

# Behaving Entrepreneurially, Remaining Resilient: Evidence from an Exploratory Study

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**Abstract**—This study explores the relationship between individual entrepreneurial orientation and entrepreneurial resilience, focusing on the behavioral dimensions of innovativeness, proactiveness, and risk-taking within entrepreneurship education. Although resilience has been extensively researched, its behavioral antecedents have frequently been neglected. The proposed model was empirically validated using partial least squares structural equation modeling (PLS-SEM) and SmartPLS 4, utilizing data from 120 final-year university students. Results indicate that each dimension of IEO positively influences entrepreneurial resilience, illuminating the behavioral mechanisms that underpin adaptability in entrepreneurship. These findings provide valuable preliminary insights into the effect of individual entrepreneurial orientation on entrepreneurial resilience. However, the limited sample size suggests the need for further research to validate these relationships in broader contexts.

**Keywords**— Individual entrepreneurial orientation - entrepreneurial resilience - entrepreneurial behavior - PLS-SEM

## I. INTRODUCTION

In complex and uncertain environments, entrepreneurs face challenges that can undermine their psychological resilience and adaptability [1]. Entrepreneurial resilience is acknowledged as an essential skill for individuals engaging in entrepreneurial ventures. It functions as an inherent mechanism for adapting to unforeseen circumstances, enabling individuals to tackle challenges, adjust to difficulties, maintain personal stability, and achieve sustained success [2]. Although resilience has emerged as a prominent subject in psychological literature, its examination is increasingly relevant within entrepreneurial studies [3]. However, limited research explores the individual and behavioral characteristics linked to entrepreneurs [4].

Individual entrepreneurial orientation (IEO) encompasses behaviors centered on risk-taking, innovation, and proactivity [5], [6]. Although the relationship between entrepreneurial intent and success is frequently examined, the link to entrepreneurial resilience is seldom addressed [7]. Furthermore, organizational studies often focus on entrepreneurial orientation while neglecting the individual perspective [8]. Recent studies emphasize the significance of analyzing entrepreneurial orientation at the micro level [9], suggesting that IEO may foster entrepreneurial resilience by nurturing behavioral traits that support adaptability and predispose individuals to develop resilience. Understanding the influence of IEO on resilience can illuminate the behavioral predictors of entrepreneurial success, highlighting the traits that enhance the capacity to thrive amid adversity.

This research investigates the impact of IEO on entrepreneurial resilience among students. The PLS-SEM approach was employed to empirically examine how individual entrepreneurial orientation serves as a predictor of entrepreneurial resilience.

Accordingly, this study addresses the following research question: To what extent does individual entrepreneurial orientation contribute to entrepreneurial resilience at the individual level?

II. ENTREPRENEURIAL ORIENTATION AND ENTREPRENEURIAL RESILIENCE

A. The Relationship Between Individual Entrepreneurial Orientation and Entrepreneurial Resilience

Recent research confirms that entrepreneurial orientation plays a significant role in enhancing organizational resilience through “anticipation, absorption, and adaptation” to external shocks [10]. Resilience is often understood as a three-step capacity process: anticipation, absorption, and adaptation [11]. This capacity process is closely associated with strategic postures, specifically the entrepreneurial orientation adopted by organizations.

The IEO is traditionally conceptualized as a junction of behavioral predispositions centered on innovation, proactivity, and risk-taking [5], [6]. These predispositions affect the perception of uncertainty and equip individuals with the capacity to formulate resilient responses. Entrepreneurial resilience refers to the capacity to endure and recover from challenges by utilizing psychological and behavioral resources [2], [12].

Several mechanisms help explain how IEO contributes to resilience. Proactivity involves anticipating change through absorption strategies known as ‘coping’ [11], thereby fostering resilience [13]. Innovation influences resilience by promoting experimentation and the reallocation of resources [14]. Risk-taking supports entrepreneurship in uncertain environments and facilitates learning from failures [2]. These interrelated mechanisms collectively contribute to strengthening entrepreneurial resilience.

Despite these theoretical arguments, empirical evidence directly linking IEO to entrepreneurial resilience remains limited [15]. Existing studies have largely focused on the relationship between resilience and entrepreneurial intentions [7], or examine entrepreneurial orientation and organizational resilience, particularly in emerging and post-COVID-19 contexts [16]. Although recent work has begun to examine the interplay between organizational entrepreneurial orientation and individual entrepreneurial resilience in small business settings [15]. Nonetheless, the individual level remains predominantly underexplored. Investigating this relationship therefore offers a promising research direction, especially in emerging countries characterized by environmental instability, where both entrepreneurial posture and resilience are critical.

B. Hypothesis Development

The theoretical review supports the existence of a relationship between entrepreneurial orientation and resilience. Accordingly, it is posited that individual entrepreneurial orientation positively influences entrepreneurial resilience. The hypotheses of the study are formulated as follows

H1: The innovativeness dimension of IEO has a positive effect on entrepreneurial resilience.

H2: The proactiveness dimension of IEO has a positive effect on entrepreneurial resilience.

H3: The risk-taking dimension of IEO has a positive effect on entrepreneurial resilience.

A conceptual model was developed and assessed utilizing SmartPLS 4 according to these assumptions.

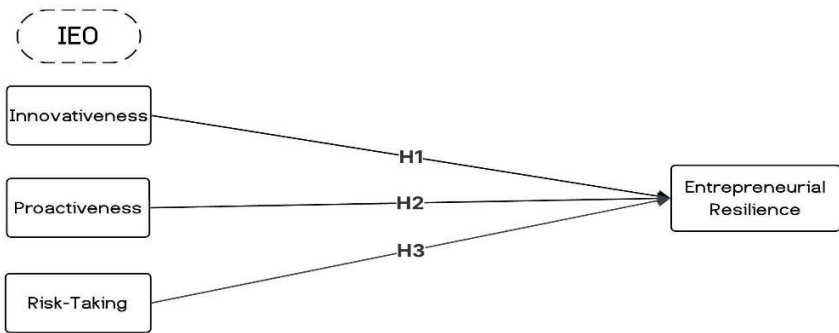


Fig. 1 Conceptual model of the impact of individual entrepreneurial orientation on entrepreneurial resilience

III. METHODOLOGY

This study applies PLS-SEM to data from 120 university students collected via a questionnaire during the 2024/2025 academic year. A Likert scale was utilized to assess entrepreneurial resilience [17] while the individual entrepreneurial orientation was measured using a validated scale [5]. Control variables, specifically gender and level of education, were integrated into the study.

IV. RESULTS

A. Profile of Respondents

The sample consists of 120 students in their final year of bachelor’s or master’s programs at various business universities across Tunisia. Students were intentionally selected based on their completion of entrepreneurship modules, which potentially cultivates a strong entrepreneurial orientation. Gender distribution is balanced, with 47.5% identifying as male and 52.5% as female. Regarding educational levels, 58.83% of respondents are pursuing a bachelor’s degree, while 41.16% are in their second year of a master’s program. All respondents belong to Generation Z.

B. Results

Table I presents the total path coefficients for the construct relationships used in hypothesis testing. Hypothesis testing was conducted using the bootstrapping method with 5,000 resamples. Individual entrepreneurial orientation significantly contributes to explaining 38.9% of the variance in entrepreneurial resilience ( $R^2=0.389$ ).

TABLE I TOTAL PATH COEFFICIENTS				
Structural Relationships	$\beta$ (O)	t- value	p-value	95% Bias-Corrected CI
Innovativeness → Entrepreneurial Resilience	0.213	2.033	0.042	[0,012 ; 0,423]
Proactiveness→ Entrepreneurial Resilience	0.237	2.028	0.043	[0,017 ; 0,471]
Risk Taking → Entrepreneurial Resilience	0.297	3.197	0.001	[0,115 ; 0,478]
Gender→ Entrepreneurial Resilience	-0.161	1.804	0.071	[-0,346 ; 0,003]
Educational Level → Entrepreneurial Resilience	0.106	0.378	0.705	[-0,402 ; 0,690]

The results shown in Table I indicate that the three dimensions of the IEO positively and significantly influence entrepreneurial resilience. The innovativeness dimension of the IEO exhibits a significant positive contribution to entrepreneurial resilience below the 5% threshold ( $\beta=0.213$ ;  $p=0.042$ ); thus, hypothesis H1 is confirmed. The proactiveness dimension of the IEO demonstrates a significant positive effect at the 5% threshold ( $\beta=0.237$ ;  $p=0.043$ ), confirming H2. Additionally, the risk-taking dimension of the IEO shows a significant positive effect at the 1% threshold ( $\beta=0.297$ ;  $p=0.001$ ), validating H3. The control variables of gender and education level exert no influence on entrepreneurial resilience, as their confidence intervals encompass 0.

Following the examination of the path coefficients, the practical significance of these relationships was evaluated through effect sizes analysis. Established guidelines state that  $f^2$  values of 0.02, 0.15, and 0.35 represent small, medium, and large effect sizes, respectively [18]. Innovativeness ( $f^2=0.038$ ) exerts a small effect on entrepreneurial resilience. Similarly, proactiveness ( $f^2=0.056$ ) also exerts a small effect size, slightly higher than innovativeness. Risk taking ( $f^2=0.093$ ) remains within the small effect size range, though approaching the threshold for a medium effect.

Following the analysis of effect sizes, the model's predictive relevance was assessed using the Stone–Geisser  $Q^2$  statistic. A  $Q^2$  value of 0.24 indicates a moderate degree of predictive relevance [18], implying that the model's forecasts are more accurate than those from a baseline model lacking structural relationships. This interpretation aligns with methodological recommendations suggesting that a positive  $Q^2$  value is sufficient to indicate acceptable predictive relevance within the PLS-SEM framework.

## V. DISCUSSION

Overall, the findings uphold the relevance of IEO in understanding entrepreneurial resilience, while sociodemographic variables appear to play a secondary role. The results indicate a positive association between IEO and entrepreneurial resilience, in line with prior research [13], [16]. This suggests that IEO-related behaviors can function as psychological resources that support individuals in dealing with uncertainty and adversity [19].

These findings should nevertheless be interpreted with caution. The theoretical grounding of the IEO–resilience relationship at the individual level remains limited, as most existing studies adopt an organizational perspective. In addition, the relatively small sample size ( $N = 120$ ) restricts the generalizability of the results. Moreover, the conceptual model focuses exclusively on IEO as an antecedent of entrepreneurial resilience. While appropriate for an exploratory study, this approach does not account for other psychological or contextual factors that may help clarify the underlying mechanisms.

Despite these limitations, the results underline the relevance of IEO as a foundation for entrepreneurial resilience. They point to the importance of developing individual behavioral and psychological capacities that support adaptation in challenging business environments. From a theoretical perspective, this opens avenues for future research to integrate additional psychological resources, such as emotional intelligence or mindfulness [20], particularly given their role in reducing emotional reactivity [21]. From a practical standpoint, the findings suggest that entrepreneurial support initiatives may benefit from placing greater emphasis on individual psychological skills, including emotion regulation, tolerance for ambiguity, and cognitive endurance.

## V. CONCLUSION

The results highlight a positive association between each dimension of IEO and entrepreneurial resilience. Theoretically, this research underscores the connection between entrepreneurial behavior and entrepreneurial resilience at the individual level within an emerging context, a domain that remains largely uncharted. Practically, this exploratory study represents an initial step toward real-world applications involving actual entrepreneurs. It emphasizes the importance of understanding how entrepreneurial behaviors help sustain resilience amid uncertainty and setbacks. Future research should expand the empirical framework by assessing the model's robustness with experienced entrepreneurs and exploring the specific mechanisms through which entrepreneurial behaviors bolster entrepreneurial resilience amid complex business environments.

## REFERENCES

- [1] E. Kromidha and N. K. Bachtar, "Developing entrepreneurial resilience from uncertainty as usual: a learning theory approach on readiness, response and opportunity," *International Journal of Entrepreneurial Behavior & Research*, vol. 30, no. 4, pp. 1001–1022, 2024.
- [2] J. C. Ayala and G. Manzano, "The resilience of the entrepreneur: Influence on the success of the business. A longitudinal analysis," *Journal of Economic Psychology*, vol. 42, pp. 126–135, 2014.
- [3] S. Korber and R. B. McNaughton, "Resilience and entrepreneurship: A systematic literature review," *International Journal of Entrepreneurial Behavior & Research*, vol. 24, no. 7, pp. 1129–1154, 2018.
- [4] R. Fisher, A. Maritz, and A. Lobo, "Does individual resilience influence entrepreneurial success?," *Academy of Entrepreneurship Journal*, vol. 22, no. 2, pp. 39–53, 2016.
- [5] D. L. Bolton and M. D. Lane, "Individual entrepreneurial orientation: Development of a measurement instrument," *Education + Training*, vol. 54, no. 2/3, pp. 219–233, 2012.
- [6] J. G. Covin and D. P. Slevin, "Strategic management of small firms in hostile and benign environments," *Strategic Management Journal*, vol. 10, no. 1, pp. 75–87, 1989.

- [7] V. Frunzaru and D. M. Cismaru, "The impact of individual entrepreneurial orientation and education on Generation Z's intention towards entrepreneurship," *Kybernetes*, vol. 50, no. 7, pp. 1969–1981, 2021.
- [8] N. Guevara-Otero, A. M. Vargas-Pérez, M. Segovia-Pérez, and P. Laguna-Sánchez, "Factors that determine the level of individual entrepreneurial orientation: Profiles of university students," *International Entrepreneurship and Management Journal*, vol. 21, no. 1, p. 56, 2025.
- [9] W. J. Wales, J. G. Covin, and E. Monsen, "Entrepreneurial orientation: The necessity of a multilevel conceptualization," *Strategic Entrepreneurship Journal*, vol. 14, no. 4, pp. 639–660, 2020.
- [10] J. Hillmann and E. Guenther, "Organizational resilience: A valuable construct for management research?," *International Journal of Management Reviews*, vol. 23, no. 1, pp. 7–44, 2021.
- [11] S. Ducheck, "Organizational resilience: A capability-based conceptualization," *Business Research*, vol. 13, no. 1, pp. 215–246, 2020.
- [12] A. Bullough and M. Renko, "Entrepreneurial resilience during challenging times," *Business Horizons*, vol. 56, no. 3, pp. 343–350, 2013.
- [13] T. A. Williams, D. A. Gruber, K. M. Sutcliffe, D. A. Shepherd, and E. Y. Zhao, "Organizational response to adversity: Fusing crisis management and resilience research streams," *Academy of Management Annals*, vol. 11, no. 2, pp. 733–769, 2017.
- [14] C. A. Lengnick-Hall, T. E. Beck, and M. L. Lengnick-Hall, "Developing a capacity for organizational resilience through strategic human resource management," *Human Resource Management Review*, vol. 21, no. 3, pp. 243–255, 2011.
- [15] N. Gottschalck, K. Branner, L. Rolan, and F. Kellermanns, "Cross-level effects of entrepreneurial orientation and ambidexterity on the resilience of small business owners," *Journal of Small Business Management*, vol. 62, no. 1, pp. 103–139, 2024.
- [16] S. Zighan, M. Abualqumboz, N. Dwaikat, and Z. Alkalha, "The role of entrepreneurial orientation in developing SMEs' resilience capabilities throughout COVID-19," *The International Journal of Entrepreneurship and Innovation*, vol. 23, no. 4, pp. 227–239, 2022.
- [17] G. Manzano-García and J. C. A. Calvo, "Psychometric properties of the Connor–Davidson Resilience Scale in a Spanish sample of entrepreneurs," *Psicothema*, vol. 25, no. 2, pp. 245–251, 2013.
- [18] J. F. Hair Jr, L. M. Matthews, R. L. Matthews, and M. Sarstedt, "PLS-SEM or CB-SEM: Updated guidelines on which method to use," *International Journal of Multivariate Data Analysis*, vol. 1, no. 2, pp. 107–123, 2017.
- [19] S. Nautiyal and P. Pathak, "A resilient path to prosperity: Understanding the impact of entrepreneurial resilience on SMEs," *Journal of Global Entrepreneurship Research*, vol. 14, no. 1, p. 8, 2024.
- [20] M. M. Sulphrey and M. Klepek, "A study on the antecedents of individual entrepreneurship orientation of female students: An examination using structural equation modeling," *Sage Open*, vol. 14, no. 2, p. 21582440241249831, 2024.
- [21] Y. Indrianti, S. Sasmoko, S. B. Abdinagoro, and R. K. Rahim, "A resilient startup leader's personal journey: The role of entrepreneurial mindfulness and ambidextrous leadership through scaling-up performance capacity," *Heliyon*, vol. 10, no. 3, p. e34285, 2024.