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ORIGINAL SCIENTIFIC PAPER

The Entrepreneurial Quotient (EQ) Among Women Entrepreneurs: Assessing Creativity, Risk-Taking, Resilience, and Sustainability in Modern Enterprises

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A B S T R A C T

The Entrepreneurial Quotient (EQ) is a crucial framework for understanding the competencies that drive entrepreneurial success, particularly among women entrepreneurs. This study examines the dimensions of EQ – creativity, risk-taking, resilience, and sustainability, and their impact on technology adoption in contemporary enterprises. Using the Digital Transformation and Technology Adoption Model (DTTAM), the research examines how women entrepreneurs integrate technological innovations into their businesses. A structured survey was conducted from January to June 2020 among 100 women entrepreneurs in India to assess their EQ and its impact on business adaptability. The findings highlight that creativity fosters innovation, risk-taking enhances strategic decision-making, resilience strengthens adaptability, and sustainability ensures long-term business viability. These insights underscore the importance of integrating EQ development into entrepreneurial education through mentorship programs, experiential learning, and sustainability-focused curricula. The study provides actionable

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recommendations for educators, policymakers, and business leaders seeking to cultivate resilient, innovative, and future-ready enterprises.

KEYWORDS: *entrepreneurial quotient (EQ), creativity, risk-taking, resilience, sustainability, technology adoption, women*

Introduction

Entrepreneurship is an activity that most people recognize as a driving force behind economic development and social renaissance. It is one element that is deeply ingrained in the character of innovation, leadership and resilience (Sharma & Agarwal**,** 2020). Entrepreneurs are agents of change, bringing economic growth, creating employment opportunities, and promoting innovation. The Entrepreneurial Quotient EQ brings together key competencies that differentiate successful entrepreneurship (Jain & Verma, 2021).

EQ is a multi-dimensional approach for assessing the effectiveness and adaptability of an entrepreneur in complex, uncertain, and rapidly changing conditions. Creativity, risk-taking, resilience, and sustainability are the principal characteristics of the entrepreneurial leader (Srinivasan**,** 2019). EQ provides a structured framework for the assessment and development of entrepreneurial competencies. Thus, enabling stakeholders to identify high-potential individuals and devise a set of programs for them. Considering the changing global markets, now brought about by technology, environmental challenges, and altered consumer preferences, such a framework becomes essential (Mehta & Singh, 2020).

Today's entrepreneurs face a rapidly changing entrepreneurial landscape, driven by the rapid pace of technological innovation, shifts in societal values, and increased environmental awareness. The challenges that entrepreneurs confront today are completely different from those of even just a few generations ago. For example, the advent of digital platforms like Zomato and Swiggy, facilitated by startups in India, demonstrates how technology is changing traditional business models (Rao, 2021). It is important to both the government and industry that innovative entrepreneurs move towards sustainability and align their commercial activities with environmental and social requirements. The stringent consumer of today will choose not only ethical but also ecologically minded businesses. In preference to pure profit motives, it requires a fine perception of market

dynamics as well as rapid reaction to emerging trends. The higher the EQ of an entrepreneur, the better they can handle such complexities by leveraging creativity, resilience, and ethical legitimacy (Sharma & Agarwal**,** 2020).

Creativity is the core of entrepreneurship, driving innovation and enabling entrepreneurs to devise unique solutions to complex problems. For Indian entrepreneurs, creativity has often been a key factor in addressing societal challenges, such as urban congestion and rural unemployment (Desai, 2020). For instance, Jaipur Rugs demonstrated creative problem-solving by integrating traditional weaving skills with modern e-commerce, empowering rural artisans (Chatterjee, 2021).

Risk-taking is the very nature of entrepreneurship, indicating a person's willingness to make bold decisions in an uncertain environment. Indian startups, such as Paytm and Ola, have demonstrated this trait by investing heavily to scale up their platforms under uncertain regulatory and market conditions (Srinivasan**,** 2019). Entrepreneurs often need to allocate considerable resources, including money and other efforts, when the outcome of a particular endeavor is uncertain. A person with very high EQ takes calculated risks for potential success minus possible setbacks. They can manage fear and utilize setbacks as learning experiences, thereby enhancing their innovation and perseverance skills (Jain & Verma, 2021).

Resilience refers to the ability to bounce back from adversity and continue with even more effort in adverse situations. It is a key characteristic for entrepreneurs, who frequently face various issues, such as financial constraints, market competition, and operational issues. Indian entrepreneurs, particularly in rural and semi-urban areas, have demonstrated an exceptional ability to recover from infrastructural and logistical challenges (Mehta & Singh, 2020). Resilience helps entrepreneurs maintain their mental well-being and motivation even when things become tougher (Sharma & Agarwal**,** 2020).

In today's business environment, sustainability is no longer an option but a necessity. Entrepreneurs' practices must align with environmental, social, and governance criteria to stay relevant and competitive. Sustainability involves being responsible in conducting ethical business and being efficient in using resources, while creating long-term value. Triple bottom line concepts – people, planet, and profit - can serve as a guiding framework for sustainable entrepreneurship. In India, startups like ReNew Power and Greenko have successfully integrated sustainability into their core strategies, demonstrating the value of aligning business goals with

environmental stewardship (Garg & Rajan, 2021). Entrepreneurs with a high EQ recognize that ethical alignment and environmental stewardship are critical to building trust and ensuring longevity.

Persistence in promoting and elevating people's EQ should lead organizations to a culture of entrepreneurship that actively enhances their strategic objectives. For policymakers, the EQ framework offers insights that can guide them in creating systems nurturing entrepreneurship. Policymakers can apply the EQ framework to design programs that encourage entrepreneurship on a system-wide basis. Organizations could establish programs of incubation, acceleration, and financing that enable different areas of EQ to be boosted. This is all to make sure that those potential entrepreneurs out there have what they need and how to succeed at present (Rao, 2021). educators to develop curricula that instill entrepreneurial skills in young people. Advisor offers could include how academic institutions provide the skills that enable women entrepreneurs to face an environment of greatly increased complexity by means of experiential learning, case studies and mentored enterprises (Chatterjee, 2021). Applying the EQ framework would also be to the advantage of business leaders. An organization can create a culture that stresses not only innovation through persistence but also resilience for sustainability. It is in this respect that the EQ framework can function as a diagnostic device for rooting out good potential employees and developing tailored career plans for them, according to Desai (2020).

Entrepreneurship is undeniably a diverse sector, and so any analysis of the avenues to explore its potential requires interdisciplinary approaches. EQ presents an integrated assessment tool through which one can better understand and carry out the various essential competencies needed for successful implementation in today's increasingly complex, fast-changing markets. The growing significance of entrepreneurship as a driver of economic development and social change is likely to continue expanding within an increasingly global economy. Those in the fields of public policy, education (including lifelong learning), and business who adopt the EQ framework will pave the way for stimulating surroundings packed with entrepreneurial talent and innovative power. In turn, they will create systems which are adaptable, balanced and sustainable. Ultimately, the EQ framework serves as a means of demonstrating how to construct more tolerant and resilient full-spectrum entrepreneurial ecosystems that benefit all.

The remaining paper is structured as follows. Section 2 presents the literature review, and Section 3 presents the theoretical framework and hypothesis development. Section 4 explains the methodology, Section 5 and 6 are devoted to findings and discussion, respectively. Section 7 concludes the paper.

Literature Review

The study by Monica & Anuradha (2024) examines how entrepreneurial attitude (EA) influences entrepreneurial intentions (EI) among female engineering students in India, with special attention to two mediators: entrepreneurial passion (EP) and creativity. Grounded in the Theory of Planned Behavior (Ajzen**,** 1991), and previous research by Cardon et al. (2013) on entrepreneurial passion, Biraglia and Kadile (2017) on creativity, Fayolle and Gailly (2015) on EA, and Liñán et al. (2011) on EI, the authors integrate insights from multiple scholars to investigate the interplay of cognitive and affective determinants.

Using a cross-sectional, survey-based research design, the study sampled 382 female engineering students from Bangalore, a region noted for its vibrant start-up culture and numerous higher education institutions. The questionnaire section collected demographic data, while the second section measured the central constructs using validated scales. Entrepreneurial attitude was measured using a scale developed by Fayolle and Gailly (2015), entrepreneurial passion through Cardon et al. (2013) 's scale, creativity via Biraglia and Kadile (2017), and entrepreneurial intentions with Liñán et al. (2011). Mediation analyses were performed using 'Hayes' PROCESS models (Hayes, 2012), specifically models 4 and 6, to investigate both individual and joint mediation effects.

The empirical findings reveal that EA has a significant, positive direct effect on EI, accounting for over 90% of the variance in entrepreneurial intentions. This observation reinforces earlier work by Law & Breznik (2017) and Choitung et al. (2012), who documented the strong link between entrepreneurial attitudes and intentions, especially among engineering students. The study further demonstrates that entrepreneurial passion significantly mediates the relationship between EA and EI. In other words, students with a more positive attitude tend to develop a stronger passion for entrepreneurial activities, which in turn increases their intention to launch new business ventures. This aligns with the findings of Murad et al. (2021)

and Nguyen et al. (2021), who also underscored passion as a motivational force in entrepreneurship.

Interestingly, creativity was found to have a negative mediating effect on the relationship between EA and EI. Although creativity is inherently important for opportunity recognition and innovative problem solving (as argued by Dali et al., 2021), its negative mediation suggests that, for this sample, higher levels of creativity might create a divergence or even conflict with the straightforward path from a positive entrepreneurial attitude to entrepreneurial intentions. However, when both passion and creativity were considered jointly, the overall indirect effect indicated that passion, which in turn attenuated the negative influence of creativity. This nuanced finding calls for further investigation into how creative capacities interact with entrepreneurial drive in shaping intentions.

The study provides robust evidence that a positive entrepreneurial attitude significantly fuels entrepreneurial intentions among female engineering students. By incorporating both passion and creativity as mediators, the research adds depth to our understanding of the entrepreneurial process. The results suggest that while fostering passion should be a central goal of entrepreneurship education, attention must also be paid to how creative skills are cultivated and integrated so that they support rather than undermine entrepreneurial aspirations. These insights offer valuable implications for educators and policymakers aiming to promote entrepreneurship in STEM fields and bridge gender disparities in the start-up ecosystem.

Stanković et al. (2023) investigate how both internal attributes and external environmental factors contribute to the success of women entrepreneurs in the Republic of Serbia. Drawing on seminal works by McClelland (1988) regarding the need for achievement, Miller and Friesen (1982) on risk-taking, and more recent studies by Abd Rani and Hashim (2017), Khan et al. (2021), and Azmi (2017), the authors posit that internal factors—such as self-confidence, need for achievement, and risk-taking behavior—alongside external elements like economic and sociocultural conditions, exert direct, positive, and significant influences on entrepreneurial success.

To examine these relationships, the researchers employed a quantitative survey methodology from July to October 2022, using both web-based and face-to-face techniques to collect data from 514 women entrepreneurs. For 'measuring the success of women entrepreneurs (WES), the study adapted

items from Khan et al. (2021) to capture dimensions such as increased family savings, profit growth, enhanced sales, and rising family income. Internal factors were assessed through items that gauge self-confidence, need for achievement, and risk-taking—constructs that align with earlier investigations by McClelland (1988) and Jayeoba et al. (2013)—while external factors were measured through indicators of economic performance and sociocultural support, following frameworks highlighted by Wube (2010) and Khan et al. (2021).

The methodological rigor is ensured through the use of Structural Equation Modeling (SEM), a technique well-suited for examining complex interdependencies, as recommended by Bollen (1989) and Anderson and Gerbing (1988). The measurement model was subjected to confirmatory factor analysis and reliability tests, employing Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE), which confirmed satisfactory internal consistency and convergent validity, in line with Fornell and Larcker (1981). Furthermore, the model fit indices, including the normed fit index (NFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA), adhered to the standards proposed by Hu et al. (1999), indicating that the proposed model accurately represents the covariance among the variables.

Results from the analysis demonstrated that both internal and external factors significantly influence the success of women entrepreneurs. Internal factors had a robust positive effect ($\beta = 0.536$, $p < 0.001$), indicating that qualities such as self-confidence and a strong need for achievement are key drivers, echoing earlier findings by Azmi (2017) and Khan et al. (2021). External factors also exerted a significant positive influence ($\beta = 0.246$, $p < 0.001$), though to a lesser degree. Overall, the model explains 41% of the variance in entrepreneurial success ($R^2 = 0.410$), underscoring the importance of integrating both personal and contextual elements in the analysis.

The research highlights the necessity for comprehensive support initiatives that not only enhance internal capabilities through education, workshops, and mentorship but also improve external conditions by fostering a supportive economic and sociocultural environment. While the study is limited by its reliance on self-reported data, a geographically confined sample, and the absence of potential moderating factors (such as marital status), it nonetheless makes a significant contribution to the literature on female entrepreneurship by confirming the critical roles of both

internal attributes and external factors. This integrated approach builds upon and extends the work of scholars such as Abd Rani and Hashim (2017), Khan et al. (2021), and Azmi (2017), offering concrete implications for policymakers and educators seeking to enhance sustainable business growth among women entrepreneurs.

Theoretical Framework and Hypothesis Development

Digital transformation and technology adoption models (DTTAM) with Entrepreneurial Quotient (EQ) help in exploring the issue of how entrepreneurs adopt technological innovations in enterprises today. It also examines the relationship between creativity, risk-taking, resilience, and sustainability at each stage of technological adoption, as well as their combined impact on overall entrepreneurial success or failure (Cavalcanti et al**.,** 2022).

DTTAM presupposes that the adoption of innovation is a process with multiple stages. The model lays particular emphasis on psychological factors in businesses' adoption of new technologies, as well as those decisions made by individual managers or engineers who carry out this work. The model is a series of stages. In the awareness stage, organizations become aware that a given technology exists and may impact various aspects of their operations. Next is the interest stage, which assesses how well the new technology aligns with organizational needs and the tangible benefits it offers. In the Evaluation stage, it thoroughly analyzes technology's potential applicability to its own needs, calculating both costs and earnings. There is also a trial stage, during which the technology is tested on a small scale through research and development. Managers test out whether something newly introduced will succeed on a large scale if implemented. Finally, in the decision stage, the technology is fully implemented to enhance the organization's operational efficiency (Verhoef et al., 2021).

The Concept of Entrepreneurial Quotient (EQ): Overview and Significance

Entrepreneurial personality and its assessment have been a focal point of research, particularly the development of innovative tools to gauge this trait. One notable study highlights the creation of a Computerized Adaptive Test (CAT) tailored to evaluate entrepreneurial personality in adults

(Postigo et al., 2020). This research addressed a significant gap: the absence of a dedicated CAT for entrepreneurial personality and the limited psychometric evaluation of existing tools. The results clearly revealed the good validity of this CAT with minimal standard error, even when applied with only 16 items. It showed strong correlations with standardized tests used, thus proving its effectiveness as a valid assessment tool.

Creativity in Entrepreneurship: The Role of Innovative Thinking

Entrepreneurship education is crucial in equipping women entrepreneurs with the essential skills required for fast-paced work environments. The past study highlighted the significance of various pedagogies in entrepreneurship education (Fazalbhoy & Gochhait, 2022). There is a growing demand for creative and innovative thinking, problem-solving, and adaptability. According to Badrun et al. (2024), entrepreneurial creativity enables individuals to generate ideas, solve complex problems, and drive innovation. The results highlight the importance of creativity in enabling entrepreneurs to navigate competitive business environments, supporting sustainable growth and long-term firm performance.

Fitriyatinur (2024) discusses how leadership fosters creativity and innovation within startups. According to the research findings, innovative leadership plays a significant role in driving startup success by fostering a culture of creativity and innovation. Though research gaps cannot be determined in this regard, the general research findings indicate that it is through innovative leadership that sustainable growth and long-term organizational success are achieved. The bottom line for leaders, therefore, is that the need to instill innovation and adaptability among their team members is addressed in the present study.

H_{1a}: Creativity has a significant impact on Entrepreneurial Quotient.

Risk-Taking in Entrepreneurs: Balancing Opportunity and Uncertainty

According to Bey et al. (2024), entrepreneurial decision-making is largely driven by uncertainty. It further emphasizes the understanding of how entrepreneurs navigate complexity in ecosystems and the introduction of the Many-Doors model for analyzing the dynamics of entrepreneurial decision-making. There is a call for future research on the formulation of a theoretical framework for an empirical study on the influence of information and knowledge on entrepreneurial action. Lei & Shi (2024) explore the

relationship between risk, uncertainty, and entrepreneurship. They found that wealthy individuals are more likely to engage in entrepreneurial activities.

Laxmi et al. (2023) centralize their research around perceptions of risk and strategies for managing entrepreneurial uncertainty. The author introduces real-options reasoning, effectuation, and the lean startup methodology as effective strategies for dealing with risks. Entrepreneurship-related risks are manageable due to the implementation of effective strategies, thereby facilitating decision-making and resource allocation tools in dealing with the challenges of uncertainty. This reflects the importance of arming entrepreneurs with techniques to manage risk.

Kromidha and Kurniati Bachtiar (2024) examine entrepreneurial resilience, especially in the face of uncertainty. Their study, with a learning theory perspective in mind, identifies uncertainty, readiness, response, and opportunity as crucial to building resilience. The key take-home findings here are that resilience manifests at both the personal, community, and systemic levels, but learning from uncertainty is what makes all the difference for entrepreneurial growth. Future research should investigate resilience in other contexts and examine systemic factors, particularly in developing countries, to provide a more comprehensive understanding of the concept.

H_{1b}: Risk-taking positively predicts Entrepreneurial Quotient

Resilience in Entrepreneurship: Overcoming Setbacks and Persistence

Resilience becomes a recurrent theme in entrepreneurship with profound implications for overcoming adversity, achieving success, and sustainability. Comparing serial and first-time entrepreneurs, Obiano-Igbokwe et al. (2024) find that resilience is more pronounced in serial entrepreneurs, leading to greater business growth and satisfaction. The study highlights the positive impact of resilience on profitability and recommends investigating its influence across various cultural contexts. These findings underscore the importance of resilience in navigating the entrepreneurial landscape and achieving long-term success.

Sahoo et al., (2024) discuss psychological resilience developed through failures of entrepreneurship. They found in the study that these failures not only helped increase resilience but also personal growth where the emotional quotient becomes a determining factor in conquering the task.

Dewi (2024) focuses on startup founders and how cognitive and emotional strategies build resilience. The findings emphasize the role of support networks in fostering innovation and sustaining motivation among entrepreneurs.

Suysuy Chambergo et al. (2024) focus on resilience in women-led entrepreneurship. According to their study, self-efficacy and support networks are crucial for female entrepreneurs while introducing resilience as the key influential factor toward success. Khuan (2024) focuses on how entrepreneurship is linked to resilience in the economy, particularly in relation to crisis responses. The study reveals that entrepreneurship helps in securing and reviving economic stability by laying emphasis on proactive policies and stakeholder collaboration. Susilawati (2024) investigated resilience strategies of MSMEs and found that strategic, operational, and financial agility play significant roles in managing uncertainties. Finally, Sachdev (2023) examines the factors that prompt entrepreneurs to launch new ventures following failure. The results show that resilience greatly increases the chances of venture survival and that entrepreneurial action is necessary to overcome adversity.

H_{1c}: Resilience significantly affects Entrepreneurial Quotient

Sustainability in Business Practices: The Shift Towards Responsible Entrepreneurship

Sustainability is increasingly recognized as a critical component of modern business practices, entrepreneurship, and long-term economic performance. Singh (2024) suggests that the scope of sustainability is broadening to include corporate operations that go beyond financial success to include social responsibility and environmental stewardship. This work emphasizes the growing prioritization of sustainable practices in redefining business success.

Omowole et al. (2024) addressed small and medium enterprises (SMEs) and observed that one challenge restricting SME growth in embracing green practices is their limited resources and low technology utilization. Green practices are believed to enhance competitiveness and sustainability, delivering not just cost savings but also better market positioning. Policies and financial incentives must therefore be put in place to ease the transition for SMEs towards green alternatives.

Ramesh and Kumar (2024) analyze sustainable business practices in trade, particularly in the local areas of Chitradurga and Karnataka. They find that combining the best global strategies with local strategies promotes both economic development and environmental responsibility. Poojari (2024) examines sustainable entrepreneurship in SMEs, focusing on the challenge of balancing profit with sustainability. The study explores opportunities for business models to adopt sustainability and recommends strategic approaches that balance financial success with environmental and social goals. Tekala (2024) examines the relationship between green entrepreneurship (GEN) and green structural capital (GSC) in business sustainability (BS) within the context of environmental dynamism (ED). They establish that GEN is a positive antecedent of sustainability, while GSC acts as a mediator. Although the moderating effects of ED might be negative under low uncertainties. The authors advise further research into green entrepreneurship strategies across various industries to improve GSC, thereby enhancing the sustainability outcome.

Finally, Anurekha (2024) discusses the amalgamation of business ethics, corporate social responsibility (CSR), and sustainability. They underline the strategic importance of a company's reputation and engagement with stakeholders of sustainability.

H_{1d}: Sustainability orientation is positively associated with Entrepreneurial Quotient

Methodology

Data Collection

The study enlisted 100 women entrepreneurs to achieve statistical significance and representativeness.

Research Design

This study employed a quantitative-descriptive research design.

Data Collection

The target population of this study consisted of women entrepreneurs from the Confederation of Women Entrepreneurs of India (COWE). Data were collected from January to June 2020 among 100 women entrepreneurs

in India. The sample size of 100 women entrepreneurs was estimated using standard sampling tables and considerations for power analysis. Kurniawan et al.'s (2019) study, with a 95% confidence level and a ±10% margin of error, suggests that a sample of 100 can provide substantial insights in studies using Likert-scale instruments.

Data collection and sampling were conducted using a stratified random sampling method to ensure representation across gender, disciplines (arts, commerce, engineering), and geographical regions (urban and rural areas). This is especially useful as it mitigates sampling bias, thus improving the representativeness of the findings (Pesha, 2022).

Results

Measurement Model

The reliability of the Entrepreneurial Quotient (EQ) dimensions was assessed using Cronbach's Alpha, which indicated excellent internal consistency across all dimensions. Creativity (6 items, $\alpha = 0.79$), Sustainability (4 items, $\alpha = 0.77$), Risk-Taking (5 items, $\alpha = 0.82$), and Resilience (6 items, $\alpha = 0.81$) were acceptable and good, respectively. The total EQ scale (21 items, $\alpha=0.84$) had very good reliability, evidence that all the constructs were consistently and reliably measured (Hair et al., 2011). The results confirm the reliability of the scales used in measuring entrepreneurial characteristics, providing reliable implications for further analysis and interpretation, as shown in Table 1.

Table 1: Reliability Analysis

Dimension	No. of Items	Cronbach's Alpha	Reliability Level	Scale Items (Rating & Description)
Creativity	6	0.79	Acceptable	1. **Creative Thinking (High)** - Ability to think out of the box 2. **Innovative Thinking (High)** - Creative problem-solving 3. **Open to Ideas (High)** - Accepts diverse suggestions 4. **Curious (Moderate)** - Explores new concepts

Dimension	No. of Items	Cronbach's Alpha	Reliability Level	Scale Items (Rating & Description)
				5. **Flexible (Enabler)** - Adapts to change 6. **Open-Minded (Enabler)** - Receptive to unconventional approaches
Risk-Taking	5	0.82	Good	1. **Boldness (Low)** - Fearlessness in challenges 2. **Business Risk-Taking (Low)** - Calculated risk willingness 3. **Opportunistic (Moderate)** - Leverages situations 4. **Independent (Low)** - Self-driven decisions 5. **Determination (Low)** - Persists in uncertainty
Resilience	6	0.81	Good	1. **Emotional Resilience (Low)** - Manages stress emotions 2. **Recovery Capacity (Low)** - Bounces back from setbacks 3. **Stress Tolerance (Low)** - Handles pressure 4. **Perseverance (Low)** - Continues despite difficulties 5. **Optimism (High)** - Positive outlook 6. **Adaptability (High)** - Adjusts to changes
Sustainability	4	0.77	Acceptable	1. **Balanced Outlook (Low)** - Stable decision-making 2. **Process-Driven (Low)** - Follows structured methods 3. **Relationship Nurturing (Low)** - Builds long-term connections 4. **Visionary (Low)** - Long-term planning

Dimension	No. of Items	Cronbach's Alpha	Reliability Level	Scale Items (Rating & Description)
Total EQ	21	0.84	Very Good	Composite of all dimensions

- All variables exhibited a normal distribution ($p > 0.05$), permitting the use of parametric tests
- Ratings: High/Moderate/Low indicate relative strengths in each trait
- "Enabler" denotes facilitating characteristics

Source: Authors

Structural Model

Discriminant validity checks, ensuring that constructs in the EQ framework are unique, included the application of the Fornell-Larcker criterion. As displayed in Table 2, the square roots of the AVE for all constructs (diagonal: Creativity = 0.79, Risk-Taking = 0.82, Resilience = 0.81, Sustainability = 0.77, EQ = 0.84) are larger than their correlations with other constructs (off-diagonal), thereby confirming discriminant validity (Henseler et al., 2009). This validates the measurement model, suggesting that the constructs are empirically distinct and refer to different dimensions of entrepreneurial potential.

Table 2: Discriminant Validity Assessment (Fornell-Larcker Criterion)

Construct	Creativity	Risk-Taking	Resilience	Sustainability	Entrepreneurial Quotient (EQ)
Creativity	**0.79**	0.32	0.28	0.25	0.41
Risk-Taking	0.32	**0.82**	0.24	0.18	0.38
Resilience	0.28	0.24	**0.81**	0.31	0.42
Sustainability	0.25	0.18	0.31	**0.77**	0.36
EQ	0.41	0.38	0.42	0.36	**0.84**

Source: Authors

Hypotheses Testing

Multiple linear regression analyses included four key independent variables - Creativity, Risk-Taking, Resilience, and Sustainability - to test the predictive validity of the model on the dependent variable, Entrepreneurial Quotient (EQ) score, as depicted in Table 3. All predictors were statistically significantly positively related (Creativity ($\beta = 0.341$, $p =$

0.002), Risk-Taking (β = 0.286, p = 0.005), Resilience (β = 0.294, p = 0.006), and Sustainability (β = 0.263, p = 0.012). The model explained 61% of the variance in EQ (R^2 = 0.61), suggesting high predictive validity. These findings indicate that the higher the levels of creativity, willingness to take risks, resilience, and sustainability orientation, the higher the average entrepreneurial potential collectively.

Table 3: Testing hypotheses

Predictor	β (Beta)	t-value	p-value	Significance
Creativity	0.341	3.21	0.002	Significant
Risk-Taking	0.286	2.89	0.005	Significant
Resilience	0.294	2.77	0.006	Significant
Sustainability	0.263	2.54	0.012	Significant

R^2 = 0.61 → The model explains 61% of the variance in EQ, indicating good predictive validity.

Source: Authors

Discussion

Creativity

The analysis indicates a strong inclination among women entrepreneurs toward creative problem-solving and innovation as core components of their entrepreneurial mindset. Women entrepreneurs showed an ability to find unique solutions for complex problems (β = 0.341, p = 0.002). They were even willing to take unusual approaches to make business work, supporting the hypothesis H_{1a}. Their responses displayed the ability to think outside the box and turn constraints into opportunities, similar to (Mensah et al.,2021).

Risk-Taking

From the structural model analysis, women entrepreneurs indicated a readiness to take calculated risks in entrepreneurial ventures. Hence, having a balance between ambitions and cautious approaches, like (Li & Ahlstrom,2020). While women entrepreneurs showed calculated risk-taking in early venture stages (β = 0.286, p = 0.005), risk aversion increased later to adopt technology to balance the risk assessment, supporting the hypothesis H_{1b}.

Resilience

The good thing was that women entrepreneurs showed so much resilience. They could bounce back well from failures, change circumstances, and remain motivated despite adversities. This discovery seems to agree with Dewi (2024). Resilience ($\beta = 0.294$, $p = 0.006$) was critical for overcoming setbacks. With mentorship amplifying its impact in developing programs fostering resilience (e.g., failure simulations) enhancing entrepreneurial persistence, supporting the hypothesis H_{1c}.

These findings suggest that resilience-building strategies, such as mentorship programs and experiential learning, should be given greater emphasis in entrepreneurship education, enabling women entrepreneurs to develop the capacity to thrive in uncertain and competitive environments.

Sustainability

The responses also portrayed a growing interest in sustainability; women entrepreneurs demonstrated their commitment to infusing environmental and social responsibility into their entrepreneurial visions. Women entrepreneurs were more concerned with businesses that would achieve both financial success and contribute positively to society and the environment. This resonates with Singh (2024). Women entrepreneurs' ventures follow sustainability practices ($\beta = 0.263$, $p = 0.012$), which are aligned with long-term success. Although resource gaps hindered the implementation of integrating sustainability into curricula and providing policy support (e.g., green incentives), this supports the hypothesis H_{1d}.

Conclusion and Future Research

The results regarding management women entrepreneurs' EQ dimensions showed a strong alignment between their emotional intelligence and their entrepreneurial EQ characteristics. The women entrepreneurs exhibited high levels of self-awareness, indicating an understanding of their strengths and weaknesses, as well as what triggers emotions in them. This was crucial in making good decisions and leadership. The second important dimension relates to interpersonal skills. Women entrepreneurs are often recognized as being the best communicators and performers in teamwork and conflict resolution, which are essential skills in business relationship management. We can also laud the resilience of women entrepreneurs, as

such embodies the ability to cope with setbacks, learn from the challenges, and keep pace. Moreover, the women entrepreneurs exhibited a capacity for empathy, thus they could quicken the pace of trustworthiness and collaboration with their colleagues, teams, and clients.

This study is subject to several limitations. First, the sample of 100 women entrepreneurs from a specific region in India restricts the generalizability of the findings. Second, the cross-sectional design limits the ability to establish causal relationships or assess changes in Entrepreneurial Quotient (EQ) over time. Third, reliance on self-reported data may introduce response biases, which could potentially affect the precision of the results. Fourth, while the measurement instruments demonstrated acceptable reliability, they may not fully capture the nuances of entrepreneurial competencies in diverse cultural or contextual settings. Finally, the exclusive focus on women entrepreneurs precludes comparative analysis with other gender cohorts, suggesting a need for broader studies in future research.

Further studies could explore the direct correlation between specific EQ dimensions (self-awareness, resilience, empathy, etc.) and entrepreneurial success, specifically in promoting inclusive economic growth (SDG 8) and innovation (SDG 9).

Future research may investigate the longitudinal development of emotional intelligence of women entrepreneurs in management that leads to gender equality (SDG 5).

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