

Antecedents of individual work performance in a Brazilian food company: the role of entrepreneurial and organizational aspects

Alex Eckert

Professor da Universidade de Caxias do Sul (Brasil)

alex.eckert@bol.com.br

Rodrigo Luiz Corso

Pesquisador da Universidade de Caxias do Sul (Brasil)

rodrigocorso81@gmail.com

Luciene Eberle

Professora da Universidade de Santa Cruz do Sul (Brasil)

luciene.eberle@gmail.com

Gabriel Sperandio Milan

Professor da Universidade do Vale do Rio dos Sinos (Brasil)

gabmilan@terra.com.br

Gobinda Roy

Professor do International Management Institute (Kolkata, Índia)

gobinda.roy@gmail.com

Abstract

This study aimed to analyze the relationship between entrepreneurial leadership, entrepreneurial orientation, organizational learning, work environment, and individual work performance. Thus, a quantitative survey resulted in 369 valid cases with respondents from two Brazilian manufacturing units of a food company. A structural equation modeling technique was used to analyze the data. The results indicate that entrepreneurial leadership, entrepreneurial orientation, and organizational learning positively affect work performance. However, the work environment does not affect work performance. Additionally, entrepreneurial leadership positively affects entrepreneurial orientation, entrepreneurial orientation positively affects organizational learning, and organizational learning positively affects the work environment.

Keywords

Work performance; Entrepreneurial leadership; Organizational learning

Antecedentes do desempenho individual no trabalho em uma empresa brasileira de alimentos: o papel de aspectos empreendedores e organizacionais

Resumo

Este estudo teve como objetivo analisar a relação entre liderança empreendedora, orientação empreendedora, aprendizagem organizacional, ambiente de trabalho e desempenho individual no trabalho. Para atingir este objetivo, realizou-se uma pesquisa quantitativa com 369 respondentes, colaboradores de duas unidades fabris brasileiras de uma empresa alimentícia. A técnica de modelagem de equações estruturais foi utilizada para analisar os dados. Os resultados indicam que a liderança empreendedora, a orientação empreendedora e a aprendizagem organizacional afetam positivamente o desempenho no trabalho. No entanto, o ambiente de trabalho não afeta o desempenho do trabalho. Além disso, a liderança empreendedora afeta positivamente a orientação empreendedora, a orientação empreendedora afeta positivamente a aprendizagem organizacional e a aprendizagem organizacional afeta positivamente o ambiente de trabalho.

Palavras-Chave

Desempenho no trabalho; Liderança empreendedora; Aprendizagem organizacional

Antecedentes del desempeño laboral individual en una empresa de alimentos brasileña: el papel de los aspectos emprendedores y organizativos

Resumen

Este estudio tuvo como objetivo analizar la relación entre el liderazgo emprendedor, la orientación emprendedora, el aprendizaje organizacional, el clima laboral y el desempeño individual en el trabajo. Para lograr este objetivo, se realizó una investigación cuantitativa con 369 casos válidos, siendo estos encuestados empleados de dos unidades de fabricación brasileñas de una empresa de alimentos. Se utilizó la técnica de modelado de ecuaciones estructurales para analizar los datos. Los resultados indican que el liderazgo emprendedor, la orientación emprendedora y el aprendizaje organizacional inciden positivamente en el desempeño laboral. Sin embargo, el ambiente de trabajo no afecta el desempeño laboral. Además, el liderazgo emprendedor afecta positivamente la orientación emprendedora, la orientación emprendedora afecta positivamente el aprendizaje organizacional y el aprendizaje organizacional afecta positivamente el ambiente de trabajo.

Palabras clave

Desempeño laboral; Liderazgo empresarial; Aprendizaje organizacional

Dados para Contato | Contact Details | Detalles de Contacto: Alex Eckert - Universidade de Caxias do Sul.
R. Francisco Getúlio Vargas, 1130 - Petrópolis, Caxias do Sul - RS, 95070-560, Brasil. **URL:** <https://www.ucs.br/>.

Recebido em | Received in | Recibido en: 18/03/2022 - **Aprovado em | Approved in | Aprobado en:** 14/11/2023

DOI: <http://dx.doi.org/10.23925/recape.v14i1.57710>

Introduction

One of the significant challenges faced by organizations in the search for business success is to find a way to keep the company business running permanently, effectively contributing to the satisfaction of all stakeholders. In this context, managers difficulties maintain the competitive capacity of organizations (Purbasari and Septian, 2017). In an increasingly competitive scenario, the search for evidence of how to provide the best individual performance of employees is relevant, seeking the survival, consolidation, and greater competitiveness of organizations.

Encouraging the individual creativity of employees became a concern for the survival and success of companies. Besides, individual work performance is associated with professionals who perform their tasks effectively and efficiently (Robbins and Coulter, 2009). As a result, organizations seek key strategies to foster employee creativity to be innovative and competitive in the market (Hirst et al., 2009).

Individuals are essential in organizations to build satisfactory results. Consequently, it is necessary to be aware of the various factors that may affect employee performance. Antecedents such as leadership, human resource management, and organizational behavior remain relevant for managers and researchers (Johari et al., 2012).

One of the duties of leadership is related to an organization's human resources, specifically influencing individual and collective performance and achieving corporate objectives. Leadership research has been less effective due to the difficulty of finding leaders with a set of pre-defined or standardized personal characteristics (Purbasari and Septian, 2017).

Another relevant factor refers to the entrepreneurial orientation of organizations. It implies implementing actions that promote a favorable climate for entrepreneurial initiatives by their employees, representing a viable way for many organizations to follow the innovation path as a factor of differentiation and competitiveness in their market (Hashimoto, 2017).

Besides, organizational learning, based on knowledge accumulation, is generated and enhanced by the individual learning process. It involves executing several stages that need to be thoroughly identified and managed: interpretation, information acquisition, experience dissemination, focused experimentation and restructuring, and knowledge accumulation (Chiang and Lin, 2016).

The working environment is where organizations strive to deploy a comfortable and friendly environment to influence better work performance. The organization's work environment affects professional performance, and both individual and collective performance improve as identified problems are corrected (Bushiri, 2014). In such a context, the central research question is: What

is the influence of the constructs of entrepreneurial leadership, entrepreneurial orientation, organizational learning, and work environment on the work performance of the employees of a food industry located in the South region of Brazil? Therefore, the study aimed to analyze the relationship between entrepreneurial leadership, entrepreneurial orientation, organizational learning, work environment, and individual work performance.

1. Proposed theoretical model and research hypotheses

Entrepreneurial leadership actions aim at future possibilities, allowing the organization to transform its current sets of transactions through adaptation with the direct involvement of people into creating value for stakeholders. Preferably, this process employs innovation to obtain some possible source of competitive advantage and a set of resources and capabilities to respond to recognized opportunities (Fontana and Musa, 2017).

The concept of entrepreneurial leadership was developed to capture leadership behaviors that influence and direct group members towards recognizing and exploring business opportunities (Renko et al., 2015). It is relevant that organizations develop their entrepreneurial leadership at all levels to ensure that the innovation management process is managed assertively (Fontana and Musa, 2017).

The entrepreneurial orientation is usually related to three dimensions: innovation, proactivity, and risk acceptance. The innovation is related to the propensity to help and enable creativity and experimentation in developing new products or services, using technology, and improving internal processes and procedures. Proactivity is the ability of companies to take advantage and not just identify market opportunities. The predisposition to risks reflects senior management's willingness to assign a large percentage of the company resources to new projects and make reasonable investments in the opportunities identified (Kreiser et al., 2002; Meekaewkunchorn et al. (2021). Furthermore, entrepreneurial leadership positively influences entrepreneurial orientation due to its impact on professionals' attitudes (Tarabishy et al., 2005). The Nguyen et al. (2021) tested entrepreneurial leadership as a mediator of entrepreneurial orientation and organizational performance and presented a direct relationship as a result, pointing out the need for further studies that address these constructs. Thus, it is possible to present the first hypothesis of research:

H1: Entrepreneurial leadership positively influences entrepreneurial orientation.

Organizational learning refers to a set of norms, values, and beliefs about an organization's functioning, which supports organizational systems and encourages individual and collective learning, teamwork, collaboration, creativity, knowledge and its distribution (Potnuru et al., 2018; Hermelingmeier and Wirth (2021). The structural elements of organizational learning are related to its mechanisms that should be institutionalized. They are procedural systems that allow organizations to collect, analyze, store, disseminate, and use relevant information to improve their performance. Moreover, the cultural elements related to organizational learning are linked to shared values. Without these values, mechanisms are likely to manifest as informal rituals rather than detect and correct existing mistakes or failures (Chiang and Lin, 2016).

Entrepreneurial orientation provides organizations a means to expand the boundaries of their capabilities and strengthen their resource management (Chiang and Lin, 2016), expanding their competitiveness level (Schäffer, 2020; Barney, 2021). For Covin and Slevin (1991), the entrepreneurial culture enables organizational learning, as it stimulates innovation, transparency, engagement, and teamwork in activities or tasks among participants of specific work processes. In one of the models tested by Altimay et al. (2016), the authors confirmed the positive impact of entrepreneurial orientation on organizational learning in SEMs, creating long-term sustainable competitive advantages (Sawaeen and Ali, 2020). Therefore, based on the arguments presented, the second research hypothesis is:

H2: Entrepreneurial orientation positively influences organizational learning.

The work environment refers to both the social environment involving colleagues and supervisors and the physical environment inherent in physical resources or working conditions (Kattenbach and Fietze, 2018). Specifically, the work environment comprises the relationship between work and necessary tools, and the workplace is an integral part of the work environment as a whole. In this sense, the work environment affects the quality of the tasks performed by professionals and their performance level (Purbasari and Septian, 2017; Lee, 2016).

Bold companies explore the concept of creative spaces, innovative laboratories, or innovation spaces to foster a culture of creativity and innovation and spaces dedicated to the production of creative ideas (Heinonen and Hiltunen, 2012). Therefore, it is vital to understand the characteristics of the work environment that promote employee creativity and, consequently, contribute to creativity and innovation in organizations (Lee, 2016). The organizational learning process can also facilitate the interaction of an organization's members with their work environment. Individuals interpret the environmental responses and adjust their organizational behaviors according to the relationships they perceive between the organization and their work environment (Dodgson, 1993). Based on the above considerations, the third research hypothesis emerges:

H3: Organizational learning positively influences the work environment.

Employees' performance is associated with their productivity and efficiency in their activities (Khan et al., 2013). Evidence indicates that work performance is strongly related to activities that contribute directly or indirectly to the overall organizational performance (Sonnentag et al., 2008). Accordingly, entrepreneurial leadership approaches a type of leadership directed at influencing and managing the performance of group members or work teams towards achieving goals that involve the recognition and exploitation of business opportunities that can improve professionals and organizational performance (Renko et al., 2015). Besides, organizational learning can also stimulate organizational creativity, generating better results for companies (Panizon et al., 2020).

Entrepreneurial leaders are examples to their subordinates, identifying business opportunities to qualify existing processes, rationalize costs, introduce new products or services in the market and exploit these opportunities by allocating resources and capabilities appropriate to the challenges imposed (Koryak et al., 2015). In turn, this will lead team members to become effectively involved in activities and processes and positively impact their individual performance (Renko et al., 2015). Furthermore, the study by Miao et al. (2019) examined the effects of entrepreneurial leadership on the individual work performance of team members, as it creates a positive environment that allows for the development of all employees. As a result, the fourth research hypothesis was elaborated:

H4: Entrepreneurial leadership positively influences individual work performance.

The entrepreneurial attitude is linked to aspects inherent to creativity and innovation. However, the individuals' orientation towards work and their perception of entrepreneurial work elements are also relevant (Höge, 2011). Professionals with an entrepreneurial orientation are generally more qualified to deal with the intense demands of work and mention less exhaustion or work-related stress, resulting in better work performance (Kattenbach and Fietze, 2018).

When the entrepreneurial orientation shows forms of behavior, such as competitiveness, proactivity, search for autonomy, and performance optimization, it collaborates with the perceptions about someone's work and with enough attitude, also elaborating the relational boundaries. The entrepreneurial orientation allows the employees to react adequately to stressful situations because they have the autonomy to do so, becoming more assertive and consequently more productive (Kattenbach and Fietze, 2018). Thus, entrepreneurial orientation might direct organizations toward performance-based strategic changes that positively impact business results (Tajpour and Salamzadeh, 2019). Entrepreneurial orientation makes more effective use of work resources and deals better with demands, leading to greater work performance (Raub et al., 2021), as suggested in the following proposition:

H5: Entrepreneurial orientation positively influences individual work performance.

Organizational learning was positively associated with professionals' job satisfaction and motivation, considered the driving force that takes company employees to acquire knowledge and innovative ideas, resulting in better performance (Hahn et al., 2015). One of the steps in measuring and tracking organizational learning can be accomplished through changes in employee behavior, leading to measurable improvements in organizational results, such as superior quality, better deliveries (speed and reliability), increased market share, sales volume, profit, and profitability (Garvin, 1993).

In order to motivate managers to pay attention to learning aspects, organizational learning should be emphasized, which is also related to the subordinates' job performance. Moreover, managers' main tasks are usually related, directly or indirectly, to their subordinates learning (Hasson et al., 2013). Hence, organizational learning is understood as a set of processes that allow organization members to develop and enhance their own knowledge and that of the organization to ensure that strategies, actions, and investments are defined to improve the organizational efficiency, effectiveness, and performance (Marsick, 2013). Therefore, organizational learning through the creation and sharing of knowledge can positively influence the performance of professionals at work (Pratono et al., 2019). That said, the sixth research hypothesis is presented:

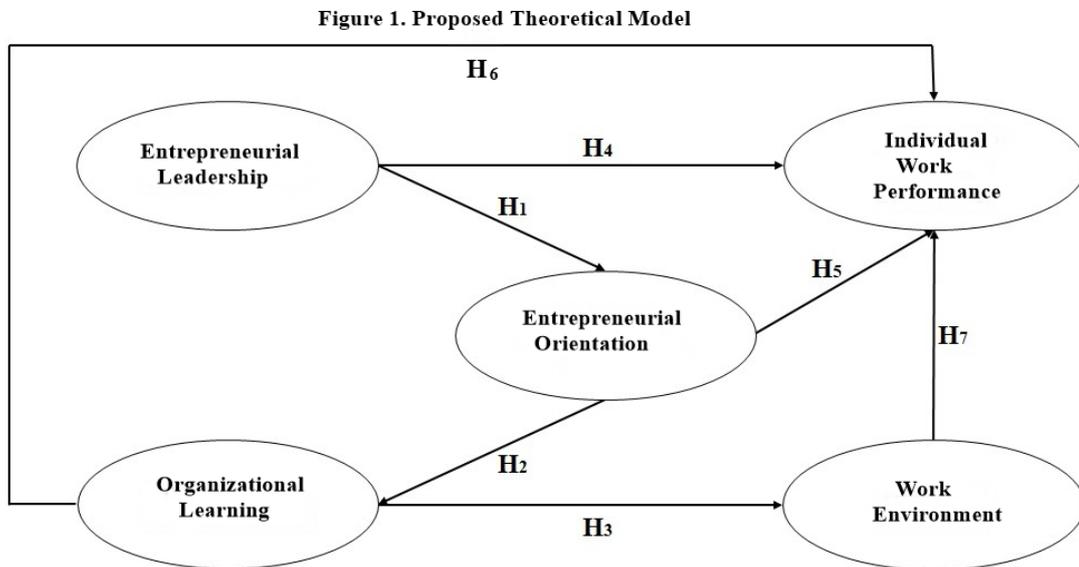
H6: Organizational learning positively influences individual work performance.

A good work environment helps people enjoy and be proud of what they do, feel they have a greater and collective purpose, and demonstrate their potential more effectively (Bushiri, 2014). The work environment includes workstations, furniture, ventilation, lighting, noise, safety, and personal protective equipment, directly interfering with the professional performance (Chandrasekar, 2011). The work environment must provide adequate resources and generate a sense of well-being and safety for professionals, contributing to higher productivity and individual performance and strengthening the cooperation bonds between individuals or work teams (Purbasari and Septian, 2017).

There is strong evidence that a pleasant work environment positively affects work performance (Ali et al., 2015). An organizational learning capability allows an organization to follow its previous change and adopt new organizational practices (Makkonen et al., 2014). Therefore, it is evident that improvements in the organizational work environment positively impact its employees' performance (Bushiri, 2014). Based on this argument, the seventh research hypothesis is:

H7: The work environment positively influences individual work performance.

Figure 1 illustrates the proposed Theoretical Model and its research hypotheses.



2. Research method

This research was developed based on a quantitative-descriptive method by applying a cross-sectional survey (Malhotra et al., 2017). For the data analysis, multivariate statistics were used based on the Structural Equation Modeling (SEM) technique (Kline, 2015; Byrne, 2016), widely used in behavioral research in social sciences (Song and Lee, 2012), where the indications of Kline (2015), Byrne (2016) and Hair Jr. et al. (2018), by means the estimation of the MLE (Maximum Likelihood Estimation) model. The software SPSS Statistics 20 and AMOS 20 were used for the analyses.

2.1. Operationalization of the constructs and validation of the data collection instrument

Concerning the operationalization of the constructs, a seven-point Likert-type scale was employed, with the extremes “1. I totally disagree” and “7. I totally agree” (Bearden et al., 2011). For the Entrepreneurial Leadership construct, a seven-item scale developed by Fernandes and Santos (2008), based on Tarabishy et al. (2005), was used. For the Entrepreneurial Orientation, a fourteen-item scale was used, adapted from Hashimoto (2017). For Organizational Learning, an eight-item

scale was used, developed by Fernandes and Santos (2008), based on Hurley and Hult (1998). A five-item scale was applied for the Work Environment, developed by Purbasari and Septian (2017), based on Chandrasekar (2011). Finally, for Individual Work Performance, a four-item scale was used, developed by Vandenberg (2009).

For the validation of the data collection instrument, we performed face validity. The questionnaire was sent to three specialists in the area: research professors, PhDs in Administration, and experience developing research in the area. Besides, a pre-test was applied to fifteen employees of the studied company, and these cases were not incorporated into the final sample (Malhotra et al., 2017).

2.2. Data preparation

The application of the survey was carried out through a cross-sectional survey of data, through questionnaires collected once, with a convenience sample (Malhotra et al., 2017; Hair Jr. et al., 2018). The data preparation was done by analyzing missings and outliers (Malhotra et al., 2017). In the missings analysis, only the questionnaires with complete data were included; a process called listwise deletion, generally used when the sample size is sufficient (Byrne, 2016; Hair Jr. et al., 2018). Therefore, of the 382 questionnaires (cases) collected, 08 were excluded, resulting in 372 valid cases.

Following Malhotra et al. (2017) and Hair Jr. et al. (2018) guidelines, the uni and multivariate outliers were identified. Initially, to verify the univariate outliers, the variables were transformed into a standard score (Z-scores), eliminating biases resulting from differences in the scales (Hair Jr. et al., 2018). After performing the calculations, we opted to exclude ten questionnaires (cases) for presenting standardized values above $|3|$.

Then, the multivariate outliers were identified by calculating the Mahalanobis distance (D^2), considering the degrees of freedom ($df = 38$), aiming at maximizing the degrees of freedom for the most appropriate model fit (Malhotra et al., 2017). For samples with more than 200 valid cases, as in the present study, Hair Jr. et al. (2018) suggested using conservative reference levels for measures D^2 / df (0.005 or 0.001), resulting in values greater than 3 or 4. As a result of this test, three more cases (11, 55, and 207) had to be excluded because they presented indexes higher than 3. Consequently, the final sample was composed of 369 cases ($n = 369$).

3. Analysis and discussion of results

3.1. Respondents' profile

The target population comprised the employees of an industry located in the South region of Brazil, with approximately 1,000 employees. The company operates in the food industry, specifically producing and commercializing flour, pasta, and cookies. Its business characteristics are entrepreneurship and innovation, systematically investing in technology and its human resources, aiming to increase its competitiveness among the competitors. The data collection was conducted between October and November 2019, operated in person by the researchers, who presented the survey objectives to the respondents and guided them on how to fill out the survey questionnaire. This process occurred at the food company facilities in both manufacturing units in southern Brazil. In total, 369 respondents composed the final sample of this survey.

Regarding the gender of the respondents, most of them were male (184), representing 50% of the sample, followed by 171 female respondents, representing 46% of the sample. Some respondents did not declare their gender (14 or 4%). Most respondents were between 21 and 30 years old (137 respondents), resulting in an average of 33.29 years of age for the surveyed sample. Regarding schooling, 122 respondents, 33% of them, have completed high school.

Another factor analyzed was the employees time working in the company, observing that 30% of them, or 112 employees, have worked less than one year in the company. The overall average of company working time was 2.63 years. On the other hand, around 4% (15) of the interviewees have more than 15 years in the company. Regarding the position or function performed, 294 respondents were Auxiliaries, 16 were Coordinators and 59 Operational Technicians. Closing the questions that define the respondents' profile, the work sector was requested, and 61 of them worked in the Administrative Sector, 259 in the Industrial Sector, and 49 in the Logistics Sector of the company.

3.2. Individual validation of the constructs

For the individual validation of the constructs, the unidimensionality, reliability, convergent validity, and discriminant validity were analyzed (Kline, 2015; Malhotra et al., 2017; Hair Jr. et al., 2018). According to the literature, the unidimensionality was verified through the Exploratory Factor Analysis by the factor loadings, ranging from 0.412 to 0.830. Besides, Bartlett's test presented an index of 0.000 and the Kaiser-Meyer-Olkin test, 0.894, meeting the recommendations (Malhotra et al., 2017).

In the sequence, the convergent validity of the constructs was checked through the Confirmatory Factor Analysis, considering as parameters values above 0.5 (Kline, 2015; Byrne, 2016). The Cronbach's Alpha values varied from 0.72 to 0.90, Composite Reliability from 0.82 to 0.96, and Variance Extracted from 42.50% to 87.94%, all satisfactory, as demonstrated in Table 1 (Malhotra et al., 2017; Hair Jr. et al., 2018).

Table I. Cronbach's alpha, composite reliability, and variance extracted

Constructs	Cronbach's alpha	Composite reliability	Variance extracted
Entrepreneurial Leadership	0.90	0.95	72.61%
Entrepreneurial Orientation	0.72	0.82	32.03%
Organizational Learning	0.75	0.85	42.50%
Work Environment	0.78	0.85	52.89%
Work Performance	0.84	0.96	87.94%

The discriminant validity was verified by employing the Fornell and Larcker (1981) method, comparing the variance of each construct to the shared variances, obtained by calculating the correlations between the constructs squared. Table 2 illustrates that the variance extracted from the Entrepreneurial Orientation construct (0.320) is smaller than the variance shared with the Organizational Learning construct (0.530), as well as that of the Work Environment construct (0.501). For the others, there is discriminant validity between them.

Table II. Discriminant validity

Construct	Entrepreneurial Leadership	Entrepreneurial Orientation	Organizational Learning	Work Environment	Work Performance
Entrepreneurial Leadership	0.726				
Entrepreneurial Orientation	0.704	0.320			
Organizational Learning	0.333	0.530	0.425		
Work Environment	0.307	0.501	0.220	0.520	
Work Performance	0.114	0.091	0.185	0.059	0.879

Note: The values in bold show the variance extracted, and the other values are the shared variances.

According to Bagozzi and Yi (2012), the results highlight that discriminant validity is more difficult to demonstrate when two or more constructs are highly correlated but distinct according to the theory, as shown in Table 3. As explained, the model constructs are valid because they are significant ($p < 0.000$) and indicate no correlation between the constructs, confirming the difference between the fixed and free models and the discriminant validity of the tested constructs.

Table III. Bagozzi and Phillips' test

Construct 1	Construct 2	χ^2	χ^2	Dif.	Sig.
		Fixed Model	Free Model		
Organizational Learning	Entrepreneurial Orientation	103.92	79.05	25.99	0.000
Work Environment	Entrepreneurial Orientation	104.07	78.97	26.04	0.000

Source: Data from research.

3.3. Validation of the Theoretical Model

From the hybrid model estimation, the validation of the Theoretical Model started by obtaining the model fit indexes from the maximum likelihood estimation method, which describes the results of the analysis of the estimated and observed covariance matrices (Kline, 2015; Byrne, 2016). According to the literature, the RMSEA (0.050) result was satisfactory, between 0.05 and 0.08 (Kline, 2015; Byrne, 2016; Hair Jr. et al., 2018). Moreover, the values of the IFI (0.915), TLI (0.901), and CFI (0.915) fit indexes were satisfactory, that is, values equal to or higher than 0.900 (Kline, 2015; Byrne, 2016; Hair Jr. et al., 2018). Table 4 presents the model fit indexes of the proposed model.

Table IV. Model fit indexes of the proposed Theoretical Model

Indexes	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Results	0.859	0.826	0.835	0.915	0.901	0.915	0.050

For GFI (0.859), AGFI (0.826), and NFI (0.835), the values were borderline (Byrne, 2016). It is important to note that the values of the GFI and AGFI can vary greatly depending on the sample size and simulations indicate that both generally do not present values as significant as those found in other indexes (Bagozzi and Yi, 2012). Therefore, based on the results, the adjustment of the Theoretical Model can be considered acceptable.

3.4. Hypotheses test

The next step to validate the Theoretical Model was the hypotheses test, comprehending the structural paths, non-standardized coefficients, standardized coefficients, errors, t-values, and probabilities. Table 5 presents the results.

Table V. Hypotheses test

Hy	Structural Paths	Non-standardized coefficients (b)	Errors	Standardized Coefficients (β)		P	Results
H ₁	ENT_LID → ENT_ORI	0.645	0.053	0.845	12.101	p < 0.001	Supported
H ₂	ENT_ORI → ORG_LEA	1.003	0.109	0.893	9.241	p < 0.001	Supported
H ₃	ORG_LEA → WOR_ENV	0.706	0.090	0.700	7.855	p < 0.001	Supported
H ₄	ENT_LID → WOR_PER	0.220	0.080	0.357	2.732	p = 0.006	Partially Supported
H ₅	ENT_ORI → WOR_PER	-0.678	0.257	-0.084	-2.644	p = 0.008	Partially Supported
H ₆	ORG_LEA → WOR_PER	0.703	0.243	0.978	2.892	p = 0.004	Supported
H ₇	WOR_ENV → WOR_PER	-0.045	0.078	-0.064	-0.582	p = 0.561	Not Supported

Note: Significance level of 0.05.

Another way to verify the effectiveness of the hypotheses test is through the Coefficients of Determination (R^2) based on multiple square correlations of each dependent variable, revealing the proportion of the variance of a dependent variable explained by the independent variables included in the model (Hair Jr. et al., 2018). Table 6 presents the Coefficients of Determination (R^2) of the model.

Table VI. Coefficients of Determination of the Theoretical Model

Constructs	Determination Coefficients (R^2)
Entrepreneurial Leadership	0.318
Entrepreneurial Orientation	0.301
Organizational Learning	0.798
Work Environment	0.490
Work Performance	0.714

The Coefficients of Determination (R^2) demonstrate that the independent variables or antecedents, in this case, Entrepreneurial Leadership, Entrepreneurial Orientation, Organizational Learning, and Work Environment, explain 71.4% of the variance of Work Performance. This result is considered a strong explanation power (Hair Jr. et al., 2018).

Conclusion

Regarding the proposed and tested Theoretical Model, the starting point was the search for antecedents that would positively influence professionals' work performance. It is important to point out that the model was developed by identifying research gaps suggested by previous studies, defining the constructs and the research hypotheses.

The proposed, tested and validated Theoretical Model empirically evidenced that entrepreneurial leadership, entrepreneurial orientation, organizational learning, and the work environment positively impact individual work performance. As a result, the first theoretical contribution resulting from this study concerns the constructs that composed the proposed Theoretical Model, and the model itself, in an attempt to better understand some of the leading entrepreneurial and organizational antecedents and their relationship with individual work performance. The results suggest that entrepreneurial orientation, organizational learning, and the work environment explained 71.4% of work performance, attesting to strong explanation power.

According to the results evidenced in the research, six of the seven proposed hypotheses were statistically supported: **H1** (entrepreneurial leadership positively influences entrepreneurial orientation, $\beta = 0.845$, $p < 0.001$) a result also evidenced in the study by Tarabishy et al. (2005); **H2** (entrepreneurial orientation positively influences organizational learning, $\beta = 0.893$, $p < 0.001$) as observed by Covin and Slevin (1991); **H3** (organizational learning positively influences the work environment, $\beta = 0.700$, $p < 0.001$) hypothesis also confirmed by Dodgson (1993); **H4** (entrepreneurial leadership positively influences individual work performance, $\beta = 0.357$, $p = 0.006$); and **H5** (organizational learning positively influences individual work performance, $\beta = 0.978$, $p = 0.004$) corroborating the result presented by Garvin (1993). In turn, hypothesis **H5** (entrepreneurial orientation positively influences individual work performance, $\beta = -0.840$, $p = 0.008$), was partially supported, unlike the study of Garvin (1993) and, finally, **H7** (the work environment positively influences individual work performance, $\beta = -0.064$, $p = 0.561$), which was not statistically supported, different from the results presented by Bushiri (2014) and Ali et al. (2015).

The confirmation of H1 that entrepreneurial leadership positively influences entrepreneurial orientation, emphasizing that, Tarabishy et al. (2005) also confirmed this relationship. Also, the confirmation of H2 that entrepreneurial orientation positively influences organizational learning, a relationship evidenced by Covin and Slevin (1991). The authors highlighted that the entrepreneurial culture is related to organizational learning and stimulates innovation, transparency, engagement, and teamwork in tasks or activities among participants of specific work processes.

In addition, the contribution of confirming H3, suggesting that organizational learning positively influences the work environment. As verified by other authors, individuals in the organization

interpret the environmental responses, allowing them to adjust their behaviors according to the relationships they perceive between the organization and its environment (Dodgson, 1993).

Significantly, in this present study, hypothesis H4 (entrepreneurial leadership positively influences individual work performance) was partially supported, differing from the result found by Renko et al. (2015). This relationship evidences that the leader engaged in entrepreneurial leadership influences the other members of the organization or a work team to better performance. Hence, leaders mobilize such professionals to work towards corporate goals through assertive communication and a compelling entrepreneurial vision to motivate the team to create value for the enterprise.

Other research contributions are related to the partial confirmation of H5 that entrepreneurial orientation positively influences individual work performance, deserving future investigations in other contexts. Besides, the confirmation of H6 (organizational learning positively influences individual work performance) reinforces that organizational learning is a process that unfolds over time and is connected to the acquisition and dissemination of knowledge, which tends to improve work performance in the organizational context (Garvin, 1993).

As the last contribution, it is possible to highlight the non-confirmation of H7, which tested whether the work environment positively influences individual work performance, generating empirical evidence different from the results found in previous studies (Bushiri, 2014; Ali et al., 2015). This result suggests new investigations, even to search for new evidence that brings reasons to exonerate such result, identifying some bias concerning the type of company or work environment the respondents perform their functions or even the nature of the work performed.

However, both theory and the empirical results of the research conducted with professionals from a Brazilian food company presented important antecedent factors that explain the work performance, and managers should better explore that. Furthermore, if well explored, this may impact both improvements in commitment and engagement at work, greater productivity and creativity of professionals, and better results for organizations concerning cost or waste reduction, increased customer service quality and profitability.

In summary, the theoretical contributions of this research are related to development of a theoretical model, which effectively contributed towards finding meaningful relationships between entrepreneurial leadership, entrepreneurial orientation, organizational learning, work environment and work performance. Such constructs and their relationships may have repercussions on companies' success, by means of improvements in the work environment (physical environment and interpersonal relationships), in the recruitment, selection and hiring process of professionals, development of training programs, and more specifically work satisfaction, productivity and competitiveness for companies.

Managerial Implications

In the context investigated, the results suggest that organizations should seek proactive strategies to foster their employees' creativity and engagement, increasing their individual work performance, possibly reflecting the competitiveness among companies in the market. Therefore, it is relevant to study ways for companies to achieve a higher individual performance of their professionals and, consequently, boosting individual and business performance as a whole. In this way, entrepreneurial leadership should influence and direct work performance in pursuit of corporate objectives.

In this study, entrepreneurial and organizational learning are important factors that organizations can work on to achieve better results through their professionals. An entrepreneurial orientation encourages and instigates the employees to be part of the work processes and responsible for the organization's results, turning their attention to organizational learning, registering and transferring knowledge, and seeking continuous improvement.

An entrepreneurial leadership needs to encourage learning in the workplace, as a means of generating opportunities for assessment, reflection and formalization of work processes, aiming at greater employee participation in problem solving, aiming at greater team engagement in achieving the organizational goals. And this can leverage organizational creativity, innovation and better business performance.

From the managerial point of view, it becomes necessary for organizations to promote their entrepreneurial leadership at the most diverse hierarchical levels, seeking to ensure that the management process occurs effectively. Além disso, é relevante que as organizações promovam o desenvolvimento de sua liderança empreendedora em todos os níveis dentro da organização para garantir que o processo de gestão da inovação seja gerido de forma eficaz. These entrepreneurial leadership actions enable the organization to transform its operations, favoring value creation for stakeholders, always seeking a competitive advantage.

Research limitations and suggestions for future research

The fact that the research was conducted in the context of a single organization, with its particularities and a restricted sample of employees, may be considered a research limitation, possibly generating some bias in the results. Therefore, future studies could contemplate more than one company and other segments, not only food, and could even evaluate the results comparatively. Future studies, especially those of an exploratory nature, are suggested in which different aspects may arise and contemplate scales that measure and evaluate this construct more robustly.

As the survey was conducted with a sample of employees from a single company, there may be some bias in their perceptions. Therefore, future studies could consider more than one company and segments other than food, like companies in the metal-mechanical, automotive, health services, and financial services sectors, and could even comparatively evaluate the results.

Evidence extracted from the respondents' profile, more specifically the employees time working for the company, indicated that 30% of the employees have less than one year of work. This result may also have generated some bias in the results. It is then suggested to apply other surveys in samples covering employees with more company time and more experience in their routines and structure.

As the last suggestion for future research, we propose verifying if the employees who have an entrepreneurial orientation are more qualified to work with the intense demands of work, showing less fatigue or stress, resulting in better individual and collective work performance. Finally, it is important to highlight that the Theoretical Model proposed, tested, and validated, even presenting adequate measures or fit indexes, should not have its representation or validation considered definitive. For this reason, it is opportune to continuously stimulate its refinement, replication, the replacement, or the insertion of other antecedent constructs, such as the Professionals Engagement and Work Satisfaction. They could also be compared with nested or rival models or even test the mediation of some constructs, such as the work environment, a construct tested in the context of the Theoretical Model proposed in this research, always seeking a greater understanding of the antecedents explaining individual work performance.

References

Ali, A.S., Chua, S.J.L., and Lim, M.E.L. (2015). "The effect of physical environment comfort on employees' performance in office buildings: A case study of three public universities in Malaysia". *Structural Survey*, Vol. 33 No. 4/5, pp. 294-308.

Altimay, L., Madanoglu, M., De Vita, G., Arasli, H., and Ekinici, Y. (2016). "Interface between organizational learning capability, entrepreneurial orientation and SME growth". *Journal of Small Business Management*, Vol. 54 No. 3, pp. 871-891.

Bagozzi, R.P., and Yi, Y. (2012). "Specification, evaluation, and interpretation of structural equation models". *Journal of the Academy of Marketing Science*, Vol. 40 No. 1, pp. 8-34.

Barney, J.B. (2021). "The emergence of resource-based theory: a personal journey". *Journal of Management*, Vol. 9, pp. 71-78.

Byrne, B.M. (2016). *Structural equation modeling with AMOS: basic concepts applications, and programming*. 3rd edition. New York: Routledge.

Bearden, W.O., Netemeyer, R.G., and Haws, K.L. (2011). *Handbook of marketing scales: multi-item measures for marketing and consumer behavior research*. 3rd edition. Thousand Oaks: Sage Publications.

Bushiri, C.P. (2014). *The impact of working environment on employees' performance: the case of Institute of Finance Management in Dar es Salaam*. (Master Dissertation). The Open University of Tanzania.

Chandrasekar, K. (2011). "Workplace environment and its impact on organisational performance in public sector organisations". *International Journal of Enterprise Computing and Business Systems*, Vol. 1 No. 1, pp. 1-19.

Chiang, C.F., and Lin, M.Y. (2016), "Motivating organizational commitment in hotels: the relationship between leaders and employees". *Journal of Human Resources in Hospitality and Tourism*, Vol. 15 No. 4, pp. 462-484.

Covin, J.G., and Slevin, D.P. (1991). "A conceptual model of entrepreneurship as firm behavior". *Entrepreneurship Theory and Practice*, Vol. 16 No. 1, pp. 7-26.

Dodgson, M. (1993). "Organizational learning: a review of some literatures". *Organization Studies*, Vol. 14 No. 3, pp. 375-394.

Fernandes, D. von D.H., and Santos, C.P. (2008). "Orientação empreendedora: um estudo sobre as conseqüências do empreendedorismo nas organizações". *RAE-Eletrônica*, Vol. 7, No. 1, Art. 6.

Fontana, A., and Musa, S. (2017). "The impact of entrepreneurial leadership on innovation management and its measurement validation". *International Journal of Innovation Science*, Vol. 9 No. 1, pp. 2-19.

Fornell, C., and Larcker, D.F. (1981). *Structural equation models with unobservable variables and measurement error: algebra and statistics*. Sage Publications: Los Angeles.

Garvin, D.A. (1993), "Building a learning organization", *Harvard Business Review*, Vol. 73 No. 4, pp. 78-91.

Hahn, M.H., Lee, K.C., and Lee, D. S. (2015). "Network structure, organizational learning culture, and employee creativity in system integration companies: the mediating effects of exploitation and exploration". *Computers in Human Behavior*, Vol. 42, pp. 167-175.

Hair Jr., J.F., Barry, J.B., Anderson, R.E., and Black, W.C. (2018). *Multivariate data analysis*. 8th edition. Boston: Cengage.

Hasson, H., Tafvelin, S., and Von Thiele Schwarz, U. (2013). "Comparing employees and managers' perceptions of organizational learning, health, and work performance". *Advances in Developing Human Resources*, Vol. 15 No. 2, pp. 163-176.

Hashimoto, M. (2017). *Espírito empreendedor nas organizações*. São Paulo: Saraiva.

Heinonen, S., and Hiltunen, E. (2012). "Creative foresight space and the futures window: using visual weak signals to enhance anticipation and innovation". *Futures*, Vol. 44 No. 3, pp. 248-256.

Hermelingmeier, V., & von Wirth, T. (2021). "The nexus of business sustainability and organizational learning: A systematic literature review to identify key learning principles for business transformation". *Business Strategy and the Environment*, Vol. 30 No 4, pp. 1839-1851.

Hirst, G., Van Dick, R., and Van Knippenberg, D. (2009). "A social identity perspective on leadership and employee creativity". *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, Vol. 30 No. 7, pp. 963-982.

Höge, T. (2011). "Perceived flexibility requirements at work and the entremployee-work-orientation: Concept and measurement". *Psychology of Everyday Activity*, Vol, 4 No. 1, pp. 3-21.

Hurley, R.F., and Hult, G.T.M. (1998). "Innovation, market orientation, and organizational learning: an integration and empirical examination". *Journal of Marketing*, Vol. 62 No. 3, pp. 42-54.

Johari, J., Yean, T.F., Adnan, Z., Yahya, K.K., and Ahmad, M.N. (2012). "Promoting employee intention to stay: Do human resource management practices matter". *International Journal of Economics and Management*, Vol. 6 No. 2, pp. 396-416.

Kattenbach, R., & Fietze, S. (2018). "Entrepreneurial orientation and the job demands-resources model". *Personnel Review*, Vol. 47 No. 3, pp. 745-764.

Khan, A., Muttakin, M.B., and Siddiqui, J. (2013). "Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy". *Journal of Business Ethics*, Vol. 114 No. 2, pp. 207-223.

Kline, R.B. (2015). *Principles and practice of structural equation modeling*. 4th edition. New York: The Guilford Press.

Kinear, T.C. and Taylor, J.R. (1996). *Marketing research: an applied approach*. 5th edition. New York: McGraw-Hill.

Koryak, O., Mole, K.F., Lockett, A., Hayton, J.C., Ucbasaran, D., and Hodgkinson, G.P. (2015). "Entrepreneurial leadership, capabilities and firm growth". *International Small Business Journal*, Vol. 33 No. 1, pp. 89-105.

Kreiser, P. M., Marino, L. D., & Weaver, K. M. (2002). "Assessing the psychometric properties of the entrepreneurial orientation scale: a multi-country analysis". *Entrepreneurship Theory and Practice*, Vol. 26 No. 4, pp. 71-93.

Lee, Y.S. (2016). "Creative workplace characteristics and innovative start-up companies", *Facilities*, Vol. 34 No. 7/8, pp. 413-432.

Malhotra, N. K., Nunan, D., & Bircks, D. F. (2017). *Marketing research: applied approach*. 5th edition. New York: Pearson.

Marsick, V.J. (2013). "The dimensions of a learning organization questionnaire (DLOQ) introduction to the special issue examining DLOQ use over a decade". *Advances in Developing Human Resources*, Vol. 15 No. 2, pp. 127-132.

Makkonen, H., Pohjola, M., and Olkkonen, R. (2014). "Dynamic capabilities and firm performance in a financial crisis". *Journal of Business Research*, Vol. 67 No 1, pp. 2707-2719.

Meekaewkunchorn, N., Szczepańska-Woszczyzna, K., Muangmee, C., Kassakorn, N., & Khalid, B. (2021). "Entrepreneurial orientation and SME performance: The mediating role of learning orientation". *Economics & Sociology*, Vol. 14 No 2, pp. 294-312.

Miao, Q., Eva, N., Newman, A., and Copper, B. (2019). "CEO entrepreneurial leadership and performance outcomes of top management teams in entrepreneurial ventures: the mediating effects of psychological safety". *Journal of Small Business Management*, Vol. 57 No. 3, pp. 1119-1135.

Nguyen, P., Huynh, H.T.N., Lam, H.H., Le, T.B., and Nguyen, N.H.N. (2021). "The impact of entrepreneurial leadership on SME's performance: the mediating effects of organizational factors". *Heliyon*, Vol. 7 No. 6, pp. 7326.

Panizzon, M., Milan, G.S., Dorion, E.C.H., and Coallier, F. (2020). "The main determinants of new product development ability for international markets: an empirical study on brazilian manufacturing export companies". *Journal of Engineering and Technology Management*, Vol. 57, Article 101569.

Potnuru, R.K.G., Sahoo, C.K., and Sharma, R. (2019). "Team building, employee empowerment and employee competencies". *European Journal of Training and Development*, Vol. 43 No. 1/2, pp. 39-60.

Pratono, A.H., Darmasetiawan, N.K., Yudiarso, A., and Jeong, B.G. (2019). "Achieving sustainable competitive advantage through green entrepreneurial orientation and market orientation". *The Bottom Line*, Vol. 32 No. 1, pp. 2-15.

Purbasari, R.N., and Septian, T.A. (2017). "Factors influencing on employee performance of production department on the manufacturing food industry in Indonesia". *Polish Journal of Management Studies*, Vol. 16 No. 2, pp. 233-242.

Raub, S., Borzillo, S., Perretten, G., & Schmitt, A. (2021). "New employee orientation, role-related stressors and conflict at work: Consequences for work attitudes and performance of hospitality employees". *International journal of hospitality management*, Vol. 94 No 10, pp. 28-57.

Renko, M., El Tarabishy, A., Carsrud, A.L., and Brännback, M. (2015). "Understanding and measuring entrepreneurial leadership style". *Journal of Small Business Management*, Vol. 53 No. 1, pp. 54-74.

Robbins, S., and Coulter, M. (2009). *Foundations of planning management*. Upper Saddle River: Pearson.

Sawaeen, F.A.A, and Ali, K.A.M. (2020). "The impact of entrepreneurial leadership and learning orientation on organizational performance of SEMs: the mediating role of innovation capacity". *Management Science Letters*, Vol. 10, pp. 369-380.

Schäffer, U. (2020). "Levers of organizational resilience". *Controlling & Management Review*, Vol. 64, pp. 8-19.

Song, X., and Lee, S. (2012). "A tutorial on the Bayesian approach for analyzing structural equation models", *Journal of Mathematical Psychology*, Vol. 56, pp. 135-148.

Sonnentag, S., Volmer, J., and Spychala, A. (2008). "Job performance". *The Sage Handbook of Organizational Behavior*, Vol. 1, pp. 427-447.

Tajpour M., and Salamzadeh, A. (2019). "The effect of spiritual intelligence on organisational entrepreneurship: case study of educational departments in University of Theran". *Int. J. Management and Enterprise Development*, Vol. 18 No. 3, pp. 205-218.

Tarabishy, A., Solomon, G., Fernald Jr., L.W., and Sashkin, M. (2005). "The entrepreneurial leader's impact on the organization's performance in dynamic markets". *The Journal of Private Equity*, Vol. 8 No. 4, pp. 20-29.

Vandenabeele, W. (2009). "The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSM-performance relationship". *International Review of Administrative Sciences*, Vol. 75 No. 1, pp. 11-34.