship and Venture Development in India offered at Graphic Era Deemed to be University.



Amar Kumar Mishra has done PhD in HR, MBA (OB & HR), M. Com from the University of Burdwan (West Bengal). Besides he has qualified UGC NET in Management, Commerce and HR. He has got experience of 20 years in academics. At present he is rendering his services to ADAMAS University, Kolkata as Professor in the Department of Management.



Roopika Kahera received the Bachelor's degree in B.tech Biotechnology in 2019 and Master's degree in Management in 2021 from Graphic Era Deemed to be University, Dehradun, Uttarakhand, India. Currently she is pursuing PhD in Management from Graphic Era University, Dehradun, India. Her research interests are in human resource management and organization behaviour.