



Influence of leadership and other critical variables in the competitiveness of Chilean MSMEs

Influencia del liderazgo y otras variables críticas en la competitividad de Mipymes chilenas

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Abstract

Smaller companies are determining factors in the Chilean economy. The objective of this research is to identify and analyze key variables in the generation of competitiveness of the smallest companies in the Coquimbo Region - Chile, represented by micro, small and medium-sized companies (Mipyme). This is based on the perceptions of 384 members of the operating personnel of this type of companies and a multivariate analysis, using a structural equation model (based on covariance - MBC). It is confirmed with statistical reliability that competitiveness in smaller companies is a consequence of the influence of five constructs, which must be considered critical variables, since they positively, directly and indirectly influence the competitiveness of these companies, which are; transformational leadership, transactional leadership, performance effectiveness, extra effort, and job satisfaction. Variables that explain the variance of competitiveness by 69%.

JEL Code: L2, M10, M12, M14

Keywords: leadership; job satisfaction; extra effort; performance effectiveness; competitiveness

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Resumen

Las empresas de menor tamaño son determinantes en la economía chilena. El objetivo de esta investigación es identificar y analizar variables claves en la generación de la competitividad de las empresas de menor tamaño de la Región de Coquimbo – Chile, representadas por las micro, pequeña y medianas empresas (Mipyme). Esto se fundamenta en las percepciones de 384 integrantes del personal operativo de este tipo de empresas y un análisis multivariado, empleando un modelo de ecuaciones estructurales (basado en covarianza - MBC). Se ratifica con confiabilidad estadística que la competitividad en las empresas de menor tamaño, es consecuencia de la influencia de cinco constructos, que deben ser consideradas variables críticas, pues influyen positiva, directa e indirectamente en la competitividad de estas empresas, las cuales son; liderazgo transformacional, liderazgo transaccional, efectividad en el desempeño, esfuerzo extra y satisfacción laboral. Variables que explican en un 69% la varianza de la competitividad.

Código JEL: L2, M10, M12, M14

Palabras clave: liderazgo; satisfacción laboral; esfuerzo extra; efectividad en el desempeño; competitividad

Introduction

In Chile, smaller companies are an important engine of economic development. Their contribution is evidenced by the fact that they constitute 98.5% of the total number of companies, and 67% of employment, although only 15% of the country's sales (Ministerio de Economía Fomento y Turismo, 2018). Nevertheless, productivity per worker and the generation of added value of large companies are significantly higher than those of smaller companies (MSMEs), by 41% and 315%, respectively. Therefore, it is important to make smaller companies more competitive in a Chilean economy of only 18 million inhabitants, which already has 64 Free Trade Agreements, granting it preferential conditions to access economies that, as a whole, represent 86% of the world's GDP (Dirección General de Relaciones Económicas Internacionales, 2019). Therefore, it is a strategic challenge for business leaders in the country and, consequently, in the Coquimbo Region to create a labor ecosystem and networks of stakeholders specific to each MSME, enabling their competitiveness to be a consequence of strategies that create value and give them a competitive advantage (Hitt et al., 2015), thus providing direct benefits to companies in general and in particular to smaller companies in the Coquimbo Region of Chile, which represent 99.4% of all those formally constituted and employ 150 358 dependent workers (fee-based personnel are excluded), 77.2% of the workforce of that segment at the regional level (Servicio de Impuestos Internos, 2018).

Therefore, increasing the value of human capital (employees) also implies giving them distinctive competencies, thus improving their contribution to the competitiveness of the organizations of both the industry or sector to which they belong, as well as the region-country in which their company is

located (Cabrera et al., 2011). In this scenario, the value of human capital reflected in its effectiveness in performance and extra effort is enhanced through transformational leadership that generates a positive effect on the innovative performance of a work team (Jiang & Chen, 2016). This is an essential issue for smaller companies trying to offer a varied range of valuable products and services that satisfactorily respond to their clients' expressed and unexpressed needs with a value proposition that installs sustainable barriers to entry in their industry (Cabana et al., 2018). Transformational and transactional leaders influence the design of the work ecosystem and, with different levels of importance, job satisfaction (Dierdorff & Morgeson, 2013), which is influential in the competitiveness of companies.

Nevertheless, competitiveness must be the product of a complex and dynamic pattern of interaction between the state, companies, intermediate institutions, and the organizational capacity of a society (Cabrera et al., 2011). Likewise, business organizations must achieve high productivity, quality, flexibility, and agility, sustaining competitiveness and generating business networks to accelerate collective learning processes (Saavedra & Milla, 2012).

Thus, the objective of this study is to identify and analyze the influence of transformational leadership and transactional leadership on the effectiveness of performance, extra effort, job satisfaction, and competitiveness of smaller companies in the Coquimbo Region of Chile, knowledge of which can contribute to regional competitiveness, which is strategically necessary, considering that the Coquimbo Region ranks only 9th out of the 15 regions of the country in competitiveness (Centro de Estudios en Economía y Negocios, 2015). This article will focus on micro variables performed by operational personnel and their leadership, excluding macro variables such as company policies and strategies.

Leadership and its influence on business competitiveness

As mentioned, leadership is key to a company's success, which depends, among other things, on the efficiency, effectiveness, and efficiency of organizations (Soto, 2011). This fact is reflected in the organizational culture and the organization's relation with society. Leaders who seek collaborative work can promote this type of attitude internally and externally. Therefore, the organizational culture is generally determined by the leader's style, affecting competitiveness (Contreras et al., 2016). In order to analyze the influence of these two leadership styles on the competitiveness of SME companies in the Coquimbo Region, the research will focus on the influence of leadership on the variables effectiveness in performance, extra effort, and satisfaction, which in turn affect business competitiveness (Mendoza et al., 2014).

Transformational leadership

Leadership is vital since it influences the alignment and commitment of individuals and teams in achieving organizational goals (Capa et al., 2018). Specifically, transformational leadership operates across a full spectrum of mechanisms: affect, cognition and behaviors. Therefore, a transformational leader inspires subordinates and entire collectives by influencing and managing their behaviors through shared belief systems (cognition) and positive emotions (affect) and through the mutual expression of a collective vision (Kark et al., 2017). The transformational leader stimulates, encourages, and motivates personnel to become aware of the importance of teamwork, developing in the members of the team a sense of collaboration, participation, belonging, and service aligned to the institutional objectives for the benefit of the community, directly impacting the individual performance of each team member (González et al., 2013).

Transformational leaders set challenging goals providing their team with inspirational motivation to achieve these objectives, which, when achieved, satisfy higher levels of human needs. They also gather ideas from the "followers" to advance and develop their organizations; this stimulates the "followers" to propose new perspectives to the organization while increasing their self-esteem and self-realization. In addition, transformational leaders pay attention to the individual concerns and needs of "followers," incorporating them when setting organizational goals, which can motivate their "followers" to achieve shared organizational goals and visions, thus providing extra effort in performing their jobs (Jung, 2014).

Following the same line, recent work suggests that transformational leadership has a more favorable impact on employee job satisfaction than other leadership styles (Çoğaltay et al., 2016). Choi et al. (2017) indicate that transformational behaviors can affect job satisfaction through employees' perceptions of transformational leaders. Such leaders increase employee expectations and recognition of their work, improving employee job satisfaction. Aydogmus et al. (2018) find that perceived transformational leadership is positively associated with job satisfaction and indicate that encouraging managers to adopt a transformational style by articulating a vision, inspiring employees, recognizing employee needs, and promoting creativity, would likely result in higher levels of job satisfaction. The collective vision of an organization that promotes transformational leadership fosters relations characterized by trust and mutual respect, favoring individual and collective job satisfaction and driving the team to constant growth (Omar, 2011).

Successful leadership promotes an optimal organizational climate and work ecosystem that leads to a competitive company because for organizations to be truly competitive, they must not only use all the strategies and technology at their disposal, but they must also have a motivated, up-to-date, and

constantly trained team to use these tools (Meza & Olmos, 2014). Therefore, through a motivated team with job satisfaction, it is possible to increase the value of modern management, raise the qualifications of personnel, incorporate higher quality in the products and services offered by the organization, find new market niches, and improve their skills, resulting in higher income and better performance in general (Cruz-Ortiz et al., 2013), which implies better competitiveness in the organization, consistent with the work of Jiang and Chen (2016).

Transactional leadership

An organization needs to outperform its competition in terms of performance by achieving a competitive advantage that will provide sustainable growth over time, but to do so, it must establish and implement effective business strategies that seize opportunities while capitalizing on resources and competencies (Obeidat, 2016). Therefore, organizations must know the factors that must be considered to achieve excellence within which organizational performance plays an essential role (Masa'deh et al., 2018). Accordingly, transactional leadership that focuses its efforts on the construction of agreements between the leader and their "followers" regarding their goals and expectations of rewards (Rodriguez et al., 2017) is of great importance as it allows "followers" to perceive tangible incentives that motivate them to perform more effectively (Clarke, 2013).

Since the terms of exchange are usually short-term, where transactional leadership is developed, achieving changes in the organizational culture is not the main concern, but rather the effort is in achieving the team's objectives (Epitropaki & Martin, 2013). This leadership style is developed because a leader sets standards, highlights duties, and directs subordinates to perform tasks in the "correct and expected manner," encouraging consent and compliance (Kark et al., 2017). The leader who gives a reward to the "followers" who demonstrate extraordinary achievements in their work can expect higher performance in the whole team since they will make an extra effort to achieve the proposed goal, so the reward is considered as a leading motivational factor (Raziq et al., 2018).

Leaders with an effective transactional style should make employees more satisfied with their jobs, as these leaders clarify their expectations and identify rewards for individual performance. Leaders must deal with organizational uncertainty by clarifying ambiguous objectives, which helps subordinates understand their roles in achieving shared objectives. These instructions from the leader channel efforts toward organizational goals and deliver intrinsic satisfaction to the "followers," indicating how to obtain extrinsic rewards (Kim et al., 2014). When "followers" achieve these rewards, they are recognized by their peers and perceive themselves to be more valued, improving their satisfaction, and enabling the

achievement of goals at both the individual and team performance levels, significantly and positively impacting their performance (Rodríguez et al., 2017).

Maintaining competitiveness and sustainability in a turbulent business environment is critical, forcing organizations to pay attention to their employees' perceptions of leadership, work practices, and policies that could drive or impede creativity and innovation in the organization, and thus its competitiveness (Alrowwad et al., 2020). To this end, transactional leadership contributes to competitiveness for organizations, so it is important for a manager to understand how some organizational environment factors impact employee satisfaction. A manager will thus be able to modify their employees' behavior, improve the quality and productivity of work, favor interpersonal relations, and achieve job satisfaction that produces the necessary competitiveness for the organization (Mendoza et al., 2014). In addition, previous studies report the importance of business-aligned information technologies (IT) for a company's performance, situational success, and information perspective, aspects directly related to competitiveness. The study by Wang et al. (2021) finds that transactional leadership influences the alignment of IT processes.

Performance effectiveness, extra effort, job satisfaction, and competitiveness

Mulenga *et al.* (2018) state that leadership styles significantly affect job satisfaction, extra effort, and performance, indicating a significant correlation between them. According to Mendoza *et al.* (2014), managers are interested in developing problem-solving skills and upgrading their staff to reach their goals and effectiveness in their performance, striving to set an example with their behavior to achieve extra effort from their workers. Therefore, committed employees need characteristics such as dedication and commitment. Nevertheless, to ensure the members of an organization have these characteristics, they must perform in an environment that stimulates emotional and psychological well-being, which triggers a high level of job satisfaction, translating into improved performance for the organization (Añazco *et al.*, 2018). Based on this, a leader will modify their behavior, improve the quality and productivity of work, favor interpersonal relations, and achieve job satisfaction that produces competitiveness (Mendoza *et al.*, 2014).

Relation between transformational and transactional leadership

Despite being unique leadership styles, not only do transformational and transactional leadership promote perceptions of fairness (from different perspectives), but both styles induce greater motivation and work engagement. Therefore, work engagement can come from any leadership style (Tziner & Shkoler, 2018). Meanwhile, Hoogeboom and Wilderom (2019) postulate that the desired effects of transformational

leadership are stronger when a fuller range of task-based leadership behaviors, i.e., transactional leadership, is exhibited. Therefore, a well-structured balance between both styles is needed to achieve leadership that positively impacts subordinates and competitiveness.

From the above theory, Table 1 proposes the following hypotheses.

Table 11

Research technical datasheet

Hypothesis	Random Sampling
H1	Transformational leadership significantly and positively affects performance effectiveness.
H2	Transformational leadership significantly and positively affects extra effort.
H3	Transformational leadership significantly and positively affects job satisfaction.
H4	Transformational leadership significantly and positively affects job satisfaction.
H5	Transactional leadership significantly and positively affects performance effectiveness.
H6	Transactional leadership significantly and positively affects extra effort.
H7	Transactional leadership significantly and positively affects job satisfaction.
H8	Transactional leadership significantly and positively affects competitiveness.
H9	Performance effectiveness significantly and positively influences extra effort.
H10	Extra effort significantly and positively influences job satisfaction.
H11	Satisfaction significantly and positively influences competitiveness.

Source: created by the authors

Methodology

Information was collected through a structured survey, adapted from the study conducted by Cabana et al. (2016), specifically the methodology of separating the constructs and asking the questions, and part of the theory used to analyze the results, applied to the operating personnel of MSMEs in the Coquimbo Region of Chile. The evaluation instrument was validated by experts from the private sector and academics specializing in research on sustainable management and business competitiveness, among other fields. The fieldwork was conducted personally and online, and the IBM SPSS Statistics 21 software was used for statistical analysis. Details are provided in Table 2.

Table 2
 Research technical datasheet

Sampling type	Random Sampling
Confidence level	95%; $z=1.96$; $p=q=0.5$ (5% error and 95% reliability)
Universe	150 358 (Internal Revenue Service (2018))
Sample size	384
Unit of analysis	Operating personnel of the smallest companies in the Coquimbo region, Chile (39 companies)
Method of data collection	Face-to-face and online 73-question questionnaire
Type of survey question	Likert-type polytomous (1 to 5) scores or categories and screening
Date of fieldwork	Between March and June 2018

Source: created by the authors

Individual reliability analysis of indicators

The Kaiser-Meyer-Olkin (KMO) and Barlett's sphericity (PEB) tests were performed, where KMO is considered adequate when the value is close to 1, and PEB shows a significance level of less than 0.05, confirming that it is feasible to perform factor analysis. Then, to determine the indicators' reliability, each one's factor loadings were calculated, accepting values higher than 0.6, so indicators LT5 and LT6 were eliminated; the rest were considered acceptable and significant at 95%.

Table 3
 Individual Indicator Reliability Analysis

Construct	Indicator	Item	Factorial Load
Transactional Leadership KMO: 0.945 PEB: 0	LT1	They always encourage me to make an effort.	0.777
	LT2	They clarify and specify the responsibility of each of us to achieve the performance objectives.	0.788
	LT3	They invest part of their time in guiding and teaching us to do a better job.	0.774
	LT4	They make clear what each one can receive if they achieve the objectives.	0.750
	LT5	We are treated as individuals rather than as members of the group.	0.518
	LT6	They consider that each worker is different regarding needs, skills, and aspirations.	0.568
	LT7	They help me develop my strengths so that I can achieve my goals.	0.845
	LT8	They express satisfaction when I deliver what is expected.	0.780
	LT9	They look for ways to develop my capabilities so that I can perform better.	0.859
	LT10	They clarify what I will receive in return for my work.	0.697

	LT11	They relate to me personally to monitor my performance.	0.787
	LT12	When I achieve the proposed objectives, I am informed that I have done well.	0.798
	LT13	They are interested in knowing the needs of the working group.	0.812
	LT14	They constantly inform me about my strengths to encourage further good performance in my work.	0.820
	LF1	They critically evaluate beliefs and assumptions to determine their appropriateness.	0.617
	LF2	They communicate their most important values and beliefs.	0.640
	LF3	When solving problems, the focus is on stimulating diversity	0.726
	LF4	They optimistically lead the organization toward a consensual future.	0.797
	LF5	I am proud to be working with them.	0.806
	LF6	They are enthusiastic about the needs to be satisfied.	0.775
	LF7	They communicate the importance of having a strong sense of purpose or personal motivation.	0.762
	LF8	They can go beyond their interests to benefit the organization or group.	0.769
	LF9	They act in a way that earns my respect.	0.816
	LF10	They take into consideration the moral and ethical consequences of the decisions taken.	0.793
	LF11	They are reliable and secure.	0.819
	LF12	They build a motivating vision of the company's future.	0.827
	LF13	They help me look at problems from different points of view and enrich my learning.	0.837
Transformational Leadership KMO: 0.978 PEB: 0	LF14	They propose new ways to complete my tasks to inspire us to do the job.	0.819
	LF15	They emphasize the importance of having a shared mission.	0.828
	LF16	They express confidence that the objectives will be achieved.	0.827
	LF17	They share the risks in the decisions taken in the working group.	0.801
	LF18	I have confidence in their judgments and decisions.	0.859
	LF19	They increase my self-confidence.	0.879
	LF20	They evaluate the consequences of the decisions adopted to share the benefits among those involved.	0.834
	LF21	They are consistent in what they say and what they do.	0.741
	LF22	They are a role model because they represent what I aspire to achieve.	0.830
	LF23	I am driven to achieve goals that are attainable and challenging.	0.821
	LF24	They encourage tolerance toward differences of opinion.	0.769
	LF25	They tend to behave in such a way as to guide their collaborators.	0.852
	LF26	They show interest in the value of my contributions to solving problems.	0.834
	LF27	They motivate me to achieve organizational objectives	0.827

		by showing me the benefits.	
	LF28	They encourage me to express my ideas and opinions about the work method.	0.796
	LF29	I listen to them attentively because it stimulates me to be like them.	0.775
	LF30	They set objectives that include my needs.	0.813
Job satisfaction KMO: 0.881 PEB: 0	S1	They use effective leadership styles because they relate to our capabilities and motivation.	0.896
	S2	They inspire me to work successfully.	0.913
	S3	I get satisfaction from working as they do when I see our results.	0.908
	S4	The motivation that the leader expresses influences our satisfaction.	0.879
	S5	They use leadership styles that generate satisfaction because we perceive rewards as equitable considering the objectives achieved.	0.877
Extra Effort KMO: 0.921 PEB: 0	EE1	They motivate me to do more than I expected to do.	0.882
	EE2	They increase my motivation toward competitiveness.	0.910
	EE3	They motivate me to work harder on my own.	0.874
	EE4	They make me feel motivated to put more into my work.	0.924
	EE5	They increase my motivation to achieve my objectives.	0.916
	EE6	They count on me whenever there is extra or unplanned work.	0.818
Performance effectiveness KMO: 0.931 PEB: 0	E1	They are effective concerning my work and my needs.	0.841
	E2	They are effective in meeting the needs of the work team.	0.874
	E3	They ensure that the group achieves the planned objectives.	0.872
	E4	They ensure that the performance of the group is well evaluated	0.878
	E5	They are effective in finding ways to motivate the work team.	0.901
	E6	They generally meet the expectations I have of them, achieving productivity in their work team.	0.903
	E7	I am pleased to work with them because they promote effectiveness in job performance.	0.878
Competitiveness KMO: 0.866 PEB: 0	C1	They lead the company to differentiate itself from the competition.	0.908
	C2	They produce a continuous improvement over the competition.	0.921
	C3	They lead the company to achieve results that are superior to their competitors.	0.931
	C4	They improve the company's image, thus enhancing clients' loyalty to the company.	0.916

Source: created by the authors

Construct reliability, convergent validity, and discriminant validity analysis

For the reliability of a set of indicators, internal consistency (Cronbach's Alpha greater than 0.7) and the calculation of the composite reliability (CFI) for each factor separately (CFI greater than 0.7) are considered. The average variance extracted (AVE) is analyzed for convergent validity, expecting it to be greater than 0.5. Table 4 shows the results. On the other hand, Table 5 evaluates discriminant validity, the extent to which a construct differs from others. One way to test this criterion is to prove that the constructs' correlations are lower than the square root of AVE.

Table 4
 Reliability of constructs and convergent validity

Construct	Cronbach's alpha	CFI	AVE
Transactional Leadership	0.947	0.953	0.627
Transformational Leadership	0.980	0.981	0.637
Job satisfaction	0.937	0.953	0.801
Extra Effort	0.946	0.957	0.789
Performance effectiveness	0.950	0.959	0.772
Competitiveness	0.938	0.956	0.845

Source: created by the authors

Table 5
 Discriminant validity

Construct	TLF	TL	PE	EE	S	C
Transformational Leadership (TLF)	0.798					
Transactional Leadership (TL)	0.791	0.792				
Performance Effectiveness (PE)	0.789	0.754	0.879			
Extra Effort (EE)	0.795	0.768	0.877	0.888		
Job satisfaction (S)	0.777	0.782	0.871	0.879	0.895	
Competitiveness (C)	0.765	0.751	0.762	0.770	0.849	0.919

Source: created by the authors

Results

Univariate analysis

Table 6 provides simple descriptive data to estimate the level of importance (attributed by operational personnel) of each of them (through the average) and the degree of convergence regarding the perceptions of these constructs (through the standard deviation). It is necessary to emphasize that the closer the average is to 5, the higher its level of importance. This is also adapted from Cabana *et al.* (2016).

Table 6
 Univariate analysis

Construct	Average	Average %	Standard deviation
Transformational Leadership	2.905	58.1%	0.075
Transactional Leadership	3.445	68.9%	0.069
Performance Effectiveness	3.771	55.4%	0.065
Extra Effort	3.820	46.4%	0.074
Job satisfaction	3.759	45.1%	0.099
Competitiveness	3.245	43.9%	0.058

Source: created by the authors

Bivariate analysis

An analysis of variance was carried out to identify significant differences between groups according to gender, age, and size of the company and to contextualize the present study. For this analysis, the null hypothesis, that the population means are equal, is tested against the alternative hypothesis, that at least one of the populations differs from the others in terms of its expected value. When performing the hypothesis test with Fisher's ratio, the null hypothesis is rejected when the calculated F-indicator is greater than the tabular F-indicator. Using the significance level of 0.05, the tabular F values are: a) ANOVA by gender: Tabular F= 3.8654, b) ANOVA by company size: Tabular F= 3.0189, and c) ANOVA by age: Tabular F= 2.395. The results of the ANOVA analysis of each factor are shown in Tables 7, 8, and 9.

Table 7
 Bivariate analysis, one-factor ANOVA – Gender

Variable	Sum of Squares			Degrees of Freedom			CF		F	Sign.
	Inter	Intra	Total	Inter	Intra	Total	Inter	Intra		
Transformational L.	0.374	268.979	269.352	1	400	401	0.374	0.672	0.556	0.456
Transactional L.	0.755	251.618	252.373	1	400	401	0.755	0.629	1.201	0.274
E. in Performance	2.775	334.374	337.149	1	400	401	2.775	0.836	3.320	0.069
Extra Effort	1.648	370.471	372.119	1	400	401	1.648	0.926	1.779	0.183
Job satisfaction	0.362	368.272	368.635	1	400	401	0.362	0.966	0.375	0.540
Competitiveness	0.010	376.117	376.127	1	400	401	0.010	0.940	0.011	0.918

Source: created by the authors

Table 8
 Bivariate analysis, one-factor ANOVA - Company size

Variable	Sum of Squares			Degrees of Freedom			CF		F	Sign.
	Inter	Intra	Total	Inter	Intra	Total	Inter	Intra		
Transformational L.	2.345	267.007	269.352	2	399	401	1.173	0.669	1.752	0.175
Transactional L.	3.639	248.734	252.373	2	399	401	1.820	0.623	2.919	0.055
E. in Performance	3.253	333.897	337.149	2	399	401	1.626	0.837	1.943	0.145
Extra Effort	3.919	368.200	372.119	2	399	401	1.960	0.923	2.123	0.121
Job satisfaction	3.507	383.127	386.635	2	399	401	1.754	0.096	1.826	0.162
Competitiveness	4.150	371.977	376.127	2	399	401	2.075	0.932	2.226	0.109

Source: created by the authors

Table 9
 Bivariate analysis, one-factor ANOVA – Age

Variable	Sum of Squares			Degrees of Freedom			CF		F	Sign.
	Inter	Intra	Total	Inter	Intra	Total	Inter	Intra		
Transformational L.	2.347	267.005	269.352	4	397	401	0.587	0.673	0.872	0.480
Transactional L.	3.515	248.858	252.373	4	397	401	0.879	0.627	1.402	0.233
E. in Performance	2.919	334.230	337.149	4	397	401	0.730	0.842	0.867	0.484
Extra Effort	2.850	369.269	372.119	4	397	401	0.712	0.930	0.766	0.548
Job satisfaction	2.455	384.179	386.635	4	397	401	0.614	0.968	0.634	0.638
Competitiveness	3.997	372.130	376.127	4	397	401	0.999	0.937	1.066	0.373

Source: created by the authors

Analysis of causal relations and hypothesis testing

The results indicate the existence of significant causal relations given by the standardized coefficient and the t-value of the constructs, higher than 1.96 in the hypotheses proposed, so all the proposed hypotheses are accepted (Table 10).

Table 10
 Contrast of relations

Hypothesis	Structural relation	Standardized Coefficient	Critical Ratio (t-value)	Contrast
H1+	Transformational Leadership → Performance Effectiveness	0.851	11.195	Accepts
H2+	Transformational Leadership → Extra Effort	0.312	3.325	Accepts
H3+	Transformational Leadership → Job Satisfaction	0.697	10.508	Accepts
H4+	Transformational Leadership → Competitiveness	0.583	4.325	Accepts
H5+	Transactional Leadership → Performance Effectiveness	0.231	3.579	Accepts
H6+	Transactional Leadership → Extra Effort	0.202	2.871	Accepts
H7+	Transactional Leadership → Job Satisfaction	0.191	3.069	Accepts
H8+	Transactional Leadership → Competitiveness	0.481	7.105	Accepts
H9+	Performance Effectiveness → Extra Effort	0.309	3.325	Accepts
H10+	Extra Effort → Job Satisfaction	0.322	3.465	Accepts
H11+	Job Satisfaction → Competitiveness	0.751	5.884	Accepts

Source: created by the authors

Next, the covariance-based structural equation method (CBEM) is used since it is oriented to the estimation of parameters, adjusting to the characteristics of the model (Figure 1).

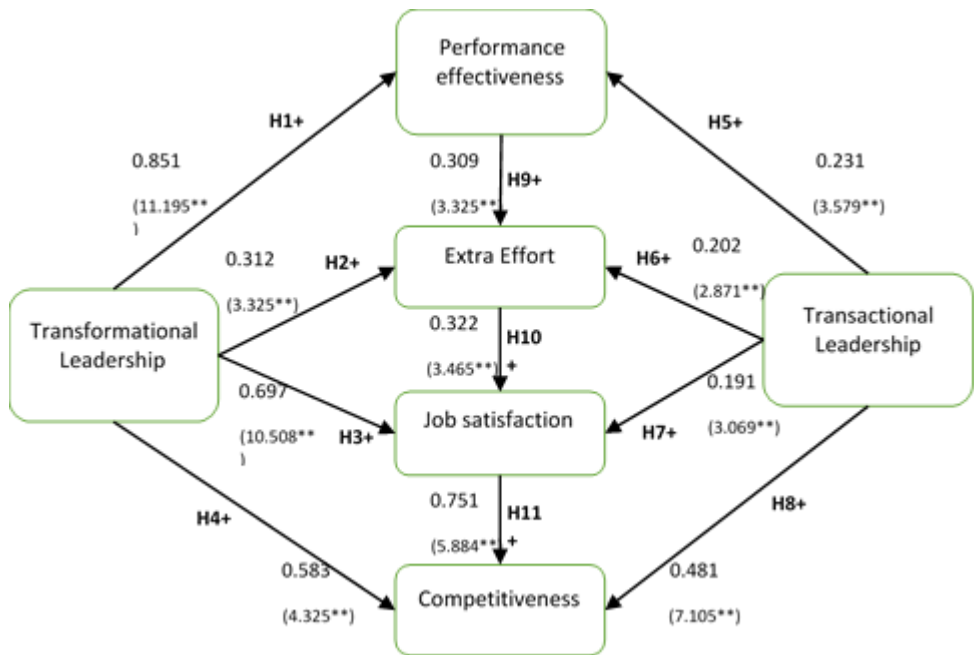


Figure 1. Structural equation models
 Source: created by the authors

Goodness of fit and model sensitivity

To measure the variances and covariances of the sample and whether they differ from the estimates obtained, the root mean square error (RMR) was used, which, as it approaches 0, can be considered a near-perfect fit (Byrne, 2016). The root mean square error of approximation (RMSEA) is calculated, which represents the anticipated fit with the total value of the population and no longer with that of the sample, where if it is less than or equal to 0.05, it indicates an error of approximation of the model with reality (Kline, 2015). The relative CFI (Comparative Fit Index) was also used, which is similar to the NFI but considers the sample size. The threshold value to consider a good fit of the proposed model would be 0.95 for large samples, but this value is relative. Therefore, considering the model analyzed, it should be estimated in conjunction with other indices (Herrero, 2010). Sensitization was performed based on 4 models: (1) leaving all variables, (2) job satisfaction was extracted, (3) transactional leadership was extracted, and (4) transformational leadership was extracted. Table 11 shows that model 1 is the best-fitting model.

Table 11
 Goodness of fit of the 4 models

Indicator	Model 1	Model 2	Model 3	Model 4
Explained variance of competitiveness	69%	60%	62%	64%
RMR	0.082	0.095	1.055	1.096
CFI	0.874	0.904	0.826	0.869
NFI	0.897	0.819	0.857	0.865
RMSEA	0.066	0.069	0.076	0.079

Source: created by the authors

Discussion

It is confirmed with statistical reliability that the competitiveness of smaller companies in the Coquimbo Region of Chile is influenced by five variables that should be considered critical since they have a positive, direct, and indirect influence on competitiveness. Transformational leadership, transactional leadership, performance effectiveness, extra effort, and satisfaction explain 69% of the variance in competitiveness, a significant level according to Medina et al. (2012).

Nevertheless, the univariate results of this research show that the management of smaller companies does not systemically manage at the required standard, the five variables that influence competitiveness, as their levels are in a low range (41 to 60%) to medium (61 to 80%), according to the scale used in Cabana et al. (2016). Transformational leadership showed a level of 58.1%; transactional leadership, 68.9%; performance effectiveness, 55.4%; extra effort, 46.4%; and workforce satisfaction, 45.1%. They generate overall low levels of competitiveness in smaller companies, equivalent to 43.9%, which implies that only 4 out of 10 workers assume that their company is competitive, which reflects the labor instability of these companies in Chile. Also, following Tziner and Shkoler (2018), who indicate significant differences in age groups, it was decided to highlight the results of the bivariate analysis that obtain the relation of gender, company size, and age with competitiveness. When Fisher's test is performed, the alternative hypothesis is rejected in all three cases since the calculated F is lower than the tabular F (at 5% significance). Therefore, the level of competitiveness of smaller companies is independent of gender, the age of the workforce, and the company's size, as no statistically significant differences are evident. This divergence from what Tziner and Shkoler (2018) said could lie in both studies' cultural and contextual differences.

Three sensitizations of the model were conducted, excluding the constructs of job satisfaction, transactional leadership, and transformational leadership, to evaluate the degree of influence their absence has on competitiveness. This scenario reduces the explanation of the variance of competitiveness by 9%, 7%, and 5%, respectively. At the same time, the three constructs analyzed together explain better the

variance of competitiveness (69%), which is very much in line with Alrowwad et al. (2020) since both types of leadership implicitly influence competitiveness.

Regarding the individual influence of the constructs on job satisfaction, transformational leadership has the greatest positive impact (0.69), which is consistent with what was posited by (Çoğaltay et al., 2016), who state that transformational leadership has a greater impact than other leadership styles. This fact corroborates the importance of motivating and guiding employees to achieve job satisfaction. In second and third place are extra effort and transactional leadership, with standardized coefficients of 0.32 and 0.19, respectively. These constructs are significant because they explain 91% of the variance in job satisfaction. Effectiveness in performance is more influenced by transformational leadership than by transactional leadership (standardized coefficients of 0.85 and 0.23, respectively). Its variance is explained in 77% by both leadership styles, evidence that is in line with what has been proposed by different authors (Espinosa et al., 2015; Clarke, 2013), confirming that leaders must make decisions in compliance with operational planning, but ensuring that each of the operational achievements contributes period by period to the strategic framework (vision, mission, and strategic objectives) and therefore to the strategic direction of the company. Regardless, it is still necessary to set standards and regulations while directing subordinates to perform their duties in the expected and correct manner, as expressed by Kark et al. (2017).

In addition, transformational leadership is more influential in the extra effort employees can deliver in their respective work areas, followed by performance effectiveness and transactional leadership, as their standardized coefficients are 0.53, 0.31, and 0.20, respectively. Nevertheless, the two leadership styles must be executed in parallel, and even more so transactional leadership aligned with transformational leadership (Hoogeboom & Wilderom, 2019), significantly impacting the satisfaction of human capital. In that scenario, it is expected that a culture of trust will be created oriented toward people and results, key assets for a company's workforce to use and improve their potential, thus contributing to improving competitiveness.

In this scenario, transactional leadership will drive an organizational adjustment, which could generate productivity and profitability in the short term but will not give a sustainable boost to organizational reinvention (proactive organizational architecture restructuring, disruptive innovation, and endodevelopment) and, as a consequence, sustainable economic value for the company, which is consistent with Mendoza et al. (2014). Given this, organizational paradigms must also focus on transformational leadership, developing the team's potential to achieve organizational and personal goals (Bartram & Casimir, 2007).

Job satisfaction is the most influential construct in the competitiveness of companies, followed by transformational leadership and transactional leadership, as their standardized coefficients are 0.75, 0.58, and 0.48, respectively. This joint scenario is consistent with that of Jiang and Chen (2016). Thus,

the systemic management of these three variables will generate sustainable competitiveness in the company. Nonetheless, the achievement of job satisfaction requires that both leadership styles complement each other and that this motivates the execution of challenging objectives and actions of value for people and the organization, which will lead the members of each work area to move from simply fulfilling the contract to committed and proactively delivering a greater contribution. In other words, providing extra effort in this scenario will boost job satisfaction as long the employees perform in an environment that stimulates their emotional well-being, which is in accordance with Añazco et al. (2018).

These results confirm the importance of the simultaneous contribution of transactional and transformational leadership in the construction of a work ecosystem where actions are performed with a strategic perspective (operational actions aligned with the strategic framework), building teams committed to eliminating "visible waste" in the processes and in identifying and eliminating "invisible waste," value extractors that demand extra effort from their collaborators and a perception of job satisfaction, which implies an ecosystem capable of generating the full realization of the workers' intellectual capital potential (Esguerra & Contreras, 2016). This would free up internal resources to contribute to the co-financing of value processes, leading to organizational optimization and reinvention and, as a consequence, to the competitiveness of the companies, consistent with Burpitt (2009).

Conclusion

This research concludes that in smaller companies in the Coquimbo Region of Chile, transactional leadership, transformational leadership, and human capital satisfaction directly influence business competitiveness, while performance effectiveness and extra effort indirectly influence them. Both leadership styles are synergistic only if the human capital expresses satisfaction with their performance in the processes in which they participate. Therefore, it can be stated that leadership is a process of influence, where decisions are made considering the psycho-socio-cultural context in which the workers find themselves. This leads to active and innovative participation that contributes to the objectives of the business and its stakeholders, strengthening the productivity and the sustainable competitiveness of the organization, consistent with what is stated by González et al. (2013).

The univariate results of this research show that MSME managers do not systemically manage, at the required standard, the five variables that influence competitiveness, as their levels are in a low range (41 to 60%) to medium (61 to 80%), according to the scale of importance proposed and used by Cabana et al. (2016), also adopted for this study. The percentage values shown in Table 6, as a whole, generate low competitiveness in smaller companies (43.9%), implying that only 4 out of 10 workers assume that their company is competitive, a reflection of the labor instability of these companies.

A company's competitiveness also depends on the sustainable innovation of its value chain and stakeholders at a higher speed than its competitors in the industry, which aligns with Morales and Pech (2000). It also requires transformational and transactional leadership that operates through performance effectiveness, extra effort, and job satisfaction to parallel the evolution of the development and commitment of their employees, building core competencies as the basis of their company's leadership in the industry. Nonetheless, these conclusions must be addressed comprehensively since the success of eventual proposals or action plans that use the results found here does not depend exclusively on good execution. According to Saavedra and Milla (2012), competitiveness is not only achieved by favorable micro or macroeconomic conditions but also requires the existence of governmental measures and policies that promote this competitiveness in an environment that encourages social, legal, political, and macroeconomic stability, so the results presented in this research must be viewed comprehensively with this perspective to achieve the desired competitiveness.

In addition, the results obtained provide important knowledge that should be researched further since authors such as Dordevic et al. (2021) and Rawashdeh et al. (2020) show that the relations between these variables have different characteristics from those presented here, specifically the variables' performance effectiveness, job satisfaction, and extra effort. Also, it should be noted that a multilevel model was not used for data processing, so the possibility for future research that includes it is open. Similarly, future research can include studies on gender, company size, and other factors.

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