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Fostering Intrapreneurial Intention through Entrepreneurial Orientation: Assessing Mediation of Entrepreneurial Skills and Psychological Empowerment

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<p>Article History:</p> <p>Received: 25th Nov, 2024</p> <p>Revised: 12th Dec, 2024</p> <p>Accepted: 29th Dec, 2024</p>	<p>Abstract</p> <p>Purpose: This study aims to evaluate the role of entrepreneurial orientation in achieving intrapreneurial intention through the mediating role of entrepreneurial skills and psychological empowerment among higher education institutions in Pakistan.</p> <p>Methodology: A total of 230 authentic questionnaires from HEIs in Karachi, Pakistan, were collected through cluster sampling. Smart PLS was used to analyze the collected data and evaluate the structural model.</p> <p>Findings: The results showed that the association between personal entrepreneurial orientation and intrapreneurial intention is partially mediated by both entrepreneurial skills and psychological empowerment, with a significant direct association between entrepreneurial orientation and intrapreneurial intention. It was also evaluated that entrepreneurial competence somewhat mediates risk and innovativeness whereas psychological empowerment mediates proactivity only.</p> <p>Implications: Promoting intrapreneurial intention in HEIs can help them to become more innovative and take more risks. Additionally, encouraging psychological independence and empowerment also boost employees' initiative behavior.</p> <p>Keywords: Intention, Psychological Empowerment, Entrepreneurial Skills, HEIs</p>
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1. Introduction

The dynamic and fragile business environment has challenged organizational management practices and structures. In this scenario, entrepreneurship has developed to address these scenarios with societal development and change the operational orientation of business (Zighan et al., 2022; Aparicio et al., 2020). Organizations have had to change their strategies and think more creatively due to factors including technology development, international competitiveness, and the impact of pandemics (Rožman et al., 2023). Organizations must investigate creative techniques for their survival in the market. Using intrapreneurship to bring fresh concepts, goods, and services into established businesses has become popular. Organizations need motivated, competitive HR capital that can think and act

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differently to support intrapreneurial initiatives (Zhou et al., 2024). Employers must recognize, value, and identify employees who exhibit intrapreneurial abilities, intentions, and behaviors. Organizations should also offer training and career possibilities, promote flexible thinking, and offer organizational assistance to employees with entrepreneurial talents to support, encourage, and motivate them (Wei & Duan, 2023).

Although intrapreneurship has been well-known over the past three decades, both academics and practitioners still need to pay attention to this topic. Organizations have not yet acknowledged intrapreneurial importance, which has been widely addressed by numerous organizational and empirical studies (Ashal et al., 2023). The nature of intrapreneurship, its determinants, and its practical implications for organizational success have been extensively studied over the past 15 years (Farrukh & Ghazzawi, 2024).

In contrast to entrepreneurship, which involves people following their ideas and taking risks to launch new businesses, intrapreneurship refers to entrepreneurial actions carried out by employees within an organization (Chouchane et al., 2023). Pinchot (1985) developed the idea of entrepreneurship within an existing organization, and intrapreneurs are people who engage in intrapreneurial activities. With the assistance of a flexible work environment, a trained workforce, and access to financial and material resources, employees can carry out intrapreneurial initiatives (Emon & Chowdhury, 2023). According to personality traits, proactive individuals, risk-takers, and innovators are characterized as intrapreneurs. As a result, intrapreneurial employees are essential to the success of organizations (Ravina-Ripoll et al., 2022).

It has become evident that intrapreneurship is essential in raising organizational performance. Recently, Klofsten et al. (2024) and Masucci et al. (2024) emphasized the significance of organizations, including Higher Education Institutions (HEIs), embracing intrapreneurship to improve their competitiveness and survival in the business. Due to ongoing dynamic development, the corporate sector must be more innovative and competitive. Intrapreneurial activities can thrive in dynamic and unstable situations (Sagbas et al., 2023). It is advantageous to think of HEIs as functioning in the corporate world and having comparable difficulties in this situation, especially when attracting research projects from the corporate sector (Klofsten et al., 2024). HEIs require a bright and driven workforce with intrapreneurial skills, competencies, and motivation if they want to be more competitive and appealing to the business sector. This study intends to assess how personal characteristics affect intrapreneurial intention in HEIs. Additionally, it looks at how entrepreneurial skills and psychological empowerment act as mediators. The purpose of the paper is to determine whether psychological empowerment and entrepreneurial abilities improve people's intention to engage in intrapreneurial activity within HEIs. The study is divided into the following sections: a review of the pertinent literature (Section 2), the research methods (Section 3), results and interpretation (Section 4), conclusion, limits, future research directions, and implications (Section 5).

2. Literature Review and Hypothesis Development

2.1 Intrapreneurship

According to Morais et al. (2021), intrapreneurship describes entrepreneurial activities that take place within organizations and promotes innovation in the pursuit of new businesses, ventures, goods, services, technology, administrative procedures, and competitive tactics. The scope of intrapreneurship may vary as some versions emphasize the participation of organizations in the intrapreneurial process, while others concentrate on particular characteristics (Kanisoy et al., 2024). According to Ashal et al. (2023), it is seen as a manifestation of human capital within an organization that includes the sum of all of its employees' knowledge, skills, and capacities. According to Kearney et al. (2010), intrapreneurship refers to voluntary employee behaviors that encompass spotting possibilities, coming up with ideas, producing new products, and launching new business ventures. Intrapreneurship essentially represents the entrepreneurial spirit within a company and includes the creation of new firms within its current framework (Benchiş & Văduva, 2024). An intrapreneur is a person who displays entrepreneurial behavior while working for a company.

2.2 Intrapreneurship and Higher Education Institutes

Due to the same dynamic and unstable contexts, intrapreneurship encounters similar challenges in both the corporate world and Higher Education Institutions (HEIs). An adaptive workplace environment is ideal for intrapreneurial practices (Klofsten et al., 2024). But there is a key distinction between these two, i.e., in HEIs, the customers are the product itself, but in firms, the products are created in response to client demands. According to Farrukh et al. (2016) and Klofsten et al. (2024), HEIs run the risk of losing a sizeable portion of the market. Therefore, HEIs must adopt new technology and execute entrepreneurial and competitive strategies to reduce this risk and maintain competitiveness. HEIs must incorporate cutting-edge technologies and an entrepreneurial spirit to successfully navigate their difficult environment (Rosienkiewicz et al., 2024).

2.3 Intrapreneurial Intention

Our study focuses on employees' motivation and readiness to engage in intrapreneurial behaviors, which are referred to as intrapreneurial intention. Employees' real intrapreneurial behavior might be better understood by understanding how their intrapreneurial intentions are formed. Ajzen (2001) asserts that intention is a powerful indicator of later behavior. According to Wijetunge et al. (2023) research on intrapreneurship, an individual's knowledge, beliefs, attitudes, and confidence for innovation, creativity, and success have an impact on their intention. Most of the previous research on intrapreneurial intentions has been on people's intentions to start or run their businesses (Knezovic, 2024). But in our study, the term "intrapreneurial intention" refers to the chance that employees in HEIs will start or develop new projects within the company itself, or "become intrapreneurs." An individual who is entrepreneurial and wishes to contribute to the growth, development, or diversification of the company regardless of the potential personal rewards, is another method to conceptualize intrapreneurial intention (Knezovic, 2024).

2.4 Entrepreneurial Orientation (IEO)

This study focuses on Individual Entrepreneurial Orientation (IEO) both at the organizational and personal levels. IEO is described as a decision-making characteristic that encourages entrepreneurial activity at the organizational level (Karami et al., 2023). Several aspects of IEO, such as risk-taking, innovation, and proactivity, have been discussed in the

literature (Huiskes, 2023). Although they are less frequently utilized in the literature, other dimensions exist as well, such as market aggression and autonomy. So, according to Rigtering et al. (2024), IEO is defined as a group of distinctive personality traits that support intrapreneurial or entrepreneurial behavior.

Similar dimensions exist for gauging entrepreneurial orientation (EO) in organizations, but the test items have been modified to fit personality qualities. Using these five criteria, Vantilborgh et al. (2015) discovered that while autonomy and competitiveness do not distinguish entrepreneurs from non-entrepreneurs however, risk-taking, creativity, and proactivity do. The same is argued by Bolton and Lane (2012), who validated their scale for evaluating IEO and confirmed that creativity, risk-taking, and proactivity are the most important and recurrent characteristics of IEO. When analyzing IEO, personality traits have been discovered to be antecedents of intention (Sulphey & Klepek, 2024) as well as behavior (Vantilborgh et al., 2015). Additionally, IEO encouraged employees to locate, investigate, and take advantage of commercial opportunities that exist within organizations (Shi et al., 2024). Therefore, we hypothesize that;

H1: Individual entrepreneurial orientation (IEO) has a favorable impact on psychological empowerment.

H2: IEO affirmatively affects entrepreneurial skills.

H3: IEO affirmatively affects intrapreneurial intention.

2.5 Entrepreneurial skills

Entrepreneurial skills are abilities that are necessary for outstanding performance and can be learned through instruction, practice, and experience rather than just innate talents. These are key skills that enable individuals to successfully launch and expand a new business (Pennetta et al., 2023). However, Arowomole (2000) also noticed a favorable correlation between the above characteristics and cited a lack of inventive talents as a barrier to entrepreneurial desire. Additionally, those who have trust and other entrepreneurial abilities frequently displayed higher degrees of self-efficacy and self-confidence regarding entrepreneurship. Furthermore, according to Shahzad et al. (2021), perceived skills moderate the link between individual traits and the inclination to pursue entrepreneurship as a vocation. Leadership, communication, and creative thinking abilities have all been linked to intrapreneurship in the settings of educational institutions (Hashem et al., 2023). Therefore, we hypothesized that:

H4: An entrepreneurial skill positively affects intrapreneurial intention.

2.6 Psychological Empowerment (PE)

Individual entrepreneurial orientation (IEO) and intrapreneurial intention are crucially mediated by psychological empowerment (PE) in the context of intrapreneurial intention. To engage in extra-role activities like intrapreneurial behaviors, psychological empowerment refers to how individuals view the flexibility and autonomy offered to them in the workplace (Valsania et al., 2016). It promotes creativity and innovation at work by mediating the link between IEO and intrapreneurial intention (Soltanifar et al., 2023). According to earlier studies (Stanescu et al., 2020), psychological empowerment mediates the effects of numerous factors, such as job dedication and satisfaction, on employee innovative behaviors.

Although earlier research has emphasized the significance of psychological empowerment in affecting employees' aspirations to engage in intrapreneurial activity, empirical research in this area is still scarce. There is general agreement, nevertheless, that having an entrepreneurial mindset affects one's sense of empowerment and intrapreneurial aim. According to Afsar et al. (2017), employees with higher degrees of psychological empowerment have more intrapreneurial goals, which are demonstrated by inventiveness, proactivity, and risk-taking behaviors. Employees display extra-role and creative behaviors within the organization when they feel psychologically empowered, which ultimately improves organizational performance (Sarwar et al., 2022). Intrinsic motivation leads to psychological empowerment (Khan et al., 2020). Organizations need to nurture employee psychological empowerment, as it is positively linked to intrapreneurial intentions and behaviors (Mahmoud et al., 2021). Fewer studies have examined psychological empowerment's mediating function, even though earlier research has mostly focused on it as a moderating variable (Stanescu et al., 2020). In this study, the mediating impact of psychological empowerment between entrepreneurial orientation and intrapreneurial aspirations is especially examined. Thus, the hypothesis is as follows:

H5: Psychological empowerment positively impacts intrapreneurial intention

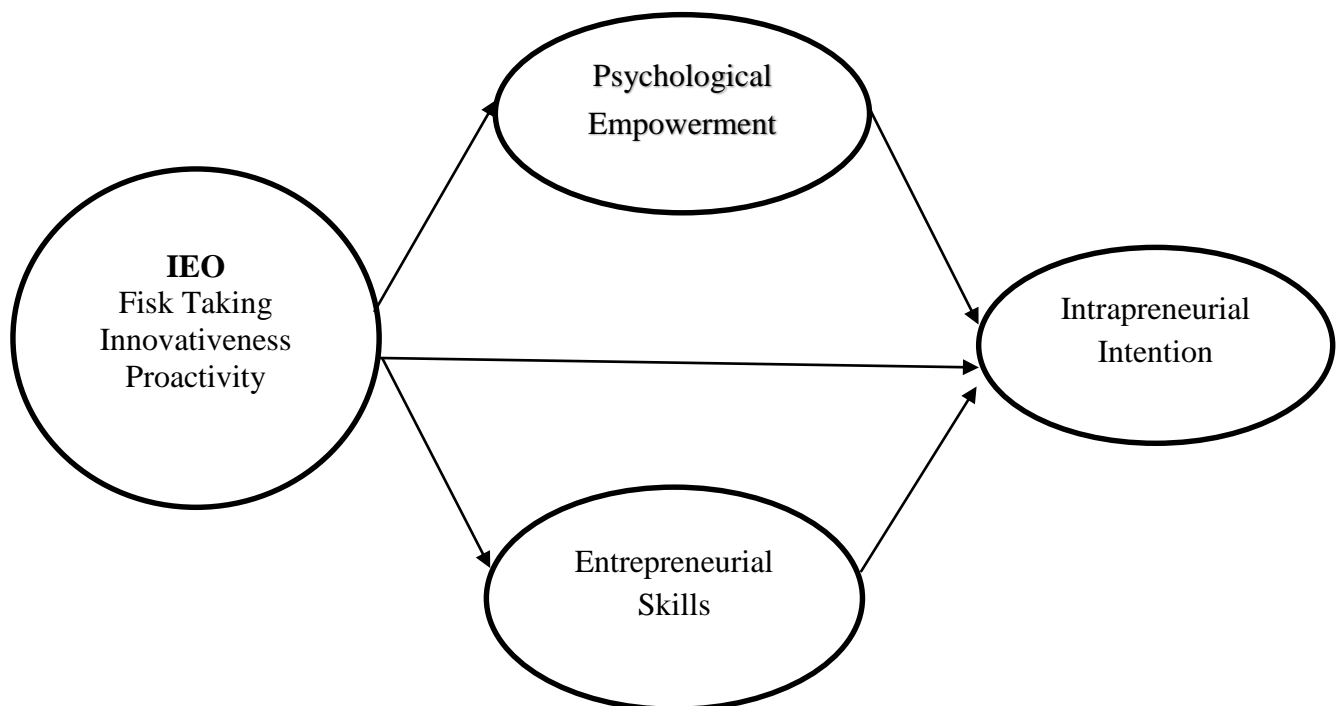


Figure 1. Conceptual Framework

3. Research Methodology

3.1 Population and Sampling

A deductive approach through positivist philosophy was adopted. Further, the quantitative approach through survey strategy was implemented to test the hypothesized relationships empirically. A total of 350 questionnaires were distributed through Google Forms using a cluster sampling technique. The study was conducted during the period ranging from March 2022 to July 2022. Initially, a very low response was noted however, additional measures were introduced to cater to the limitation of survey-based data collection through online mediums hence, enhancing the response rate. To enhance the response rate and to make the study more generalized, two co-authors were chosen. A total of 255 questionnaires were obtained through these efforts. After a thorough review, 25 incomplete surveys were eliminated. A total of 230 valid responses were included for final data analysis. The Partial Least Structural Equation Modelling (PLS-SEM) was performed using Smart PLS 3.0 software. The study's overall response rate was 65.7% which is considered satisfactory.

3.2 Research Instrument

The instrument was adopted from previous studies. The IEO scale was adopted from Bolton and Lane's (2012) and the scale for intrapreneurial intention was adapted from Liñán and Chen's (2009). Liñán (2008) originally developed the entrepreneurial skills scale and translated it for this study. Items of intrapreneurial orientation were measured on a five-point Likert scale ranging from (1 = Strongly Disagree; 5 = 'Strongly Agree'); and items of aptitude for entrepreneurial skills on a seven-point Likert scale (1 = 'No aptitude at all'; 7 = 'Very high aptitude'). The items of intrapreneurial intention and psychological empowerment are measured on a seven-point Likert scale and range from disagreement (1 = 'Strongly Disagree') to Agreement (7 = 'Strongly Agree').

3. Results and Discussion

Descriptive statistics showed that 56% of respondents were female, making up most of the sample. Among them, most of the respondents had MPhil degrees. From professional contexts, 78% of the respondents were permanent employees of HEIs. In addition, 46 % of the respondents were between the ages ranging 31 to 40. The majority of the participants have an average experience of 5 to 10 years.

Table 1. Sample characteristics

	Values	Percentages
Gender		
Female	128	56%
Male	102	44%
Education		
Bachelors	19	8%
Masters	66	29%
MPhil	109	47%
PhD	35	15%
Post Doc	1	1%

Employment Status

Permanent	180	78%
Visiting	5	2%
Contract	38	17%
Others	7	3%

Position

Lecturer	91	40%
Assistant Professor	77	34%
Associate Professor	10	4%
Professor	5	2%
Admin Staff	31	13%
Other	16	7%

4.1. Reliability and Validity tests

The values of Cronbach alpha / Composite Reliability should be higher than 0.70 and values of AVE should be greater than 0.50 (Hair et al., 2017). All the Cronbach's alpha, CR, and AVE values meet the threshold values and show good reliability in our analysis. Further, Hamid et al. (2017) indicated that higher reliability values are considered good in survey-based research. The statistical analysis of this study shows that all variables used have values more than 0.7 and are higher than 0.70, which means that the reliability level is high and falls in the acceptable index. The values between 0.60 and 0.80 are accepted as falling under moderate, while above 0.80 are considered very good. For sufficient convergent validity, the value of AVE should be greater than 0.50 (Hair Jr et al., 2014). The AVE of all the variables in this study is greater than 0.50, which means that all variables have sufficient convergent validity. With the help of this, we can assume that there are no problems with the validity of the construct.

4.2. R-Square

R² values forecast the degree of fluctuation in the dependent variable's effect size due to a change in the independent variables. According to the direct impacts, IEO has the least direct influence on intrapreneurial intention variation (R²=25.3%). The results of the other two independent variables indicate a modest but positive influence on the dependent variable. The results are shown in Table 3 below.

Table 2. Scale Reliability and Validity

Variable	No of Items	CR	AVE	CORRELATION						
				Risk	Innovation	Proactivity	Entrepreneurial Orientation	Entrepreneurial skills	Psychological Empowerment	Intrapreneurial Intention

Risk	3	0.54	02.	1.0						
		2	97	00						
Innovatio n	4	0.48	0.2	0.2	1.000					
			42	7						
Proactivit y	3	0.68	0.4	0.5	0.851	1.000				
		0	20	54						
Entrepren eurial Orientatio n	10	1.00	1.0	0.6	0.634	0.560	1.000			
		0	00	65						
Entrepren eurial skills	6	0.81	0.4	0.4	0.541	0.0	0.419	1.000		
		9	43	84						
Psycholo gical Empower ment	6	0.90	0.4	0.2	0.601	0.66	0.478	0.578	1.000	
		7	54	1						
Intraprene urial Intention	12	0.91	0.6	0.5	0.421	0.734	0.399	0.718	0.542	1.000
		2	44	09						

Table 3. Regression Analysis

Variable Name	R-Suare	Adjusted R-Square
Individual Entrepreneurial Orientation	0.23	0.250
Entrepreneurial Skills	0.389	0.387
Psychological Empowerment	0.331	0.328
Intrapreneurial Intention	0.483	0.476

4.3 The Structural Model

The collected data was examined using smart PLS software to produce the proposed model's Partial Least square Structure (PLS-SEM). An algorithm was used to analyze the model initially. Bootstrapping was restricted to 500 iterations due to the sample size restriction of 230 responses to isolate the direct and indirect effects of mediation over entrepreneurial intention.

Table 4. Direct and Indirect Effects

Variables	Effects	Mediators		Dependent
		Entrepreneurial Skills	Psychological Empowerment	Intrapreneurial intention
Independent				
Risk	Direct	0.335 (0.000)	0.125 (0.136**)	0.326 (0.000)
	Indirect	0.123 (0.002)	0.024 (0.263**)	
Innovativeness	Direct	0.153 (0.036)	0.190 (0.020)	0.224 (0.004)
	Indirect	0.056 (0.054*)	0.036 (0.128**)	

Proactivity	Direct	0.149 (0.084**)	0.289 (0.000)	0.038(0.642**)
	Indirect	0.055 (0.112**)	0.055 (0.057*)	
<hr/>				
Individual Entrepreneurial Orientation	Direct	0.537 (0.000)	0.507 (0.000)	0.503 (0.000)
	Indirect	0.206 (0.000)	0.087 (0.050*)	
<hr/>				
Mediators				
Entrepreneurial Skills	Direct			0.384 (0.000)
Psychological Empowerment	Direct			0.172 (0.042)
<hr/>				
Path coefficients after bootstrapping				
(*) Significant at < 0.10				
(**) Not significant i.e. > 0.05				
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The coefficient results of direct and indirect mediation effects are shown in Table 5. The findings demonstrate that the association between individual entrepreneurial orientation and intrapreneurial intention is partially mediated by both entrepreneurial skills ($b=0.206$, $p0.05$) and psychological empowerment ($b=0.087$, $p0.10$). These entrepreneurial skill-related findings align with those of Marques et al. (2019), who found that entrepreneurial talent played a role in mediating the connection between IEO and intrapreneurial intention. However, compared to entrepreneurial abilities, this mediating effect is less strong for psychological empowerment. IEO's distinct components operate differently from its overall results. On the other hand, the relationship between proactivity and intrapreneurial intention is fully mediated by psychological empowerment, indicating that psychological empowerment plays a crucial role in creating the intention to engage in intrapreneurship when proactivity is triggered. These findings are consistent with the findings of (2021), who studies the role of psychological empowerment on individual performance. In this case, psychological empowerment acts as a facilitator for proactive orientations toward intrapreneurial initiatives.

Overall, the results highlight the importance of individual entrepreneurial orientation in generating intrapreneurial intention, particularly when individuals possess entrepreneurial skills. The impact of entrepreneurial skills on intrapreneurial intention is further enhanced when individuals are empowered psychologically. Additionally, psychological empowerment and entrepreneurial skills are significantly related to intrapreneurial intention. (2019) conducted a study to analyze the intrapreneurial behaviour of HEIs in Pakistan and found similar findings hence supporting our results. The findings suggest that individuals with risk and innovativeness orientations are motivated to initiate intrapreneurship when they have refined entrepreneurial skills, regardless of institutional empowerment. However, psychological empowerment is necessary to enhance proactive orientations toward intrapreneurship initiatives. Figures 2 and 3 further explain the findings.

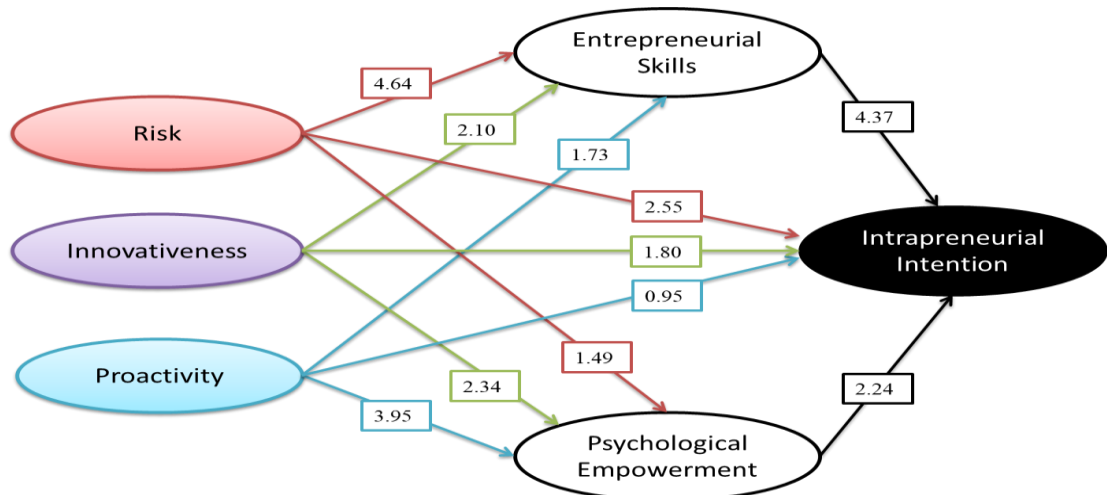


Figure 2 Structural Model

Table 2 substantial direct and mediation effects are seen in Figure 2 above. Risk is one of the three IEO variables that follow one another and significantly influences a person's inclination to start their own business. Additionally, innovation has less effect than risk. Proactivity, however, only serves to launch entrepreneurial intention when it is supported by psychological empowerment. This means that a person in an HEI will only start an intrapreneurial activity if they are oriented, skilled, and independent when it comes to taking risks and being creative. The consequences of IEO are depicted in Figure 3 below. The figure shows that individual entrepreneurial orientations considerably mediate the aggregate individual entrepreneurial orientation and its role. This figure highlights the crucial role that entrepreneurial skills play in inspiring women working in HEIs to pursue their businesses.

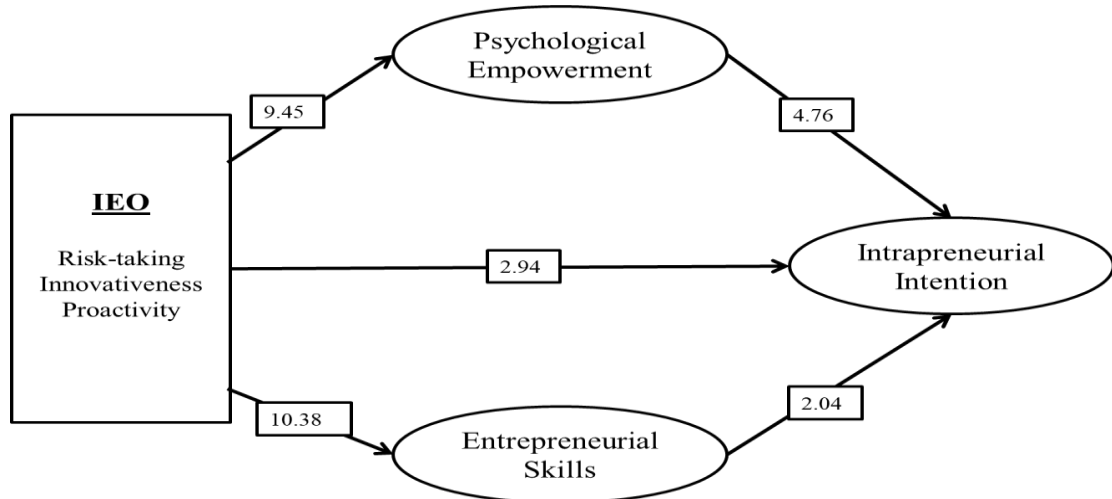


Figure. 3 Mediation

The results can be summarised by saying that employees in higher education institutions are likely to take intrapreneurial initiatives only when they have entrepreneurial skills. According to the study, people who are high-risk takers, naturally innovative, and have entrepreneurial talents should start intrapreneurial projects.

5. Conclusion, Implications, and Future Recommendations

The research conducted aimed to develop a multidimensional model to understand the factors influencing intrapreneurial intention among employees in higher education institutions (HEIs), with a particular focus on women. The growth and development of HEIs have posed challenges in retaining competent faculty members and motivating them to engage in research and intrapreneurial activities within the institutions. The study investigated how individual traits, such as risk-taking, innovativeness, and proactivity, motivate individuals to take intrapreneurial initiatives. The results indicated that individuals with a risk-taking orientation are more likely to engage in intrapreneurial activities when they possess enhanced entrepreneurial skills and have confidence in their abilities. Combining risk-taking with innovativeness and enhancing entrepreneurial skills further amplifies this behavior. The study also revealed that while psychological empowerment provided by the institutions is important, it cannot compensate for the lack of skills and traits necessary for intrapreneurial initiatives. It concluded that factors contributing to the enhancement of entrepreneurial skills indirectly motivate intrapreneurial intentions, leading to innovative research, teaching, learning, and training within the higher education sector.

5.1 Practical Implications

This study has several practical implications for institutions and HEIs. First, this study provided insight into HEI management to encourage their employees towards intrapreneurial behaviors so that they could generate more opportunities for themselves and institutions as well. Secondly, our findings revealed that if the employees are provided psychological empowerment in their decision-making, their output for institutions can be raised and their intrapreneurial intention flourishes which ultimately yields competitiveness for institutions. Thirdly, our study implies that the intrapreneurial intention of employees can be enhanced by enhancing the employees' entrepreneurial skills and these skills can be enhanced by providing them with an intrapreneurial environment through training and workshops. Lastly, the investigated factors can be utilized by HEIs to cultivate intrapreneurial initiatives among their academic and non-academic staff, fostering knowledge enhancement and sharing. This, in turn, will contribute to the growth of the education industry by creating dynamic individuals who are confident in their entrepreneurial skills and inclined towards intrapreneurial intentions.

However, the research also acknowledges certain limitations. One limitation is the lack of sufficient time to collect extensive data, which may have impacted the strength of the results. Additionally, the focus on academic and non-academic staff in HEIs suggests the need for future research specifically targeting female faculty members and non-academic staff. Furthermore, the model developed in this study can potentially be applied to other industries as well. Lastly, the variable of psychological empowerment did not exhibit a strong influence in the model, possibly due to the small sample size. Future studies could consider including sub-dimensions of psychological empowerment, such as self-determination and confidence, to strengthen its impact.

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