

RESEARCH ARTICLE

Relationships between well-being, resilience, leadership, and perceived success in SME owners-managers of Ecuador

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ABSTRACT

This paper aims to provide a comprehensive understanding of entrepreneurial success among owners and managers of Ecuadorian SMEs through the relationship between variables such as business efficiency, psychological resilience and perceived entrepreneurial leadership. We surveyed 385 SME owners and managers in Ecuador and employed hierarchical linear modeling to analyze the data. The findings of this article suggest that entrepreneurial well-being, psychological resilience, and entrepreneurial leadership perceived by owners and managers of Ecuadorian SMEs are positively correlated with entrepreneurial success. There may be a tendency to associate success with economic performance. The practical implications of this study are that owner-managers of SMEs can use the developed measurement scale to evaluate their success and identify areas where they may need support or improvement and develop strategies to foster the best possible business experience. The study also provides insights into factors affecting entrepreneurial success and highlights the importance of promoting a positive entrepreneurial experience. In addition, the study contributes to literature by identifying some limitations and identifying areas for future research.

Keywords: business success; well-being; resilience; leadership; micro-enterprise; small enterprise; small enterprise;

1. Introduction

Despite the crucial role of SMEs, there is limited understanding of how factors like well-being, leadership, and resilience influence their perceived success, especially in regions like Ecuador. Small and medium enterprises (SMEs) play a significant role in the economy and society^[1,2]. Their success or failure can have implications for job creation economic growth and community development in many countries this is one of the reasons why studying perceived entrepreneurial success in SMEs helps to understand the factors that contribute to their growth and sustainability^[3]. Perceived entrepreneurial success provides insights into how entrepreneurs themselves evaluate their achievements and satisfaction with their businesses^[4] and allows for a more comprehensive and holistic understanding of success beyond traditional economic indicators an facilitate a better understanding of the unique challenges and opportunities faced by small business owners^[5–8].

There is a strong academic interest in identifying factors that are vital to SMEs success^[5,9]. Many studies of perceived entrepreneurial success have been conducted in developed countries but some author point out

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that there is a need for more research to understand the unique challenges and opportunities faced by entrepreneurs in these contexts^[3,10,11].

Perceived entrepreneurial success has been sparsely studied among entrepreneurs in the Ecuadorian context, our study contributes to the ongoing exploration and understanding of this concept. According to the last Global Entrepreneurship Monitor (GEM) Ecuador 2019–2020 report, the country's entrepreneurial activity rate (EAR) increased by 5.7 percentage points since 2017 reaching 36.2% ^[12]. This increase is almost exclusively due to an increase in the share of nascent entrepreneurs. Entrepreneurship in Ecuador during 2022 and the first half of 2023 has shown significant growth and experts believe that 2023 will bring greater challenges not only for entrepreneurs but also for other citizens who see entrepreneurship as a solution to generate income^[13].

The authors of this research note that this research is needed to develop a more comprehensive understanding of entrepreneurial success among Ecuadorian SMEs owner—managers^[14]. Understanding the factors that influence perceived entrepreneurial success allows entrepreneurship to be presented as a viable career option beyond financial success this can attract a wider range of individuals to entrepreneurship and contribute to the growth and sustainability of existing SMEs^[6,15].

The literature reviewed includes studies that relate perceptions of entrepreneurial success to entrepreneurial leadership^[16,17], entrepreneurial well-being^[8,18] and psychological resilience^[5,9]. The fact that these three important variables have been examined together in the Ecuadorian context for the first time is a strength of this study. This research aims to test the hypothesis that higher levels of entrepreneurial well-being, effective leadership, and psychological resilience lead to increased perceived entrepreneurial success among SME owner-managers in Ecuador. To address this, we will employ a combination of quantitative surveys and qualitative interviews with Ecuadorian SME owner-managers. Given the established significance of these factors in the literature, we anticipate a strong correlation between them and perceived entrepreneurial success in the Ecuadorian context.

1.1. Entrepreneurial success

Perceived entrepreneurial success is a multidimensional construct that includes both personal and business variables^[13–15]. Perceived entrepreneurial success refers to the subjective evaluation or perception of an entrepreneur's achievements and accomplishments in their entrepreneurial career. It is based on the entrepreneur's own perception of success rather than external or objective measures of success^[14,15]. Entrepreneurs perceive themselves as successful when they achieve personal and business performance goals^[3,4].

Many authors acknowledge that the self-reported nature of this variable does not measure actual success, but rather focuses on how satisfied the entrepreneur is with his or her personal life and business achievements^[3,9,11]. This kind of success can be perceived differently by individuals and depends on many factors^[4,5,10,15]. Sometimes, this perception of the owner-manager is not even linked to the level of success they have achieved in their business. It only takes into account the individual's own assessment of their performance, satisfaction and confidence in their abilities as an entrepreneur, and how they evaluate their performance in relation to their expectations and aspirations^[2,7,10]. This highlights the importance of considering subjective criteria and perspectives when measuring entrepreneurial success.

Research on perceived entrepreneurial success has evolved from a focus on objective measures of success, such as financial performance and business growth, to a more subjective and multidimensional understanding of success that takes into account the entrepreneur's own perceptions of success^[4,7,14]. In the early 1970s, Granovetter^[19] introduced the concept of 'strength of weak ties', suggesting that weak ties in social networks

can provide valuable resources and information for entrepreneurial success.

Later studies began to incorporate psychological factors, such as self-efficacy and psychological capital, into the understanding of business perceptions^[20]. At the beginning of this century, Shane^[21] emphasized the importance of prior knowledge in the discovery of entrepreneurial opportunities, highlighting the role of knowledge and experience in entrepreneurial success. More recent studies have highlighted the importance of resilience, adaptability and innovation in shaping perceived entrepreneurial success^[22]. Recent research has attempted to explain the causes of success in terms of predictors related to the entrepreneur's personality, education, age, personal and family security, relationships with employees and stakeholders, social value creation, self-realization and spirituality, which are important indicators of the owner-manager's overall well-being^[2]. Other variables such as specific business characteristics (years of operations, economy sector, sales stratum) and environmental conditions faced by the business^[3,9,11].

Overall, the evolution of research on perceived entrepreneurial success has shifted from focusing solely on objective measures to incorporating subjective evaluations, psychological factors, social capital, and resilience, reflecting a more holistic understanding of entrepreneurial success and better reflecting the reality of entrepreneurship^[1,2,4,5,7,10,11,14].

Despite the importance of its study, we have identified several limitations in previous studies about perceived entrepreneurial success^[4,5,9,10]. The most significant obstacle is the subjective nature of perceived success, as it is. This subjectivity, influenced by individual perspectives and cultural factors, makes it difficult to measure and compare across different contexts^[10]. Another limitation observed, derived from the previous one, is that the measurement of perceived entrepreneurial success is often based on self-reported data, which can be subject to bias and social desirability effects^[9–11]. Following the analysis of previous limitations, Wach et al.^[3] acknowledge the complexity of the concept and underline the temporal aspect of entrepreneurial success, which may be transitory and achieved at a particular point in time. For this reason, they suggest a stepwise approach to examine the individual antecedents and contextual factors that contribute to perceived entrepreneurial success.

1.2. Entrepreneurial well-being

Although entrepreneurial well-being has been widely studied at the macro level, and there has been a recent increase in research on this topic, but that there is a lack of studies at the individual level^[23]. Even from a macro perspective, it is possible to analyze the work of Pathak^[24], who explores the likelihood that societal-level well-being and country-level self-expression values positively influence individual entrepreneurship across countries. Nevertheless, some authors point out that there are still few studies in the literature to understand entrepreneurial well-being, especially on an individual level^[8,25,26].

Entrepreneurial well-being is defined as an individual's overall satisfaction with their life and work as an entrepreneur^[25,27,28]. It includes their psychological and emotional state, positive affect, sense of happiness, fulfilment, and positive emotions derived from their entrepreneurial activities such as developing, starting, growing, and running an entrepreneurial venture^[18,29,30].

Studying entrepreneurial well-being is important for several reasons. Today, entrepreneurship is a prevalent option in many parts of the world, so studying entrepreneurial well-being allows us to understand whether this business option contributes from their perspective to the essential goal of human existence: well-being^[18,25]. Entrepreneurship is rarely linear and smooth, and the well-being of entrepreneurs can have significant spillover effects on the perceived success and sustainability of business projects^[25,27,30].

Interesting links have been found between entrepreneurship and various manifestations of subjective well-

being, for example higher levels of happiness and life satisfaction have been shown to improve people's productivity, creativity, and physical health, making happy and life-satisfied people an asset to society^[29]. Another interesting finding comes from Sherman et al.^[27] who found that entrepreneurs who experience a decline in well-being are more likely to suffer from burnout and may close their businesses. Furthermore, entrepreneurial well-being is related to job engagement, which is a predictor of entrepreneurial success^[26,27].

Overall, is expected that SMEs owner managers who have higher levels of well-being are more likely to stay engaged in their business for a longer period, because this level of personal and professional satisfaction increasing their perception of success as entrepreneurs^[18,27].

1.3. Entrepreneurial leadership

Entrepreneurial leadership is a relatively new area of research, and the literature suggests that there is still much to learn about it^[6,31]. In general, it can be said that entrepreneurial leadership is a style exhibited by owner-managers in business contexts that combines leadership potential with entrepreneurial spirit^[32–34]. This style involves the ability to influence others to achieve organizational goals, which involves in searching for business opportunities, opportunity recognition, and opportunity exploitation, marshalling the necessary resources to capitalize on them^[6,35]. An interesting proposal is the one of Bagheri and Harrison^[36], which assesses eight dimensions: facing challenges, reducing uncertainty, supporting, generating commitment, defining severity, identifying and taking advantage of opportunities, learning orientation and creating collective self-efficacy. The combination of these dimensions allows the classification of leadership into five styles Transformational, Inspirational, Collaborative, Transactional and Passive.

Entrepreneurial leadership involves creating a vision, the need to achieve it and taking risks in the process^[17,25,31] and fostering a culture and innovative climate of innovation^[16,37]. This behavior facilitated, encouraged, and empowered employees to use their intellectual capacity by valuing and supporting their new ideas and novel insights^[31,34]. An Entrepreneurial leadership involve a transformational entrepreneurial leader seeks to transform and elevate the level of motivation and commitment of their team. They inspire through a compelling vision, foster innovation and personal growth, and motivate team members to surpass their own expectations.

Understanding entrepreneurial leadership allows you to identify people who are more likely to succeed in ventures^[6,17,33]. This is especially true for SMEs functioning in complicated and volatile business contexts, where creativity is frequently a significant source of competitive advantage^[6,17,37]. The study of entrepreneurial leadership is significant because it gives light on the role of leadership in stimulating entrepreneurship, driving organizational success, and improving overall effectiveness^[6,16,17,31,32].

To reinforce the above idea, some examples can be cited as follows, Ravet-Brown et al.^[6] pointer that entrepreneurial leadership is associated with higher levels of entrepreneurial success, also Nguyen et al.^[17] mention that entrepreneurial success is associated with leaders who encourage followers to think and act creatively and innovatively. The study by Mehmood et al.^[37] emphasizes that organizations seeking to enhance their creativity and innovation should pursue business leaders who can effectively lead and inspire their employees to achieve entrepreneurial success. Similarly, the studies of Li et al.^[32] Mishra and Misra^[16] and Yusuf Esmer^[34] suggest that organizations with leaders who possess entrepreneurial leadership qualities are more likely to achieve success.

1.4. Psychological resilience

According to a theoretical review of psychological resilience^[38,39], the concept and theory of resilience has evolved from "equilibrium" to "adaptation" and from "single ecosystems" to "social-ecological complex

systems". Sisto et al. [40] present resilience as the ability to maintain the persistence of one's orientation towards existential goals, which is perhaps general, but from a theoretical point of view very close to the issue of entrepreneurship. However, the literature provides different perspectives on the definition of psychological resilience. Nevertheless, some regularities can be identified within the definitions analysed.

Psychological resilience is manifested in the process of interaction between individuals and the environment^[41,42], where the individual who possesses this psychological trait exhibits the behavioral tendency to change to adapt to changing environments and the ability to recover from adversity maintain or regain mental health and well-being and continue to function at a relatively high level of performance despite experiencing significant life and business challenges^[41,43,44]. In summary psychological resilience is related to both exposure to turbulent and complex environments that present challenges to success and how entrepreneurs respond to this adversity through affective cognitive and behavioral strategies based on their inherent capacities to achieve positive outcomes as a demonstration of resilience^[42].

This paper recognizes the importance of psychological resilience in the context of SMEs because entrepreneurs face a variety of challenges and adversities including financial difficulties market competition and regulatory changes among others all of which can have an impact on their well-being and final perception of success^[41,43]. Psychological resilience can assist entrepreneurs in coping with and overcoming these problems, resulting in improved well-being. Furthermore, resilience can assist entrepreneurs in adapting to changing circumstances and innovating, which is critical for the survival and success of As a result, psychological resilience is connected with a variety of beneficial outcomes for SMEs, including innovation, self-efficacy, self-confidence, willingness to succeed, optimism, creativity, and resilience, all of which can lead to improved business performance and success Entrepreneurs that are resilient are more likely to take measured risks, learn from failures, and persevere in the face of adversity, which can boost their competitiveness and success.

The literature shows evidence of relationships between psychological resilience and success in the context of SMEs. Santoro et al.^[4] found that perceived resilience of entrepreneurs is positively associated with their perception of success. Hartmann et al.^[42] point put that resilient entrepreneurs are more likely to persist in the face of challenges learn from failures and adapt to changing circumstances which can enhance their performance and competitiveness over time however this author notes that the relationship between psychological resilience and success is complex and may depend on various contextual factors such as the type of industry the stage of venture development and the level of competition. The results of Chadwick and Raver^[45] show that psychological resilience helps nascent entrepreneurs become less vulnerable to their stressful circumstances which in turn increases their business survival.

2. Materials and methods

This study used a sampling frame of SMEs from National Institute of Statistics and Censuses of Ecuador, representing an infinite population^[46]. Sampling was developed using IBM SPSS 25. This software provides an option that facilitates the selection of a sample based on the provided sampling frame and the calculated sample size.

Table 1 provides a summary of the description of the final sample participants calculated to estimate the proportion at a 95 % confidence level ($Z_{\alpha} = 1.96$); p = q = 0.50 and a 5% margin of error.

Table 1. Demographic data.

Variables		Frequency	Percent
Economy sector	Agriculture, livestock, forestry and fisheries	45	11.7
	Manufacturing industries	21	5.5
	Trade	137	35.6
	Construction	23	6.0
	Services	159	41.3
Sales stratum business	Micro	180	46.8
	Small	170	44.2
	Medium	35	9.1
Sex	Female	115	29.9
	Male	270	70.1
Education	High school or less	43	11.2
	Some college	148	38.4
	College graduate	91	23.6
	Post-graduate	103	26.8
Total sample: 385 SMEs			

2.1. Measures

With the SMEs identified, their location was located, and the cooperation of their owner-managers was sought to participate in the study. Participants completed a battery of questionnaires, including measures of perceived entrepreneurial success, entrepreneurial well-being, entrepreneurial leadership and psychological resilience. The reliability of these questionnaires was analyzed in the context in which they were to be applied. The results are explained below.

The Perceived entrepreneurial success questionnaire focuses on SMEs owner-managers' perception of how successful they have been as entrepreneurs. The design of this questionnaire was based on previous studies from which those items most relevant to the present study were assumed^[1,3,4,7,11,15,47]. The Perceived entrepreneurial success questionnaire is a 15-item version that measures three areas: Firm performance, Relationships and Community impact. It is self-administered and evaluates each item from 0 (Minimum) to 100 (Exceptional). The reliability of this questionnaire was calculated using McDonald's ωt (0.711). This indicator expresses better than Cronbach's ω (0.721) the reliability of a continuous variable such as that measured by this instrument^[48].

This study also used the 17-item Entrepreneurial well-being Scale. The questionnaire uses scales ranging from 1 to 7, with 7 representing a very favorable state of well-being and 1 representing an unfavorable state. This scale differs from other Entrepreneurial well-being questionnaires in that it focuses on measuring well-being with life in general and with life because of having developed an entrepreneurship. In order to design this questionnaire, several research studies were consulted and the items most relevant to this research were selected [49–54]. The reliability of the questionnaire was calculated and showed a McDonald's ω t and Cronbach's α of 0.911.

The questionnaire used to measure Entrepreneurs' Leadership is the one proposed by Bagheri and Harrison^[36]. The 43 items are rated on a seven-point Likert scale ranging from (1) "Definitely does not apply to me", to (7) "Definitely applies to me". There is a high internal consistency in general (McDonald's ω t and Cronbach's α of 0.978), and reliability for the subscales range from 0.744 to 0.915. The authors of this research

agreed to analyze the items that made up the dimensions proposed by the aforementioned authors to classify leadership styles, which were classified as follows:

Passive Leadership: A passive entrepreneurial leader adopts a more laissez-faire approach, providing minimal direction and direct control. They encourage autonomy and individual decision-making within their team, relying on self-regulation and the expertise of team members.

Transactional Leadership: A transactional entrepreneurial leader focuses on establishing clear agreements and transactions with their team. They emphasize rewarding and recognizing individual achievements and the fulfillment of set goals through pre-defined incentives and consequences.

Collaborative Leadership: A collaborative entrepreneurial leader prioritizes collaboration and active participation of all team members in decision-making and problem-solving. They foster open communication, teamwork, and the creation of an inclusive environment.

Inspirational Leadership: An inspirational entrepreneurial leader has the ability to motivate and guide their team through effective communication, creating an inspiring vision, and demonstrating passion and commitment. They inspire others to reach their full potential and pursue audacious goals.

Transformational Leadership: A transformational entrepreneurial leader seeks to transform and elevate the level of motivation and commitment of their team. They inspire through a compelling vision, foster innovation and personal growth, and motivate team members to surpass their own expectations.

The Psychological resilience questionnaire is a 25-item measure from 7 (completely agree) to 1 (completely disagree). The scale was constructed following the analysis of the work of Shi et al. [55]. and Ahern et al. [56]. The 25 items comprising the scale showed a McDonald's ω t and Cronbach's α of 0.965.

Total baseline scores were calculated for each of the scales. Finally, assumptions allowing for hierarchical regression analysis were tested to determine how much of the variance in Perceived entrepreneurial success was explained by demographic variables, business characteristics, Entrepreneurial well-being, Entrepreneurial leadership and Psychological resilience.

Hierarchical regression, or hierarchical linear modelling, is a subset of regression methods that attempt to generate theory-driven evidence for a given effect^[57]. In hierarchical regression, predictor variables are entered into the model in predetermined iterations to see how the change in r-squared is affected. Hierarchical regression analysis is performed in iterations. The most important aspect of running hierarchical regression is that there is a sound methodology, based on the empirical literature, for the order of entry into the model. There must be a theoretical, conceptual or physiological link that determines the nature of the order of entry into the hierarchical linear model^[58,59].

Our model consisted of five steps in which two demographic variables were entered first as control variables, followed by two business characteristics and then entrepreneurial well-being, entrepreneurial leadership and finally psychological resilience. In order to determine if the sample size is the most appropriate for this type of study, the formula proposed by $Green^{[60]}$ was used: n > 50 + 8 m (where m is the number of independent variables). Following Austin and Steyerberg^[61], this formula suggests that with seven variables a sample of 106 participants is the minimum number of participants required to detect a statistically significant result. This result is much lower than the calculated sample size of 385, which is an adequate sample size for the study.

2.2. Results

The univariate information on the variables analyzed is shown in **Table 2**.

Table 2. Univariate information.

Variables		Frequency	Percent
Perceived entrepreneurial success	Exceptional	61	15.8
	Notable	184	48
	Moderate	124	32
	Below Average	16	4
Entrepreneurial well-being	Energized	43	11
	Fulfilled	108	28
	Thriving	131	34
	Stressed	77	20
	Overwhelmed	26	7
Entrepreneurial leadership	Transformational	90	23
	Inspirational	138	36
	Collaborative	15	4
	Transactional	82	21
	Passive	60	16
Psychological resilience	Exceptional	68	18
	Strong	121	31
	Established	29	8
	Intermediate	77	20
	Developing	90	23

The data show that most respondents perceive their entrepreneurial success as either Notable (48%) or 'Moderate' (32%). Only a small proportion consider their success to be 'exceptional' (15.8%), while an even smaller proportion consider it to be 'below average' (4%).

The most common state of entrepreneurial well-being among respondents is 'thriving' (34%), followed by 'fulfilled' (28%). A considerable proportion feel stressed (20%) or overwhelmed (7%), while a smaller group report feeling 'Energized' (11%). The analysis shows that 'inspirational' leadership (36%) is the most common perception among entrepreneurs, followed by 'transformational' leadership (23%). 'Transactional' (21%) and 'Passive' (16%) leadership styles are also notable, while 'Collaborative' leadership is the least common (4%).

In terms of psychological resilience, the largest group rate their resilience as 'Strong' (31%), followed by 'Developing' (23%) and 'Intermediate' (20%). A smaller proportion consider their resilience to be 'exceptional' (18%), while 'established resilience' is the least common (8%). By examining these variables, we can gain insights into entrepreneurs' perceptions of their success, well-being, leadership style, and psychological resilience.

The Shapiro Wilk p-value is not significative (0.22) and we assume that the dependent variable is normally distributed. To examine the amount of variability in perceived entrepreneurial success we analyze three independent variables, entrepreneurial well-being, entrepreneurial leadership and psychological resilience controlling for demographic characteristics (education, age) and business characteristics (years of operations, economy sector, sales stratum).

The independent variables were examined for collinearity, none of them are highly correlated with each other, but at the same time all of them show correlations are significant. Results of tolerance with values

over .10 and variance inflation factor (all less than 2.0) suggest that the estimated β s are well established in the following regression models with no multicollinearity. Analyzing Cook's Distance with the maximum under 1, and the minimum and maximum of standard residual are between -2.715 and 2.045 is possible to say that there are no significant outliers in the data. Furthermore, the data met the assumption of independent errors (Durbin-Watson = 1.642). As we see in **Figure 1** the residuals (errors) are approximately normally distributed.

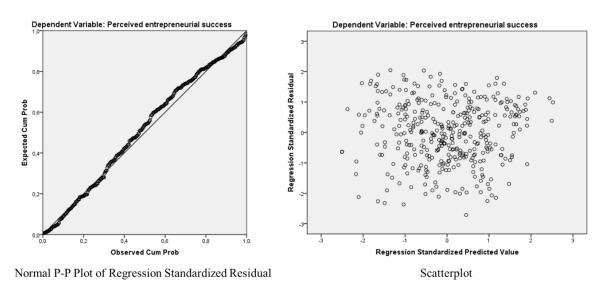


Figure 1. Normality, linearity, homoscedasticity.

The means and standard deviations for the measures are shown in **Table 3**.

Std. Deviation Minimum Maximum Mean N Perceived entrepreneurial success 49.5355 7.89504 25.87 68.93 385 42.97 12.682 18 70 385 Age 1 Education 2.66 0.993 4 385 9.078 Years of operations 14.31 2 57 385 Sales stratum 1.62 0.646 3 385 Entrepreneurial well-being 4.0672 0.96190 1.71 6.29 385 3.9923 Entrepreneurial leadership 1.22757 1.63 5.91 385 Psychological resilience 3.7481 1.27076 1.60 5.92 385

Table 3. Descriptive statistics.

Correlations were computed for each variable. **Table 4** demonstrates the correlation matrix. The strongest positive correlation was observed between Perceived entrepreneurial success and Entrepreneurial well-being (r(385) = 0.494, p < 0.001) and Entrepreneurial leadership (r(385) = 0.47, p < 0.001). Additionally, there was also a negative correlation between Perceived entrepreneurial success and age, r(385) = -0.135, p < 0.001.

Table 4. Correlation matrix.

	1	2	3	4	5	6	7	8
Perceived entrepreneurial success	1	-0.135**	0.286**	0.416**	0.200**	0.494**	0.470**	0.446**
Age	-	1	0.042	0.003	0.012	-0.071	-0.011	-0.033
Education	-	-	1	0.202**	0.035	0.215**	0.151**	0.143**

Sales stratum	-	-	-	1	0.142	2** 0.414**	0.368**	0.314**
Years of operations	-	-	-	-	1	0.125*	0.160**	0.186^{**}
Entrepreneurial well-being	-	-	-	-	-	1	0.341**	0.444**
Entrepreneurial leadership	-	-	-	-	-	-	1	0.451**
Psychological resilience	-	-	-	-	-	-	-	1

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The results of the hierarchical design predicting Perceived entrepreneurial success employing five blocks of variables are reported in **Table 5**.

Table 5. Models summary^e.

Model	R	R R Square	Adjusted R	the Estimate	Change Statistics				
			Square		R Square Change	F Change	df1	df2	Sig. F Change
1	0.322^{a}	0.104	0.099	7.49434	0.104	22.080	2	382	0.000
2	0.507^{b}	0.257	0.249	6.83974	0.154	39.309	2	380	0.000
3	0.592^{c}	0.351	0.342	6.40410	0.093	54.458	1	379	0.000
4	0.643^{d}	0.413	0.404	6.09600	0.063	40.279	1	378	0.000
5	0.655e	0.429	0.418	6.02199	0.016	10.348	1	377	0.001

a. Predictors: (Constant), Education, Age.

The results of model one indicated that the variance accounted for (R^2) with the first two predictors (Education, Age) equaled 0.104 (adjusted $R^2 = 0.099$), which was significantly different from zero (F(2.382) = 22.08, p < 0.001). Next model involving, Education, Age, Years of operations, Sales stratum shows the change in variance accounted for (ΔR^2) was equal to 0.154, which was statistically significant increase in variance accounted for over the first model (F(4.380) = 32.09, p < 0.001).

In model three, Entrepreneurial well-being was entered into the regression equation. The change in variance accounted for (ΔR^2) was equal to 0.093, which was a statistically significant increase in variance accounted above the variability contributed by the previous predictor variables entered in model two (F(5.379) = 40.09, p < 0.001). Model four add to the previous predictor variables Entrepreneurial leadership introducing a ΔR^2 equal to 0.063 (F(6.378) = 44.34, p < 0.001). Overall, the final model accounted for 41.8% of the variance in Perceived entrepreneurial success (F(7.377) = 40.43, p < 0.001).

In the final adjusted model, all of six predictor variables were statistically significant, with Entrepreneurial well-being a higher Beta value ($\beta = 0.238$, p < 0.001), Entrepreneurial leadership ($\beta = 0.231$, p < 0.001), Education ($\beta = 0.152$, p < 0.001), Psychological resilience ($\beta = 0.151$, p < 0.01), Sales stratum ($\beta = 0.143$, p < 0.002) and Age ($\beta = -0.119$, p < 0.003).

Based on the results obtained and taking into account the contribution of control variables such as education and sales stratum, it was decided to analyse more specifically the relationships between these variables and the perception of entrepreneurial success. The results are shown in **Figures 2** and **3**.

As can be seen, the hypothesis of equality of perception between the different sales stratum is rejected.

^{**.} Correlation is significant at the 0.01 level (2-tailed).

b. Predictors: (Constant), Education, Age, Years of operations, Sales stratum.

c. Predictors: (Constant), Education, Age, Years of operations, Sales stratum, Entrepreneurial well-being.

d. Predictors: (Constant), Education, Age, Years of operations, Sales stratum, Entrepreneurial well-being, Entrepreneurial leadership.

e. Predictors: (Constant), Education, Age, Years of operations, Sales stratum, Entrepreneurial well-being, Entrepreneurial leadership. Psychological resilience.

f. Dependent Variable: Perceived entrepreneurial success.

Owners of medium-sized enterprises perceive themselves as more successful than owners of micro and small enterprises. Considering that the turnover stratum is based on turnover, one might think that the perception of success is strongly influenced by the economic factor. In fact, the correlation between these variables is 0.564***.

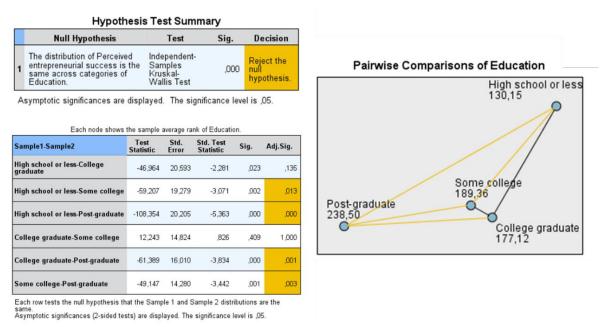
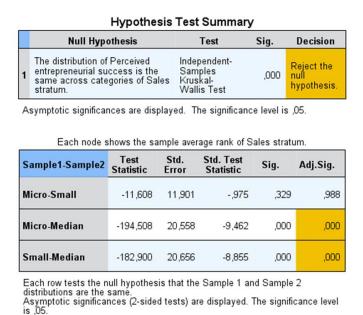


Figure 2. Education vs. perception of entrepreneurial success.

Evidence shows that there is a difference between educational levels. Perceptions of success are higher for SMEs owner-managers with a postgraduate education as opposed to those with high school or less. Those with Some college or College graduate have average perceptions of success but differentiated from the above.



Pairwise Comparisons of Sales stratum

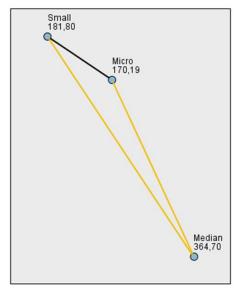


Figure 3. Sales stratum vs. perception of entrepreneurial success.

3. Discussion

The general objective of this study was to analyze the relationship between entrepreneurial well-being,

psychological resilience and entrepreneurial leadership in perceived entrepreneurial success of SMEs owner-managers. With the recent renewal of interest in studying perceived entrepreneurial success, research has been directed at determining the nature of the variables that might influence this perception^[1,4,7].

Our findings underline the importance of well-being, leadership and resilience for perceived entrepreneurial success. It may be that an owner-manager who reports positive ratings on these three variables reports high levels of perceived success in his or her personal and business life. Significant relationships were found between perceived entrepreneurial success and the variables examined, with results similar to previous research^[8,11,17].

Interestingly, although the correlation is low, there is a negative relationship between age and perceived success. This suggests that younger owner-managers perceive themselves to be more successful than older ones. It remains an interesting area of research to discover how these variables relate to each other.

In the case presented, five hierarchical regression models were run, each with a different set of predictors. The R-squared value increases as more predictors are included in the model, indicating that the model explains more of the variance in the dependent variable. The F-statistic is significant for all models, indicating that the added predictors significantly improve the model fit.

The final model (model 5) has an R-squared adjusted value of 0.418, which means that the predictors included in the model explain 41.8% of the variance in the dependent variable, the perception of entrepreneurial success. Therefore, it can be said that the predictors included in the model are significant in explaining the perception of entrepreneurial success and that the final model has a significant fit. In particular, the finding that Perceived entrepreneurial success relates to all three mentioned variables sheds light on how the perception of success among SMEs owner—manager emerge. However, our results suggest that while entrepreneurial leadership, entrepreneurial well-being and psychological resilience are associated with perceived entrepreneurial success, they independently account for only a very small percentage of the variance in this perception.

The control variables introduced in Models 1 and 2 increased the change in R-squared most. Demographic and business variables such as education, years in business and sales stratum were significantly associated with perceived entrepreneurial success and made interesting contributions to the change in R-squared (25,4%).

The correlations calculated between the variables studied, in addition to their different contributions to the regression model, suggest that the relationships between these variables may be much more complex than apparently expected.

There are some limitations to this research. The study is restricted to the Ecuadorian context in a specific region, which may affect the generalisability of the findings to other regions or countries. It should be emphasised that the questionnaires used in the study are new tools and, although they showed satisfactory reliability in this study, further research is needed to refine the measurement scales and fully establish their reliability and validity. Our study only analysed part of the phenomenon. There may be discrepancies between owner-managers' perceptions of success and what external stakeholders consider to be entrepreneurial success. This is a study that should be carried out in the future. Future longitudinal studies will also help to understand the relationships between the variables analysed.

A strength of this study is that three important variables, entrepreneurial leadership, entrepreneurial well-being and psychological resilience, have been examined together for the first time in relation with Perceived entrepreneurial success. In addition, variables specific to the owner-managers and the businesses they manage were included. Gender was not included in the study because there is evidence of gender bias in the perception

and evaluation of entrepreneurial success, with differences in how success is defined and valued for male and female entrepreneurs^[1,3,7].

This research has implications for SME owners - managers. By examining entrepreneurs' perceptions of their success, well-being, leadership style and psychological resilience, SME owners—managers can gain insights that can help identify areas where may need support or improvement and develop strategies to promote positive business experiences. It can also help entrepreneurs assess their own success and make informed decisions to enhance their career satisfaction and fulfillment. The developed measurement scales can help to bridge the gap between theory and practice and could be useful to empirical research. Overall, studying perceived entrepreneurial success in the context of SMEs is important for gaining insights into the factors, processes, and outcomes associated with entrepreneurial success. This knowledge can contribute to the development of effective strategies, support systems, and policies to foster entrepreneurship and drive economic growth.

This study highlights important conclusions drawn from the survey of SME owner-managers in Ecuador by revealing those factors that influence the perception of entrepreneurial success. The research highlights the interaction between entrepreneurial well-being, psychological resilience and entrepreneurial leadership in shaping the perception of success among SMEs. The results indicate that a substantial proportion of owner-managers perceive their business success as remarkable or moderate, and a smaller percentage consider it exceptional or below average. In addition, the study highlights the prevalence of thriving and satisfied states of entrepreneurial well-being, along with varying degrees of stress and feelings of overwhelm. In addition, the predominant leadership styles among entrepreneurs are inspirational and transformational, which have an impact on perceptions of success. Furthermore, the analysis sheds light on the varying levels of psychological resilience displayed by owner-managers, emphasising the importance of this trait in the business context. Overall, the study highlights the intricate relationship between well-being, resilience, leadership and perceived success, offering valuable implications for understanding and improving the entrepreneurial experience of SME owner-managers in Ecuador.

Author contributions

Conceptualization, GGV; methodology, GGV, LGV and RPC; validation, GGV and LGV; formal analysis, ASR and GGV; investigation, GGV, ASR, RPC, LGV and RMV; data curation, RPC; writing—original draft preparation, GGV; writing—review and editing, GGV and ASR; visualization, LGV, ASR and RPC; supervision, RMV; project administration, GGV. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest.

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