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The Role of Demographic Factors and Entrepreneurial Exposure in Shaping Faculty Entrepreneurial Mindset

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Abstract

The entrepreneurial mindset is increasingly emphasized in higher education, yet faculty perspectives remain underexplored. The purpose of this study is to explore how demographic factors and entrepreneurial exposure influence the entrepreneurial mindset among the faculty of higher educational institutions in Nepal. Employing a quantitative research method and a cross-sectional design, data were collected through an online survey of 248 faculty members selected, using purposive and snowball sampling. Through non-parametric tests (Mann–Whitney U, Kruskal–Wallis H) and CHAID decision tree methods using SPSS 26.0, results indicated that demographic and entrepreneurial experience shaped the entrepreneurial mindset of the faculty. Specifically, the result showed that faculty qualification, teaching level, and participation in entrepreneurship workshops emerged as the most influential variables, demonstrating consistency across multiple entrepreneurial mindset dimensions. While gender, age, faculty qualification, participation in entrepreneurship workshops, experience in teaching entrepreneurship courses, and teaching level show a significant impact on entrepreneurial mindset, teaching experience and the entrepreneurial course studied have no impact on their mindset. The study highlights the combined role of demographics and exposure in shaping faculty entrepreneurial mindset, offering insights for professional development and institutional policy to promote entrepreneurial thinking.

Keywords: Entrepreneurial mindset, demographic factors, entrepreneurial exposure, risk-taking, innovativeness, autonomy, proactiveness, passion

Introduction

Entrepreneurial mindset has gained scholarly attention that enables individuals to identify opportunities, take initiative, and create innovative solutions in uncertain environments (Hölzner & Halberstadt, 2023; Santos et al., 2017). The entrepreneurial mindset is a multidisciplinary construct and increasingly seen as essential not only for students and entrepreneurs but also for educators, researchers, and professionals across fields (Bosman & Fernhaber, 2018; Bosman & Fernhaber, 2021; Kuratko et al., 2021).

Higher education is shifting, changing, and facing unprecedented challenges (Ramaley, 2014); institutions are investing in their human capital to remain competitive and market-driven through innovating in the teaching and learning process (Ostojic & Leko Simic, 2021). Entrepreneurship studies have been increasing in the academic context (Hayter et al., 2018), and higher education institutions are developing the infrastructure, entrepreneurship curriculum, and business incubation to promote entrepreneurship (Jurgelevicius et al., 2025). In

this mission, active faculty involvement is essential (Abo-Khalil, 2024). They play a significant role in making institutions sustainable and relevant to the market (Kearney & Meynhardt, 2016). Faculty members play a vital role in shaping students' entrepreneurial thinking and fostering an institutional culture that supports innovation. Faculties interact with students, deliver course material, and provide mentorship; thus, their mindset and how they cultivate entrepreneurial thinking have an impact on the development of entrepreneurial aspirations in students.

Davis et al. (2016) defined the entrepreneurial mindset as the “constellation of motives, skills, and thought processes that distinguish entrepreneurs from non-entrepreneurs and contribute to entrepreneurial success” (p. 22). In the literature, the entrepreneurial mindset was broadly discussed as skills and attitudes, such as risk-taking, autonomy, innovativeness, proactiveness, and passion (Dinh et al., 2022; Imran et al., 2019; Jung & Lee, 2020). It is noteworthy to state that the entrepreneurial mindset and the entrepreneurial orientation dimension are similar (Krueger & Sussan, 2017); however, the difference is that entrepreneurs’ orientation has been widely considered for the firm level, while the entrepreneurial mindset is on an individual level. An entrepreneurial mindset is an individual-level cognitive and behavioral pattern that reflects how a person thinks, perceives opportunities, and acts entrepreneurially (Daspit et al., 2023).

Despite the acknowledged importance of faculty role in promoting entrepreneurship, there is a research gap about how demographic factors and entrepreneurial exposure influence their entrepreneurial mindset. The literature has highlighted that personality traits and situational factors have been considered to study the development of the entrepreneurship phenomenon (Kerr et al., 2017; Najev Čacija et al., 2023; Salmony & Kanbach, 2022). According to Ajzen (2002), demographic factors influence attitudes about one's own behavior and its normative consideration; thus, it is essential to understand how demographic factors and prior entrepreneurial exposure impact the entrepreneurial mindset.

The mindset is based on their past engagement and experience. The researcher has considered demographic factors to discuss entrepreneurship (Liang et al., 2014) and its dimensions, such as entrepreneurial intention (Jovicic Vukovic et al., 2020; Najev Cacija et al., 2023; Nguyen, 2018; Ozyilmaz, 2011; Paray & Kumar, 2020), entrepreneurial orientation (Abidi et al., 2022; Meilani & Ginting, 2018), entrepreneurial performance (Gunawan, 2024; Tasman et al., 2023), entrepreneurial motivation (Sarmah et al., 2022), entrepreneurship education (Justus, 2021; Sharma & Ahmad, 2023), intrapreneurship behavior (Adachi & Hisada, 2017; Shian et al., 2022). The literature shows that limited research has been conducted to determine whether and how demographic factors operate among higher education faculty members and their influence on entrepreneurial behavior (Abidi et al., 2022; Rodrigues et al., 2019). Research suggests that the impact of demographic factors on the formation of an entrepreneurial mindset has received limited attention in the academic context (Jung & Lee, 2020), whereas universities are spending a lot of resources in developing entrepreneurial cultures.

This gap is particularly relevant in contexts where higher education institutions are striving to embed entrepreneurship in their curricula and research agendas yet often encounter uneven faculty engagement (Abidi et al., 2022; Westover, 2025). The entrepreneurial mindset of faculty is the core of the development of entrepreneurial culture. Understanding how faculty demographic characteristics and entrepreneurial exposure influence their mindset can provide valuable insights for designing faculty development programs, tailoring institutional policies, and fostering a stronger entrepreneurial ecosystem within universities.

Thus, the study seeks to bridge this gap by exploring the extent to which faculty demographic factors and entrepreneurial exposure serve as determinants of entrepreneurial mindset. Specifically, it aims to analyze whether variations in age, gender, educational attainment, entrepreneurial exposure, and teaching experience are associated with differences in entrepreneurial mindset or not.

Literature Review and Hypothesis Development

Entrepreneurial Mindset

Robinson and Gough (2020) mentioned the entrepreneurial mindset as a “poorly defined concept” that is yet to be fully developed and must be researched further in entrepreneurship literature. Oestreich (2023) defined the entrepreneurial mindset as individual traits for thinking outside the box, whereas Davis et al. (2016) described it as a personality trait and set of skills that guide individuals to become innovative. Also, Ireland et al. (2003) defined entrepreneurial mindset as “the ability to rapidly sense, act, and mobilize, even under uncertain conditions." Further, Dinh et al. (2022) conducted a systematic literature review to identify the dimensions of entrepreneurial mindset; some of the dominant traits include opportunity seeking, action orientation, working in uncertainty, risk-taking, practices, autonomy, problem-solving, innovativeness, resilience, and value creation.

Further, researchers developed different instruments, such as the Kern entrepreneurial engineering network framework (Gorlewicz & Jayaram, 2019), the entrepreneurial mindset profile (Davis et al., 2016), the mindset scale (Mathisen & Arnulf, 2014), and the entrepreneurial orientation scale (Toledano & Urbano, 2008; Krueger & Sussan, 2017) to measure entrepreneurial mindset. As per the study conducted by Dinh et al. (2022), in the context of education setting, the entrepreneurial mindset of the faculty members can be defined as the skills and attitudes on how they approach curriculum design, strategy for classroom management, engage in research with societal impact, bring new ways to teaching and learning pedagogy, and mentor students toward entrepreneurial activity.

These studies concluded that the entrepreneurial mindset of faculty can be examined across five dimensions: risk-taking (willingness to engage in uncertain ventures), autonomy (ability to make independent decisions), innovativeness (generating and implementing creative ideas), proactiveness (anticipating and acting on opportunities), and passion (strong commitment and intrinsic motivation). These attitudinal dimensions will help explore how faculty embody entrepreneurial traits and engage with entrepreneurship initiatives (Davis et al., 2016).

Gender and Entrepreneurial Mindset

Gender has been one of the most widely examined demographic factors in entrepreneurship research (Samsam et al., 2025). Many studies report that men tend to express stronger entrepreneurship behavior (Cacija et al., 2023; Reynolds et al., 2002; Sarmah et al., 2022). The study conducted by Alhosseiny and Ahmad (2022) and Justus (2021) concluded that male faculty have a more entrepreneurial mindset than female faculty. However, Srivastava (2025) shows that women students have a higher entrepreneurial mindset in a major dimension, and Kaya and Yuksel (2022) show that female faculty have a higher growth mindset. Smith et al.'s (2016) study shows no significant difference between men and women regarding entrepreneurship. Degefu and Verma (2025) concluded that gender has a significant impact on the entrepreneurial mindset of the students and how they pursue opportunities in the field. Further, Samsami et al (2024) found that gender shaped the mindset, but the contextual support system influenced their relationship. Despite the growing literature in the entrepreneurial mindset and entrepreneurship field, only limited literature has focused on studying how gender shapes the entrepreneurial mindset of the faculty (Abidi, 2022). The current research evidence remains inconclusive, making it important to explore how gender influences entrepreneurial mindset in faculty populations.

H1: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on gender.

Age and Entrepreneurial Mindset

The relationship between age and entrepreneurship has been widely examined among students and working professionals. Abidi et al. (2022) confirmed that faculty age plays a vital role in shaping their mindset to engage in developing new pedagogical and

teaching-learning strategies that enhance their entrepreneurial orientation and performance.

Age is often linked to entrepreneurial behavior, with younger individuals generally seen as more open to risk and innovation (Chaudhary, 2017). A study conducted by Muhammed and Henry (2024), among university students, indicates that age has a significant relationship with the development of their entrepreneurial mindset. However, research conducted by Degefu and Verma (2025) and Nguyen (2018) did not show any significant relationship with entrepreneurial intention, whereas Bohlmann et al. (2017) confirmed that age was negatively related to entrepreneurial activity. Syed et al. (2024) examined the relationship between age and entrepreneurship by analyzing a literature review and concluded that age has a direct and indirect role in defining the entrepreneurship characteristics. Prior research is dominant in understanding the role of students' age in determining their entrepreneurship intention. These findings highlight the need to further examine the role of age in shaping faculty entrepreneurial mindset.

H2: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on age.

Years of Teaching Experience and Entrepreneurial Mindset

Teaching experience has been recognized as a key factor influencing faculty mindset and their innovation intention (Fernández-Cruz & Rodríguez-Legendre, 2021). Faculty with extensive teaching experience may have greater confidence, which can encourage an entrepreneurial mindset in terms of curriculum design and innovation (Abidi, 2022).

Kaya and Yuksel (2022) showed that senior faculty possess higher entrepreneurial characteristics compared to new faculty, aligning with Santos et al. (2017), Alhammadi et al. (2022), and Kuratko et al. (2021) studies. Although some studies suggest a positive relationship between teaching experience and mindset, research that directly examines years of teaching experience in higher education as a predictor of entrepreneurial mindset remains limited.

H3: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on teaching experience.

Academic Qualification and Entrepreneurial Mindset

The study by Alhosseiny and Ahmad (2022) concluded that faculty qualifications are significant in learning and developing faculty entrepreneurial mindset. Faculty members with higher degrees can enhance their ability to identify opportunities, innovate, and mentor students in entrepreneurial pursuits (Hahn et al., 2017; Muange & Kiptoo, 2020). For faculty, this dynamic is particularly relevant, as qualifications shape their orientation toward research, teaching, and external engagement. However, Abidi (2022) and Pinto et al. (2024) found that the level of the highest academic qualification does not have a significant relationship with innovative behavior. This suggests that while higher qualifications can enrich an entrepreneurial mindset through expertise and networks, they may also foster conservatism in teaching and research approaches.

H4: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on academic qualification.

Entrepreneurship Courses, Workshops, and Entrepreneurial Mindset

Entrepreneurship education, whether through formal courses or short-term workshops, has been widely acknowledged as a driver of entrepreneurial mindset development, as it shapes individuals' ability to recognize opportunities, innovate, and engage in proactive problem-solving, which are key components of the entrepreneurial mindset (Overwien et al., 2024; Wardana et al., 2020). Similarly, the curriculum and content of entrepreneurship skills development and training and coaching programs have been shown to foster an entrepreneurial mindset, self-efficacy, and skills among students (De la Gala-Velásquez et al., 2024; Shetty et al., 2024; Zulkifli et al., 2025). While most evidence comes from student

populations, the results underscore the potential benefits of similar interventions for faculty members as well.

H5: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on the entrepreneurship course studied

H6: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on experience in entrepreneurship workshop participation.

Teaching Entrepreneurship Courses and Entrepreneurial Mindset

Teaching entrepreneurship courses plays a pivotal role in shaping the entrepreneurial mindset of higher education faculty. Neergard and Roald (2025) noted that educators without prior experience in teaching entrepreneurship courses often lead them to believe they lack the necessary competence and attitude to teach the subject effectively. Research has shown that faculty who are involved in teaching entrepreneurship courses build confidence and a professional identity in this role, enhancing their entrepreneurial motivation and prompting faculty to rethink and incorporate mindset attributes into their practice (Brush et al., 2024; Nadelson et al., 2018). Neergård and Roald (2024) confirmed that the faculty's ability to teach entrepreneurship influences their entrepreneurial position and attitude. This indicates that repeated involvement in teaching entrepreneurship can gradually cultivate a faculty entrepreneurial mindset, as teaching practice, reflection, and exposure to evolving entrepreneurial ecosystems reinforce entrepreneurial thinking over time. While the research highlighted the role of teaching entrepreneurship courses, the research is very limited in the higher education sector that explicitly examines the role of teaching entrepreneurship and innovation-related courses in shaping the mindset of the faculty.

H7: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on experience in teaching entrepreneurship courses.

Teaching Level and Entrepreneurial Mindset

Faculty teaching at different academic programs utilize varying pedagogical and andragogical approaches. For example, Nakamura and Csikszentmihalyi (2004) discussed that faculty teaching at the undergraduate level tends to focus on foundational knowledge, scaffolded skill-building, and motivation. In contrast, faculty teaching at the master's level often connects students' prior professional experience with the content, which encourages application-oriented, problem-based, and practice-focused approaches that align closely with entrepreneurial pedagogy (Rodrigues, 2023).

H8: There is a statistically significant difference in the entrepreneurial mindset and its five dimensions based on teaching level.

Methods and Materials

This study used a quantitative, descriptive cross-sectional survey design to collect data from faculties currently teaching undergraduate and graduate-level programs in Nepal. A purposive and snowball sampling methodology was used to reach targeted participants, yielding 248 valid responses. Although these sampling methods enabled access to a wider network of faculty respondents, they may introduce selection bias and limited generalizability.

To measure the attitudinal dimension of entrepreneurial mindset, a total of five dimensions, i.e., risk-taking, innovativeness, autonomy, proactiveness, and passion, were adapted from Davis et al. (2021), rated on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Demographic variables, such as age, gender, years of teaching experience, faculty teaching position, highest academic qualification, core subject area, and institutional affiliation, were measured using categorical options. Entrepreneurial exposure was assessed through dichotomous (yes/no) measures capturing whether respondents had (a) studied an entrepreneurship course, (b) attended an entrepreneurship workshop, and (c) taught entrepreneurship or innovation-related courses.

The data from this study were examined using the statistical package for the Social Sciences (SPSS 26.0). The reliability and validity were examined. Normality has been tested using the Kolmogorov–Smirnov test and the Shapiro–Wilk test. The result shows that data is not normally distributed (Kolmogorov–Smirnov test, df = 253, *p*-value = 0.00; and Shapiro–Wilk test, df = 253, *p*-value = 0.00); thus, non-parametric tests were employed. The Mann–Whitney U test was used to compare entrepreneurial mindset across binary groups, while the Kruskal–Wallis H test was applied for multi-group comparisons. Chi-square automatic interaction detection (CHAID) was used to generate a decision tree to identify complex interactions among predictors that influence the entrepreneurial mindset of faculty.

Results

Item Analysis

Table 1 summarizes faculty responses across the five dimensions of entrepreneurial mindset. Overall, the mean entrepreneurial mindset score was 3.77 (*SD* = 0.74), indicating a generally positive orientation among faculty members. The result showed that, among five dimensions of entrepreneurial mindset, risk-taking scored the lowest (*M* = 3.53, *SD* = 0.88). While 64.4% of faculty showed some willingness to take risks, about 45% do not show a positive risk-taking propensity. This shows that while some faculty are willing to take risks, many are more cautious and prefer safer approaches in their academic work.

Innovativeness is the highest mean (*M* = 4.03, *SD* = 0.88). More than 80% of respondents agreed or strongly agreed that rigid and structured tasks feel boring, reflecting a strong preference for flexibility and innovation in their academic roles. Autonomy showed a moderate level (*M* = 3.58, *SD* = 0.97). Although many faculty members expressed a desire to carry out their work in their own way, nearly 40% remained neutral or disagreed.

Proactiveness was relatively strong (*M* = 3.86, *SD* = 0.88). About 70% of faculty reported making decisions quickly, pointing to a readiness to act rather than delay. Passion was also high (*M* = 3.84, *SD* = 0.82). Over 70% agreed or strongly agreed that they are passionate about their work, highlighting intrinsic motivation and engagement in their academic careers. The table concludes that faculty are motivated, proactive, and like to explore opportunities, but they are less inclined to take risks.

Table 1
Descriptive Item Analysis

Question	*M*	St. D	*SD*	D	N	A	SA
Risk-taking: I am willing to take a certain amount of risk to achieve real success	3.53	0.87	-	14.2%	30.4%	43.9%	11.5%
Innovativeness: I find it boring to work on clearly structured tasks	4.03	0.88	1.6%	5.5%	11.1%	51.8%	30.0%
Autonomy: I like to work things out my way	3.58	0.97	.8%	15.4%	26.1%	40.7%	17.0%
Proactiveness: I tend to make decisions quickly	3.86	0.87	.8%	6.7%	21.3%	48.2%	22.9%
Passion: I am passionate about the work that I do	3.84	0.82	.8%	5.1%	22.5%	52.2%	19.4%
Entrepreneurial Mindset Average	3.76	0.74					

Note. M- mean, St.D- standard deviation, *SD*- strongly disagree, D- disagree, N- neutral, A- agree, SA- strongly agree.

Reliability and Validity

The purpose of the study is to measure how demographic and entrepreneurial exposure shape the entrepreneurial mindset. The entrepreneurial mindset was measured using a previously validated five-item scale.

The reliability of the entrepreneurial mindset was tested using Cronbach's alpha value. The value of 0.809 confirms that the instrument is reliable for measuring faculty entrepreneurial mindset.

The factor analysis was performed, and KMO and Bartlett's Test; the result showed that the Kaiser-Meyer-Olkin measure of sampling adequacy value is 0.855. Bartlett's Test of Sphericity was significant, $\chi^2(10) = 741.829$, $p < .001$, confirming that the variables were sufficiently correlated to proceed with factor analysis.

The average variance extracted for the construct was 0.697, exceeding the recommended threshold of 0.50, indicating strong convergent validity.

Gender and Entrepreneurial Mindset

The Kruskal–Wallis test was performed to assess whether faculty members' entrepreneurial mindset differed by gender. Table 2 shows statistically significant differences in overall faculty entrepreneurial mindset across gender groups ($\chi^2 = 12.200$, $df = 2$, $p = 0.002$). Male faculty ($N = 172$) exhibited the highest mean rank (134.93) and mean score ($M = 3.87$, $SD = 0.05$), indicating a stronger entrepreneurial mindset compared to female faculty ($N = 63$, mean rank = 102.30, $M = 3.57$, $SD = 0.09$) and those who preferred not to disclose their gender ($N = 13$, mean rank = 94.04, $M = 3.31$, $SD = 0.28$). The significant test results show that there are significant differences in the overall entrepreneurial mindset of faculty members.

The findings indicate statistically significant gender-based differences in three entrepreneurial mindset areas. First, male faculty reported a greater willingness to take risks in pursuit of success ($\chi^2 = 12.496$, $df = 2$, $p= 0.002$) with higher mean ranks (134.49) compared to females (103.60) and prefer not to say (93.65). Male respondents demonstrated a stronger preference for autonomy, expressing a greater tendency to work in their own way ($\chi^2=17.722$, $df = 2$, $p < 0.001$). Similarly, the overall measure of faculty entrepreneurial mindset was higher among male faculty (mean rank = 134.93) relative to females (102.30) and prefer not to say (94.04), with the difference reaching statistical significance ($\chi^2 = 12.200$, $df = 2$, $p = 0.002$).

There were no statistically significant gender differences found in attitudes toward clearly structured tasks ($\chi^2 = 4.103$, $p = 0.129$), speed of decision-making ($\chi^2 = 5.183$, $p = 0.055$), and passion for work ($\chi^2 = 4.988$, $p = 0.082$).

Table 2

Descriptive Statistics of Faculty Entrepreneurial Mindset and the Kruskal–Wallis Test Results Regarding Gender

	Gender	*N*	Mean Rank	Mean	*SD*	K-W Test	Decision
Risk Taking	Male	172	134.49	3.65	0.064	0.002	Reject the null hypothesis
	Female	63	103.60	3.24	0.112	(χ^2 = 12.496;	
	Prefer not to say	13	93.65	3.08	0.288	*df* = 2)	
Innovativeness	Male	172	127.82	4.09	0.065	0.129	Retain the null hypothesis
	Female	63	122.58	4.00	0.113	(χ^2 = 4.103;	
	Prefer not to say	13	89.88	3.46	0.332	*df* = 2)	
Autonomy	Male	172	136.60	3.74	0.072	0	Reject the null hypothesis
	Female	63	98.65	3.21	0.116	(χ^2 = 17.722; *df*	
	Prefer not to say	13	89.69	3	0.32	= 2)	
Proactiveness	Male	172	131.30	3.95	0.063	0.055	Retain the null hypothesis
	Female	63	109.63	3.65	0.118	(χ^2 = 5.183;	
	Prefer not to say	13	106.54	3.54	0.332	*df* = 2)	
Passion	Male	172	130.57	3.94	0.058	0.082	Retain the null hypothesis
	Female	63	112.17	3.73	0.107	(χ^2 = 4.988;	
	Prefer not to say	13	103.96	3.46	0.332	*df* = 2)	
Faculty Entrepreneurial Mindset	Male	172	134.93	3.87	0.05	0.002	Reject the null hypothesis
	Female	63	102.30	3.57	0.09	(χ^2 = 12.200;	
	Prefer not to say	13	94.04	3.31	0.28	*df* = 2)	
	Total	248					

Age and Entrepreneurial Mindset

Table 3 results show that there is no statistically significant difference in faculty entrepreneurial mindset among age groups (χ^2 = 3.075; *df* = 3; *p* = 0.380). However, there is a statistically significant difference in faculty perceptions regarding the monotony of structured tasks across age groups (χ^2 = 10.117; *df* = 3; *p* = 0.018), with faculty (31–40 years) showing high flexibility and creativity, whereas older faculty (above 50 years) showed lower scores; this shows that they are more aligned with structured work. Similarly, decision-making tendencies varied significantly with age (χ^2 = 9.612; *df* = 3; *p* = 0.022), where mid-career faculty (31–40 and 41–50 years) reported quicker decision-making compared to their younger or older counterparts. Passion for work also demonstrated a strong age-related difference (χ^2 = 17.771; *df* = 3; *p* < 0.001), with faculty aged 41–50 years showing the highest levels of passion, whereas the oldest group (above 50 years) reported lower levels. There are no significant differences between age groups in willingness to take risks (χ^2 = 1.492; *df* = 3; *p* = 0.684) and autonomy in working style (χ^2 = 1.717; *df* = 3; *p* = 0.633)

Table 3
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Kruskal–Wallis Test Results Regarding Age

	Age	*N*	Mean Rank	Mean	*SD*	K-W Test	Decision
Risk Taking	20-30 Years	64	119.38	3.42	0.115	0.684	Retain the null
	31-40 Years	128	127.83	3.56	0.081	(χ^2 = 1.492;	hypothesis
	41-50 Years	37	117.04	3.46	0.083	*df* = 3)	
	50 +Years	19	133.84	3.63	0.256		
Innovativeness	20-30 Years	64	144.14	4.33	0.074	0.018	Reject the null
	31-40 Years	128	121.70	3.98	0.084	(χ^2 = 10.117;	hypothesis
	41-50 Years	37	114.18	4.03	0.072	*df* = 3)	
	50 +Years	19	97.34	3.42	0.336		
Autonomy	20-30 Years	64	119.41	3.50	0.120	0.633	Retain the null
	31-40 Years	128	122.77	3.55	0.093	(χ^2 = 1.717;	hypothesis
	41-50 Years	37	136.73	3.73	0.100	*df* = 3)	
	50 +Years	19	129.47	3.63	0.256		
Proactiveness	20-30 Years	64	112.70	3.73	0.098	0.022	Reject the null
	31-40 Years	128	133.88	3.97	0.081	(χ^2 = 9.612;	hypothesis
	41-50 Years	37	129.91	3.97	0.082	*df* = 3)	
	50 +Years	19	90.58	3.26	0.295		
Passion	20-30 Years	64	103.95	3.64	0.101	0.000	Reject the null
	31-40 Years	128	130.57	3.92	0.072	(χ^2 = 17.771;	hypothesis
	41-50 Years	37	153.07	4.22	0.069	*df* = 3)	
	50 +Years	19	97.21	3.47	0.258		
Faculty	20-30 Years	64	116.79	3.73	0.07	0.380	Retain the null
Entrepreneurial	31-40 Years	128	128.58	3.80	0.07	(χ^2 = 3.075;	hypothesis
Mindset	41-50 Years	37	133.39	3.88	0.04	*df* = 3)	
	50 +Years	19	105.68	3.48	0.27		
	Total	248					

Teaching Experience and Entrepreneurial Mindset

Table 4 presents the results of the Kruskal–Wallis test examining differences in faculty entrepreneurial mindset with the levels of teaching experience. There are significant differences among experiences on three individual mindset dimensions, i.e., risk-taking (χ^2 = 9.707, *df* = 4, $p < 0.05$), openness to novelty (χ^2 = 16.901, *df* = 4, $p < 0.01$), and passion for work (χ^2 = 21.573, *df* = 4, $p < 0.001$). The result shows no significant differences in the autonomy dimension (χ^2 = 5.024, *df* = 4, $p > 0.05$) and quick decision-making (χ^2 = 2.349, *df* = 4, $p > 0.05$). In the overall faculty entrepreneurial mindset, there are no significant differences in relation to the faculty teaching experiences (χ^2 = 7.255, *df* = 4, $p > 0.05$). The descriptive table shows faculty with above 5 years of teaching experience reported higher scores in overall entrepreneurial mindset (*M* = 3.85) as well as in risk-taking dimension (*M* = 3.76), autonomy (*M* = 3.73), and quick decision-making (*M* = 3.95), whereas passion for work is highest in the faculty whose teaching experience is above 10 years (*M* = 4.09).

Table 4

Descriptive Statistics of Faculty Entrepreneurial Mindset and the Kruskal–Wallis Test Results Regarding Teaching Experience

	Teaching Experience	*N*	Mean Rank	Mean	*SD*	K-W Test	Decision
Risk Taking	0-2 Years	59	108.36	3.32	0.112	0.046	Reject the null hypothesis
	2- 5 years	49	117.26	3.43	0.12	(χ^2 = 9.707;	
	5-7 years	41	143.77	3.76	0.143	*df* = 4)	
	7-10 years	35	117.21	3.43	0.111		
	10+ years	64	136.56	3.66	0.122		
Innovativeness	0-2 Years	59	127.35	4.15	0.076	0.002	Reject the null hypothesis
	2- 5 years	49	150.03	4.37	0.104	(χ^2 = 16.901;	
	5-7 years	41	127.57	4.02	0.158	*df* = 4)	
	7-10 years	35	91.70	3.69	0.114		
	10+ years	64	118.30	3.86	0.142		
Autonomy	0-2 Years	59	117.66	3.51	0.129	0.285	Retain the null hypothesis
	2- 5 years	49	118.91	3.51	0.131	(χ^2 = 5.024;	
	5-7 years	41	136.13	3.73	0.14	df = 4)	
	7-10 years	35	110.86	3.37	0.136		
	10+ years	64	135.09	3.67	0.143		
Proactiveness	0-2 Years	59	133.89	4.02	0.085	0.672	Retain the null hypothesis
	2- 5 years	49	117.34	3.78	0.128	(χ^2 = 2.349;	
	5-7 years	41	128.37	3.95	0.121	*df* = 4)	
	7-10 years	35	124.90	3.91	0.095		
	10+ years	64	118.63	3.67	0.149		
Passion	0-2 Years	59	96.89	3.56	0.094	0.000	Reject the null hypothesis
	2- 5 years	49	118.30	3.84	0.089	(χ^2 = 21.573;	
	5-7 years	41	122.55	3.8	0.136	*df* = 4)	
	7-10 years	35	135.79	4.03	0.112		
	10+ years	64	149.78	4.09	0.123		
Faculty Entrepreneurial Mindset	0-2 Years	59	108.84	3.71	0.07	0.123	Retain the null hypothesis
	2- 5 years	49	123.31	3.78	0.09	(χ^2 = 7.255;	
	5-7 years	41	139.62	3.85	0.13	*df* = 4)	
	7-10 years	35	113.57	3.69	0.08		
	10+ years	64	136.14	3.79	0.13		
	Total	248					

Academic Qualification and Entrepreneurial Mindset

Table 5 presents the Kruskal–Wallis test results between entrepreneurial mindset dimensions across academic qualifications. There are statistically significant differences for the risk-taking dimension (χ^2 = 12.251, *df* = 3, $p < 0.01$), openness to novelty (χ^2 = 23.817, *df* = 3, $p < 0.001$), quick decision-making (χ^2 = 23.257, *df* = 3, $p < 0.001$), and passion for work (χ^2 = 38.326, *df* = 3, $p < 0.001$). Across all dimensions, faculty with a master's degree showed the highest mean score compared to other qualification statuses. There are no significant differences found for autonomy (χ^2 = 7.471, *df* = 3, $p > 0.05$), suggesting that the preference to work independently is consistent across qualifications. The overall entrepreneurial mindset shows a significant difference among faculty qualifications (χ^2 = 24.250, *df* = 3, $p < 0.001$), with Master's degree holders scoring the highest (*M* = 3.87), followed by Bachelor's (*M* = 3.51), PhDs (*M* = 3.23), and others (*M* = 3.02).

Table 5
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Kruskal–Wallis Test Results Regarding Academic Qualification

	Qualification	*N*	Mean Rank	Mean	*SD*	K-W Test	Decision
Risk Taking	Bachelor	16	90.81	3.13	0.155	0.007	Reject the null
	Master	201	131.57	3.60	0.060	(χ^2 = 12.251;	hypothesis
	Phd	26	100.10	3.19	0.222	*df* = 3)	
	Other	5	75.00	3.00	0.000		
Innovativeness	Bachelor	16	122.13	4.13	0.085	0.000	Reject the null
	Master	201	132.50	4.16	0.054	(χ^2 = 23.817;	hypothesis
	Phd	26	81.77	3.19	0.272	*df* = 3)	
	Other	5	32.50	3.00	0.000		
Autonomy	Bachelor	16	122.88	3.63	0.221	0.058	Retain the null
	Master	201	129.27	3.63	0.068	(χ^2 = 7.471;	hypothesis
	PhD	26	98.27	3.19	0.222	*df* = 3)	
	Other	5	74.50	3.00	0.000		
Proactiveness	Bachelor	16	78.56	3.38	0.125	0.000	Reject the null
	Master	201	133.89	3.98	0.059	(χ^2 = 23.257;	hypothesis
	PhD	26	95.15	3.38	0.222	*df* = 3)	
	Other	5	46.50	3.00	0.000		
Passion	Bachelor	16	70.25	3.31	0.12	0.000	Reject the null
	Master	201	136.70	4.01	0.051	(χ^2 = 38.326;	hypothesis
	Phd	26	79.50	3.19	0.222	*df* = 3)	
	Other	5	41.50	3.10	0.000		
Faculty	Bachelor	16	80.63	3.51	0.06	0.000	Reject the null
Entrepreneurial	Master	201	134.86	3.87	0.05	(χ^2 = 24.250;	hypothesis
Mindset	Phd	26	87.46	3.23	0.22	*df* = 3)	
	Other	5	41.00	3.02	0.00		
	Total	248					

Entrepreneurship Courses Studied and Entrepreneurial Mindset

Table 6 shows the Mann–Whitney *U* test results on whether studying entrepreneurship courses has an impact on faculty entrepreneurial mindset. The results show there are significant differences in risk-taking (U = 6484.5, Z = –2.712, p < 0.01) and openness to novelty (U = 4531, Z = –3.443, p < 0.01). There are no significant differences for autonomy (U = 6005, Z = –0.239, p > 0.05), quick decision-making (U = 5640, Z = –1.020, p > 0.05), or passion for work (U = 6023, Z = –0.211, p > 0.05). The overall entrepreneurial mindset composite score did not differ significantly between groups (U = 5175.5, Z = –1.888, p > 0.05).

Table 6
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Mann–Whitney U Test Results Regarding Entrepreneurship Course Study

	Ent Studied	*N*	Mean Rank	Mean	*SD*	M-WU Test	Decision
Risk Taking	Yes	180	117.35	3.42	0.065	0.007(*U* = 6484.5;	Reject the null
	No	68	143.43	3.78	0.102	*Z* = -2.712)	hypothesis
Innovativeness	Yes	180	115.67	3.93	0.067	0.001(*U* = 4531;	Reject the null
	No	68	147.87	4.31	0.099	*Z* = -3.443)	hypothesis
Autonomy	Yes	180	123.86	3.56	0.075	0.811(*U* = 6005;	Retain the null
	No	68	126.19	3.60	0.109	Z = -.239)	hypothesis
Proactiveness	Yes	180	121.83	3.82	0.066	0.308(*U* = 5640;	Retain the null
	No	68	131.56	3.94	0.107	*Z* =-1.020)	hypothesis
Passion	Yes	180	123.96	3.84	0.064	0.833(*U* = 6023;	Retain the null
	No	68	125.93	3.9	0.084	*Z* = -.211)	hypothesis
Faculty Entrepreneurial Mindset	Yes	180	119.25	3.71	0.06	0.059(*U* = 5175.5;	Retain the null
	No	68	138.39	3.91	0.08	*Z* = -1.888)	hypothesis
	Total	248					

Entrepreneurship Workshops Participated in and Entrepreneurial Mindset

Table 7 shows the relationship between entrepreneurial mindset among faculty who participated in entrepreneurship workshops (*n* = 184) and those who had not (*n* = 64). There are statistically significant differences in all dimensions of entrepreneurial mindset: autonomy (*U* = 4636, *Z* = -2.655, *p* < .01), openness to novelty (*U* = 4140, *Z* = -3.862, *p* < .001), decision-making speed (*U* = 4500.5, *Z* = -3.007, *p* < .01), and passion for work (*U* = 4700, *Z* = -2.635, *p* < .01), except for risk-taking. Also, there is a significant relationship between entrepreneurial mindset and participation in entrepreneurship-related workshops. The overall entrepreneurial mindset composite score was significantly higher among faculty who had participated in workshops (*M* = 3.85) compared to those who had not (*M* = 3.53; *U* = 4389.5, *Z* = -3.055, *p* < .01).

Table 7
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Mann–Whitney U Test Results Regarding Entrepreneurship Workshop Participation

	Ent Workshop Taken	*N*	Mean Rank	Mean	*SD*	M-WU Test	Decision
Risk Taking	Yes	184	129.20	3.58	0.068	.064(*U* = 5024;	Retain the null
	No	64	111.00	3.34	0.092	*Z* = -1.855)	hypothesis
Innovativeness	Yes	184	134.00	4.15	0.06	.000(*U* = 4140;	Reject the null
	No	64	97.19	3.69	0.113	*Z* = -3.862)	hypothesis
Autonomy	Yes	184	131.30	3.65	0.07	.008(*U* = 4636;	Reject the null
	No	64	104.94	3.33	0.11	*Z* = -2.655)	hypothesis
Proactiveness	Yes	184	132.04	3.94	0.065	.003(*U* = 4500.5;	Reject the null
	No	64	102.82	3.61	0.11	*Z* =-3.007)	hypothesis
Passion	Yes	184	130.96	3.92	0.062	.008(*U* = 4700;	Reject the null
	No	64	105.94	3.67	0.092	*Z* = -2.635)	hypothesis
Faculty Entrepreneurial Mindset	Yes	184	132.64	3.85	0.06	.002(*U* = 4389.5;	Reject the null
	No	64	101.09	3.53	0.09	*Z* = -3.055)	hypothesis
	Total	248					

Teaching Entrepreneurship Courses: Experience and Entrepreneurial Mindset

Table 8 shows whether faculty involved in the teaching of entrepreneurship-related courses have a different entrepreneurial mindset compared to those who do not teach entrepreneurship-related courses. The result showed that faculty who had taught entrepreneurship courses reported a significantly higher willingness to take risks to achieve real success (U = 4851.5, Z = -2.342, p = .019) and autonomy in working style (U = 4365, Z = -3.338, p = .001). Teaching entrepreneurship nurtures risk-taking and independence as fundamental aspects of the entrepreneurial mindset (Joensuu-Salo et al., 2020). There is no significant difference in perceptions regarding working on structured tasks (U = 5716.5, Z = -0.508, p = .612), decision-making process (U = 5147, Z = -1.726, p = .084), and passion for work (U = 5314.5, Z = -1.397, p = .162). This suggests that some personality-related traits, such as passion and way of doing structured tasks, are not influenced by teaching practices (Fatemi & Sazegar, 2016). The overall entrepreneurial mindset of faculty was significantly higher among those who taught entrepreneurship (U = 4730, Z = -2.469, p = .014), and it is statistically significant.

Table 8
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Mann–Whitney U Test Results Regarding Teaching Entrepreneurship Courses Experience

	Ent Course Taught	*N*	Mean Rank	Mean	*SD*	M-WU Test	Decision
Risk Taking	Yes	183	130.49	3.60	0.065	.019(*U* = 4851.5; *Z* = -2.342)	Reject the null hypothesis
	No	65	107.64	3.29	0.11		
Innovativeness	Yes	183	125.76	4.04	0.067	.612(*U* = 5716.5; *Z* = -.508)	Retain the null hypothesis
	No	65	120.95	4.00	0.105		
Autonomy	Yes	183	133.15	3.69	0.073	.001(*U* = 4365; *Z* = -3.338)	Reject the null hypothesis
	No	65	100.15	3.23	0.109		
Proactiveness	Yes	183	128.87	3.91	0.065	.084(*U* = 5147; *Z* =-1.726)	Retain the null hypothesis
	No	65	112.18	3.69	0.11		
Passion	Yes	183	127.96	3.89	0.06	.162(*U* = 5314.5; *Z* = -1.397)	Retain the null hypothesis
	No	65	114.76	3.77	0.097		
Faculty Entrepreneurial Mindset	Yes	183	131.15	3.83	0.06	.014(*U* = 4730; *Z* = -2.469)	Reject the null hypothesis
	No	65	105.77	3.60	0.08		
	Total	248					

Teaching Level and Entrepreneurial Mindset

Table 9 shows the Kruskal–Wallis test results examining whether there were significant differences in the entrepreneurial mindset of faculty according to their teaching program level (Bachelor's, Master's, or both). The findings showed statistically significant differences across most measured dimensions of entrepreneurial mindset: risk-taking (χ^2 = 8.354, *df* = 2, *p* = .015), structured tasks (χ^2 = 23.297, df = 2, *p* = .000), autonomy in work (χ^2 = 17.020, *df* = 2, *p* = .000), and decision-making process (χ^2 = 8.591, *df* = 2, *p* = .014). However, there was no statistically significant difference in passion for work (χ^2 = 1.501, *df* = 2, *p* = .472). The aggregate entrepreneurial mindset score also differed significantly across teaching levels (χ^2 = 12.251, *df* = 2, *p* = .002). The mean scores indicate that faculty teaching in both programs (*M* = 3.83) and at the bachelor's level (*M* = 3.88) displayed stronger entrepreneurial mindset traits compared to those teaching exclusively at the master's level (*M* = 3.32).

Table 9
Descriptive Statistics of Faculty Entrepreneurial Mindset and the Mann–Whitney U Test Results Regarding Teaching Level

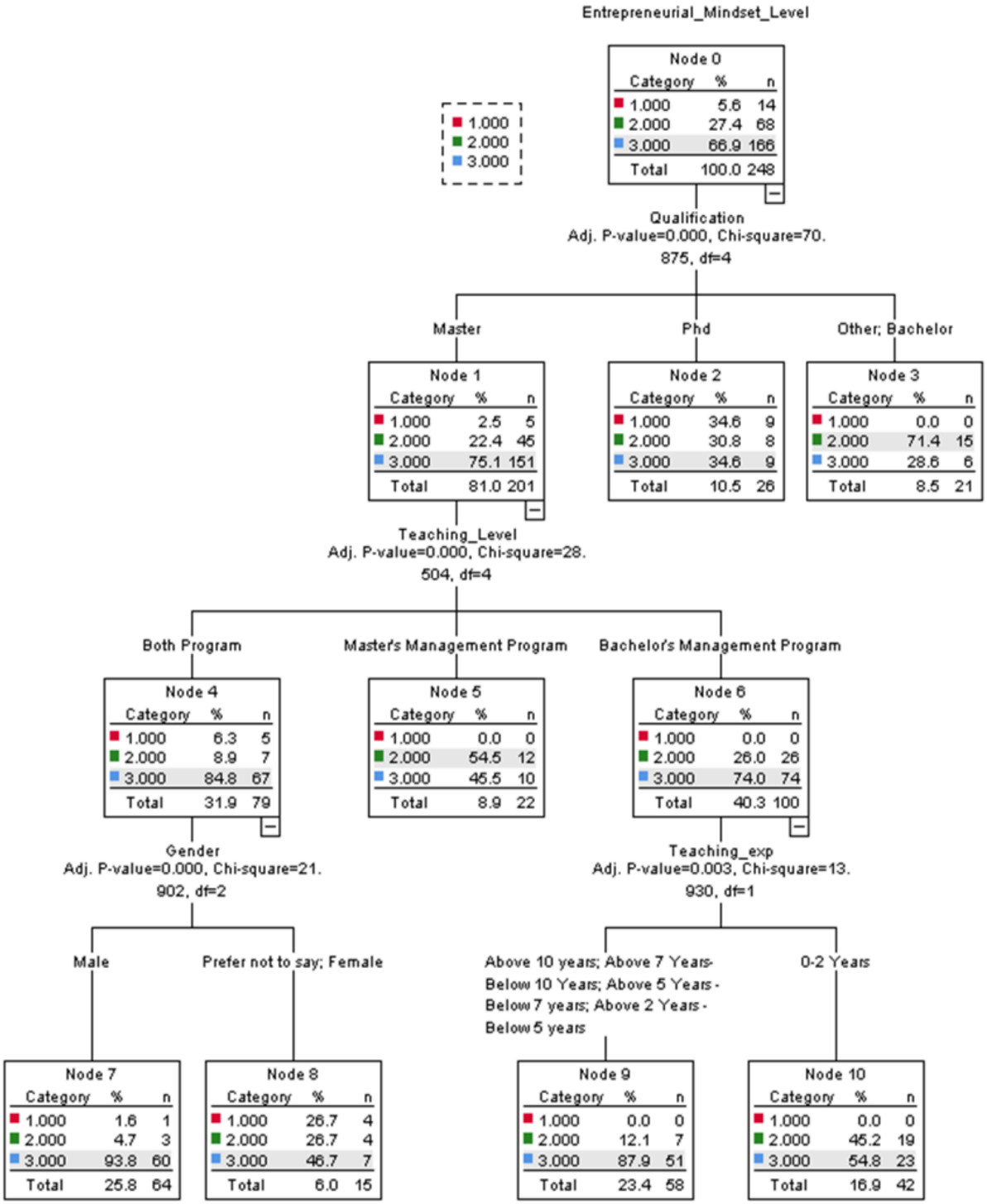
	Program Level	*N*	Mean Rank	Mean	*SD*	K-W Test	Decision
Risk Taking	Bachelor's	116	129.25	3.59	0.080	0.015	Reject the
	Master's	43	97.50	3.12	0.167	(χ^2 = 8.354;	null
	Both	89	131.35	3.62	0.077	*df* = 2)	hypothesis
Innovativeness	Bachelor's	116	138.35	4.27	0.06	0.000	Reject the
	Master's	43	81.99	3.37	0.173	(χ^2 = 23.297;	null
	Both	89	126.98	4.04	0.098	*df* = 2)	hypothesis
Autonomy	Bachelor's	116	130.47	3.68	0.087	0.000	Reject the
	Master's	43	85.66	2.98	0.168	(χ^2 = 17.020;	null
	Both	89	135.49	3.71	0.092	*df* = 2)	hypothesis
Proactiveness	Bachelor's	116	133.20	4.01	0.063	0.014	Reject the
	Master's	43	98.27	3.47	0.161	(χ^2 = 8.591;	null
	Both	89	125.83	3.84	0.103	*df* = 2)	hypothesis
Passion	Bachelor's	116	123.33	3.87	0.07	0.472	Retain the
	Master's	43	115.72	3.67	0.16	(χ^2 = 1.501;	null
	Both	89	130.26	3.93	0.08	*df* = 2)	hypothesis
Faculty	Bachelor's	116	129.39	3.88	0.05	0.002	Reject the
Entrepreneurial	Master's	43	90.34	3.32	0.15	(χ^2 = 12.251;	null
Mindset	Both	89	134.63	3.83	0.08	*df* = 2)	hypothesis
	Total	248					

Decision Tree Analysis

The decision tree analysis was performed using the chi-square automatic interaction detection (CHAID) method. As CHAID relies on chi-square tests, it does not assume normality and thus can be considered a distribution-free exploratory method (McHugh, 2013). In the CHAID procedure, the analysis selects the independent variable that shows the strongest relationship with the dependent variable at each step. Categories of the independent variable are grouped if their differences are not statistically significant. The dependent variable, entrepreneurial mindset, was recorded as a categorical variable, where entrepreneurial mindset intensity was coded as 1.00 through 2.49 as low, 2.50 through 3.49 as moderate, and 3.50 through 5.00 as high. It enhances the interpretability of CHAID results while maintaining consistency with the distribution and nature of the data. CHAID requires categorical dependent variables; thus, a transformation was necessary and methodologically appropriate.

A decision tree shown in Figure 2 was calculated in a 40/15 decision node. The CHAID model has a risk estimate of 0.286 (SE = 0.029), indicating that approximately 71.4% of cases in this node are correctly classified. The classification tree analysis revealed distinct patterns in the entrepreneurial mindset level of respondents (N = 248). At the overall level, 66.9% of respondents exhibited a high entrepreneurial mindset, 27.4% reported a medium level, and only 5.6% indicated a low level. The most significant predictor of entrepreneurial mindset was qualification (χ^2 = 70.875, p < 0.001). Master's degree holders (n = 201) demonstrated the strongest entrepreneurial orientation, with 75.1% categorized at the high level, whereas PhD holders (n = 26) displayed a more even distribution across low (34.6%), medium (30.8%), and high (34.6%) levels. Respondents with other or bachelor's qualifications (n = 21) were predominantly at the medium level (71.4%).

Figure 1
Decision Tree Analysis



The second classification criterion is the teaching program level, but only for the group that has a master's degree mindset ($\chi^2 = 28.504$, $p < 0.001$). Those teaching both bachelor's and master's programs (n = 79) had 84.8% in the high mindset group, compared to 74.0% among bachelor's-only teachers (n = 100) and 45.5% among master's-only teachers (n = 22).

The third classification criterion is gender, but only for the group of faculties that are involved in teaching both programs. Gender was significant ($\chi^2 = 21.902$, $p < 0.001$): 93.8% of males exhibited a high entrepreneurial mindset, compared with 46.7% of females/prefer not to say.

Another third classification criterion is teaching experience, but only for the faculty group who are involved in teaching bachelor's programs ($\chi^2 = 13.930$, p = 0.003). Respondents with more teaching experience (n = 58) reported a higher level of entrepreneurial mindset (87.9%), while less experienced teachers (n = 42) were split between medium (45.2%) and high (54.8%).

Discussion/Implications

In the emerging entrepreneurship literature, the study of the entrepreneurial mindset has gained growing consideration. Nonetheless, only a few studies have explored the role of demographic and entrepreneurial exposure in shaping faculty entrepreneurial mindset. This study is aimed at exploring what demographic factors and entrepreneurial experience affect the entrepreneurial mindset of the faculty, especially in the higher education sector.

The results show that gender plays a vital role in developing an entrepreneurial mindset. The results suggest that while entrepreneurial risk-taking, autonomy, and overall orientation are higher among male faculty, intrinsic motivation and decision-making have no significant difference between genders. These differences may be explained by gender-based variations in behavioral and psychological orientations. It confirms significant gender differences in overall entrepreneurial mindset, which is aligned with previous research (Ahmad, 2022; Cacija et al., 2023; Justus, 2021). While male faculty exhibit higher risk-taking, autonomy, and overall entrepreneurial mindset, intrinsic motivation, and decision-making do not differ significantly across genders.

The findings of this study highlight that age does not play a significant role in the development of an entrepreneurial mindset. This result is consistent with Degefu and Verma's (2025) and Nguyen's (2018) research; however, it is important to note that the respondents' categories were different from those in this study. The result concludes that age plays an important role in shaping specific entrepreneurial traits, and entrepreneurial mindset is not uniformly influenced by age; rather, certain dimensions evolve depending on career stage, with mid-career faculty appearing more dynamic in terms of creativity, decision-making, and passion, while other foundational traits remain consistent over time.

The findings of this study further demonstrate that faculty teaching experiences influenced the risk-taking attitude, innovativeness, and passion towards the work; however, it does not have a significant role in defining the overall entrepreneurial mindset. The result indicates that faculty who are passionate about teaching will continue to teach for a longer period of time. The findings suggest that teaching experience does not have an influence on overall entrepreneurial mindset but shows different results across dimensions. The result indicates that there is low passion for teaching among the new faculty; the institution should bring programs to support it. For the mid-career faculty, the institution should be more focused on promoting risk-taking and passion development, and for the experienced faculty to take risks and promote innovation in teaching.

Furthermore, the analysis shows that academic qualification plays a vital role in shaping entrepreneurial mindset, with Master's degree holders consistently demonstrating stronger orientations across multiple dimensions. Faculty with a Master's degree consistently showed high entrepreneurial intention, which is very notable and significant for the institution while hiring faculty. The result shows that faculty with PhD degrees scored lower in entrepreneurial dimensions and overall

entrepreneurial mindset; this result is significant as it indicates that faculty with doctoral degrees are more focused on systems and processes, have depth of expertise but not necessarily entrepreneurial agility. This result is consistent with the age group and teaching experience findings. Faculty with higher degrees, more teaching experience, and higher age groups consistently show a lower entrepreneurial mindset. This indicates that institutions should develop relevant development programs and workshops to keep them innovative in the workplace.

The result shows that, across all dimensions and the entrepreneurial mindset composite score, faculty who did not study entrepreneurship-related courses show higher scores than those who have studied entrepreneurship-related subjects. While entrepreneurship courses are designed to foster entrepreneurial qualities, the result showed that participants reported lower levels of entrepreneurial mindset. Miço and Cungu (2023) indicated that while entrepreneurship education introduces entrepreneurship-related knowledge, risk-taking strategies, and concepts of entrepreneurship, it might create a risk-aversion mindset rather than innovation, either because of teaching strategies and curriculum design and offering (Deng & Wang, 2023) or personal traits (Pham et al., 2023). The results signify that entrepreneurship curricula and their offering strategies need to be revisited. The curriculum should promote innovation and actively encourage risk orientation and openness to novelty to improve the overall entrepreneurial mindset.

The findings show that the entrepreneurship workshop has a direct influence on how individuals think about bringing innovation, supporting the view that entrepreneurial learning environments encourage proactive, opportunity-oriented thinking. This finding indicates that entrepreneurship workshops provide a valuable platform for enhancing entrepreneurial attitude and mindset (Pham et al., 2023). This finding suggests that exposure to entrepreneurship workshops fosters greater flexibility and a preference for innovation, improving proactiveness (Al-Awlaqi et al., 2021; Morris et al., 2023). Overall, entrepreneurship workshops have a positive and significant impact on most aspects of the entrepreneurial mindset besides risk-taking. Thus, institutions should provide an opportunity for the faculty to participate in entrepreneurship-related workshops regularly.

The findings of this study further demonstrate the reinforcing role of teaching entrepreneurship in cultivating broader entrepreneurial attitudes and orientations. The faculty who taught entrepreneurship-related courses practiced entrepreneurial traits and focused on developing those traits. Their mindset emphasizes creativity, flexibility, and independence in problem-solving, which is the core of entrepreneurship (Neck & Corbett, 2018). These results imply that entrepreneurship teaching not only benefits students but also contributes to shaping the entrepreneurial mindset of faculty themselves. The overall entrepreneurial mindset composite score was significantly higher among faculty who had taught entrepreneurship-related courses (M = 3.83) compared to those who had not (M = 3.60). Thus, it also signifies that teaching entrepreneurship helps faculty to develop their own entrepreneurial mindset.

The result confirmed that teaching level has an important influence on entrepreneurial mindset. Faculty at the bachelor's and dual-program levels may be more exposed to practical, hands-on, and innovation-driven teaching approaches, which could reinforce entrepreneurial traits. In contrast, faculty teaching at the master's level may be more engaged with research, theoretical frameworks, and structured pedagogy, which might limit entrepreneurial expression. This aligns with prior research, which highlights that an entrepreneurial mindset is strengthened when faculty are involved in practice-oriented teaching and active engagement with learners (Lynch & Booking, 2023). The curriculum and teaching strategies across different programs influence faculty mindset and the way of delivering classroom instruction (Gningue et al., 2024). The level of the program and teaching strategies need to be differentiated; thus, faculty exercise different levels of entrepreneurial mindset.

Further, the above results were confirmed

through the decision tree analysis. The findings suggest that an entrepreneurial mindset is strongly associated with academic qualification, teaching level, gender, and teaching experience. These results indicate that faculty qualification and teaching level are the most consistent predictors across all dimensions of entrepreneurial mindset. Workshop participation also significantly shaped several dimensions, while gender and age had selective but notable effects. In contrast, teaching experience and entrepreneurship courses studied influenced specific dimensions but did not affect the overall mindset. These findings highlight that faculty entrepreneurial mindset is shaped by a combination of personal attributes and professional engagement.

This study has theoretical and practical implications for higher education institutions and faculty. This research applied demographic variables and entrepreneurial exposure, with the aim of examining how traits influenced entrepreneurial mindset. This is a limited research area in higher education, especially among the faculty, so it provided a theoretical contribution and developed a theoretical understanding for future research. Further, this paper has applied the CHAID decision tree analysis to explore the relationship, which has been limited in the higher education literature in developing countries like Nepal.

This study shows that faculty qualification and teaching level have influenced the overall entrepreneurial mindset. This suggests that educational institutions need to create an opportunity for the faculty to engage in entrepreneurship-related workshops and training. They should integrate applied, practice-oriented methods into both faculty training and curriculum design. Although gender difference is not a significant overall entrepreneurial mindset, female faculty show a relatively low entrepreneurial mindset, thus emphasizing the need for inclusive institutional policies that encourage risk-taking and autonomy among female faculty. Faculty should attend entrepreneurship-related workshops and training.

The government has a vital role to play in fostering an entrepreneurial mindset among the faculty. Like they have a program related to entrepreneurship for the students, they should develop a similar program that provides an opportunity for the faculty to participate and learn. These programs can be initiated as part of a faculty development plan. By nurturing a culture of an innovative mindset, it can contribute significantly to the development of an entrepreneurial mindset.

Limitation

This study has adopted a five-dimensional entrepreneurial mindset, and those dimensions were measured through a single measure. In future research, multiple items should be used to measure each dimension to capture the construct more comprehensively. This study applied a cross-sectional design to collect data from the higher education faculties; thus, it was not able to explore whether the exposure to entrepreneurial-related activities actually develops an entrepreneurial mindset or not. Longitudinal research could be conducted to show the impact. Further, the research has been conducted among the faculty in Nepal; depending upon the context, it might be different, so it needs to be generalized with caution. The study examined demographic and entrepreneurial exposure with five key dimensions of the entrepreneurial mindset but did not explore broader institutional factors, such as those that may shape faculty attitudes and behaviors. Future studies could consider those individual and organizational-level factors to capture deeper insights into how the entrepreneurial mindset develops and is expressed in academic contexts.

Conclusion

This study examined the relationship between higher education institution faculty demographics and entrepreneurial exposure with entrepreneurial mindset, i.e., risk-taking, innovativeness, autonomy, proactiveness, and passion. The results showed that the faculty's entrepreneurial mindset is positive and particularly strong in innovativeness, proactiveness, and passion, whereas the risk-taking attitude was low. These reflect that the faculties are very cautious to take risks in higher education initiatives. The academic

qualifications of the faculty are significant and do influence how faculty think and tend to act. Further, teaching level, gender, and experience have played a vital role in shaping the entrepreneurial mindset among the faculty. Faculty who had engaged in entrepreneurship workshops or taught entrepreneurship courses also showed higher entrepreneurial orientation, suggesting that applied and practice-based experiences reinforce entrepreneurial traits.

These findings contribute to the growing body of literature on entrepreneurial mindset in academia and highlight the dynamic and multidimensional nature of the entrepreneurial mindset among faculty. The study underlines the importance of designing policies and interventions that encourage innovative thinking and develop faculty who are better positioned to model and cultivate entrepreneurial skills in students, which contributes towards an entrepreneurship culture in the educational sector.

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