

Performance Assessed by Stakeholders' Satisfaction and Predicted by Organizational Culture

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Abstract

This study proposes stakeholder satisfaction as a metric for assessing a company's general performance. The assessment can be performed using the Stakeholder Satisfaction Scale (SSS) developed, for this purpose, in this study. Once the overall performance score of the company is obtained, the question arises of how to explain it. To answer this question, an additional scale was also developed in this study—the Performance Culture Scale (PCS). To confirm the empirical usefulness of these scales, this study sought to verify the predictive relationship between culture and organizational performance. A total of 1376 working adults participated in three studies: 1) validity evidence for the SSS; 2) evidence of validity for PCS; 3) predictive relationship of organizational culture on stakeholder satisfaction. The results showed that both scales are empirically feasible, and the positive predictive effect of organizational culture on organizational performance, as measured by stakeholder satisfaction, was corroborated.

Keywords: stakeholders' satisfaction, organizational performance, organizational culture.

Performance Avaliada pela Satisfação dos Stakeholders e Predita pela Cultura Organizacional

Resumo

Esse estudo propõe a satisfação dos *stakeholders* como métrica para avaliar a performance geral de uma empresa. A avaliação pode ser realizada usando a Escala de Satisfação dos *Stakeholders* (ESS) desenvolvida, para esse fim, nesse estudo. Obtida a pontuação da performance geral, surge a questão de como explicá-la. Para responder a esta questão, foi também desenvolvida, nesse estudo, uma escala adicional, a Escala da Cultura para Performance (ECP). Para confirmar a utilidade empírica dessas escalas, este estudo procurou verificar a relação preditiva entre cultura e desempenho organizacional. Participaram no total 1376 adultos trabalhadores em três estudos: 1) evidências de validade para a ESS; 2) evidências de validade para a ECP; 3) relação preditiva da Cultura Organizacional sobre a Satisfação dos *Stakeholders*. Os resultados mostraram que ambas as escalas são empiricamente viáveis, e o efeito preditivo positivo da cultura organizacional sobre a performance organizacional, medido pela satisfação dos *stakeholders*, foi corroborado.

Palavras-chave: satisfação dos *stakeholders*, desempenho organizacional, cultura organizacional.

Performance Evaluado por Satisfacción de los Stakeholders y Predicho por la Cultura Organizacional

Resumen

Este estudio propone la satisfacción de los *stakeholders* como una métrica para evaluar el desempeño general de una empresa. La evaluación se puede realizar utilizando la Escala de Satisfacción de los *Stakeholders* (ESS) desarrollada, en este estudio. Una vez obtenido el puntaje de desempeño general de la empresa, surge la pregunta de cómo explicarlo. Para responder a esta pregunta, fue desarrollada, una escala adicional, la Escala da Cultura para Performance (ECP). Para confirmar la utilidad empírica de estas escalas, este estudio intentó verificar la relación predictiva entre cultura y desempeño organizacional. Un total de 1376 adultos trabajadores participaron en tres estudios: 1) evidencia de validez de la ESS; 2) evidencia de validez de la ECP; 3) relación predictiva de la Cultura Organizacional sobre la Satisfacción de los *stakeholders*. Los resultados mostraron que ambas escalas son empíricamente viables y se corroboró el efecto predictivo positivo de la cultura organizacional sobre el desempeño organizacional, medido por la satisfacción de los *stakeholders*.

Palabras clave: satisfacción de los *stakeholders*, desempeño organizacional, cultura organizacional.

The true purpose of capitalism and the proper goals of corporations have long been a subject of debate. A number of actors, individuals, and entities have been particularly influential in this debate, and a few key works have been milestones in determining how capitalism and its objectives are understood. For Friedman (1970), “the objective of companies is to satisfy their shareholders.” For Freeman et al. (2004), “the objective of companies is to create value for all their stakeholders.” Elkington (1998), in turn, argued that “to the financials should be added the sustainability results, i.e., the social and environmental results,” i.e., the core components of current ESG mandates. More recently, the Business Roundtable (2019), through its incisive statement, established the new rules of the game.

The BRT statement notes, “While each of our individual companies serves its own corporate purpose, we share a fundamental commitment to all our stakeholders. We commit to: delivering value to our customers; investing in our employees; dealing fairly and ethically with our suppliers; supporting the communities in which we work; generating long-term value for shareholders” (Business Roundtable, 2019). Over the course of these changing definitions, one can see an evolution from the concept of corporate objectives as centered on shareholder satisfaction to a new concept that takes the satisfaction of all stakeholders as the goal.

In turn, companies’ performance indicators have been updated over time to reflect the changing purpose of capitalism and objectives of companies. Until the early 1990s, when Friedman’s ideas prevailed, performance was measured solely in terms of financial metrics. As is well known, Kaplan and Norton’s (1992) work, which introduced the concept of the Balanced Scorecard (BSC), was a milestone in the business measurement system. Appolloni et al. (2019) refers to sustainability BSC as a tool for value creation, survival and growth of the company. Since then, dozens of unprecedented types of business performance indicators, mainly of intangible metrics, have started to be used by companies in addition to financial ones. Therefore, it is clear that as corporate objectives have changed, performance indicator metrics have evolved along with them.

Although there is currently widespread use of many different key performance indicators (KPIs), the question of how to measure a company’s overall performance remains unanswered. Therefore, to fill this gap, stakeholder satisfaction is proposed here as a single metric for assessing a company’s general performance. The current study set out to develop a new instrument, the Stakeholder Satisfaction Scale (SSS). The output of the SSS corresponds to the company’s performance score, based on the stakeholders’ satisfaction with it, as graded by the survey respondents.

However, given the SS score, the question of what explains a company’s performance remains to be answered. As is well known, a company’s performance depends mainly on its people, teams, and organizational climate; therefore, measuring it involves looking at the organization from a cultural perspective.

Researchers have demonstrated that the cultural aspects of organizations are intimately aligned with performance. Huselid (2018), attests that the workforce can significantly increase the ability of leaders and managers to achieve operational and strategic goals. As cited by DeNisi (2000), companies do not perform. People in a company perform and generate results that we call organizational performance. Considering that, the current study set out to develop a second new instrument, the

Performance Culture Scale (PCS). The PCS has the purpose of assessing the degree to which the practices and values that constitute a performance culture are exercised throughout an organization. Therefore, with the dual objective of evaluating general performance and explaining it, in this study, the development of two instruments is proposed.

In addition to the two objectives mentioned above, 1) the development of the Stakeholder Satisfaction Scale (SSS) and 2) the development of the Performance Culture Scale (PCS), the third objective of this work was to test the predictive relationship between organizational culture and organizational performance, as assessed by the degree of stakeholder satisfaction. The predictive relationship was verified with the intention of corroborating the evidence found in previous research regarding the alignment of the cultural aspects of organizations with performance. Using a psychometric approach, we sought evidence of the instruments’ validity based on their internal structures and relationship with external variables and examined estimates of precision by internal consistency for both of them.

Three studies were conducted with a view to achieving these objectives. The first and second studies, concerning the development of the SSS and the PCS, had the following sequence of actions: a) elaborating the respective set of items for each of the instruments; b) searching for evidence of validity based on the internal structure and verifying precision estimates through internal consistency of the instruments’ factors; and c) searching for evidence of validity based on the relationships with external variables.

For this last purpose, the SSS was correlated with two existing Brazilian instruments. First, it was correlated with the Job Satisfaction Scale, named in Brazil as the *Escala de Satisfação no Trabalho* – (EST; Siqueira, 2008), and then it was correlated with another performance evaluation scale, the General Job Performance Scale, known in Brazil as the *Escala Geral de Desempenho no Trabalho* – (EGDT; Queiroga et al., 2008).

Several hypotheses were put forward to be tested in the first study: h1) a factor structure formed by five first-order factors, namely Financiers, Employees, Customers, Suppliers, and Communities, would explain the SSS items. These factors are considered since they correspond to the five groups of primary stakeholders defined by Freeman et al. (2010) and the items seek to assess the level of satisfaction of these groups of main stakeholders; h2) a second-order factor, interpreted as Performance Index – General (PING), would explain the five first-order factors; h3) the omega values of the precision indices would be greater than 0.70; and h4) there would be positive correlations between the SSS and EST factors, as well as positive correlations between the SSS and EGDT factors.

More specifically, positive correlations were expected between the SSS Financiers and Employees factors and the corresponding EST factors, as this scale assesses job satisfaction, which is understood to be both influenced and perceived by the organization’s financiers and employees. Positive correlations were also expected between the SSS and the corresponding EGDT factors once both scales had the target of assessing performance.

In the second study, for the purpose (c) of searching for evidence of validity based on the relationship with external variables, the PCS was correlated with the Brazilian Instrument for the Assessment of Organizational Culture, known in Brazil as *Instrumento Brasileiro de Avaliação da Cultura Organizacional* – (IBACO; Ferreira et al., 2002). Several

hypotheses were put forward to be tested in the second study: h5) a factor structure would be formed by six first-order factors, in the PCS items, namely Organizational values, Practices of organizational routines, Practices of organizational goals, Practices of continuous improvement, Practices of monitoring indicators, and Practices of personnel management, would explain the PCS items. These factors are paralleled in the model by Neely et al. (2001) named Performance Prism; h6) a second-order factor, interpreted as Performance culture, explains the six first-order factors; h7) the omega values of the precision indices would be greater than 0.70; and h8) there would be positive correlations between the PCS and the corresponding IBACO factors. More specifically, positive correlations were expected between the PCS Practices of the personnel management factor and the corresponding IBACO factors, since this instrument assesses the company's culture with a focus on employee satisfaction.

In the third study, a test of the predictive effect of organizational culture on organizational performance was carried out using a structural equation model. The variables used were the factors that make up the PCS and the PING, i.e., the second-order factor of the Stakeholder Satisfaction Scale (SSS). One hypothesis was put forward to be tested by this study: h9) that there would be positive predictive relationships between the organizational culture variables and the organizational Performance Index – General (PING), as indicated in the diagram in Figure 1.

Method of Study 1: Development of the Stakeholder Satisfaction Scale (SSS)

The objective of Study 1 was the construction of the Stakeholder Satisfaction Scale (SSS), along with a proper psychometric study aimed at its validation. The SSS is composed of 22 items, enabling one or a group of employees to supply a hetero report regarding the main stakeholder's satisfaction.

Participants

The total sample consisted of 1,376 working adults and was composed of two subsamples. The first had 707 respondents who were working for different companies. The second subsample had 669 respondents and was conducted inside an industrial company that operates in the auto parts field in Brazil.

Together, subsamples 1 and 2 comprise a non-probabilistic convenience sample composed of workers at companies from different segments, as follows: industrial (65.4%), services (22.2%), and commercial (12.4%). Regarding the number of employees in the companies where the respondents work, the sample presented the following data: companies with up to 9 employees (8.4%), companies with 10 to 99 employees (15.4%), companies with 100 to 999 employees (62.4%), and companies with more than 1,000 employees (13.8%).

Instruments

Stakeholder Satisfaction Scale. The SSS is composed of 22 items and 5 stakeholder grouping factors, which are applied to assess the stakeholders' satisfaction. The items are answered using a 4-point Likert-type scale, with intensity or frequency variants for the responses to the items.

Construction of the Stakeholder Satisfaction Scale (SSS) items. In the item construction procedure, the set of recommendations made by Hair et al. (2009) were adopted, more specifically, the use of affirmative and direct statements with clear and concise writing and also the non-use of multiple questions and questions with predominant content in any specific group. The SSS items were designed based on the concept of stakeholder satisfaction proposed by Freeman et al. (2010). The items sought to capture the respondents' opinions regarding the level of satisfaction of the different primary group of stakeholders in their company. The initial list of 28 items, submitted to analysis, was reduced to the 22 items that were the subject of this study. The analysis of the items comprised three phases, namely, semantic and content analyses, which had the support and help of two specialists on psychometrics, who have agreed with items content. As third phase, in the study 1, with Subsample of 707 respondents, exploratory factor analyzes were also carried out using the criteria of eliminating items with a lower factor loading of 0.30.

The factors correspond to five groups of stakeholders and comprise the number of items as indicated: Financiers (five items), Employees (six items), Customers (three items), Suppliers (four items), and Communities (four items). The SSS is a hetero-report scale, and the computation of the answers indicates the level of satisfaction of the different groups of stakeholders based on the assessment made by the respondents.

Job Satisfaction Scale (EST; Siqueira, 2008). The EST, in its reduced version, consists of 15 items and aims to assess the worker's degree of satisfaction in relation to five dimensions of their work, as follows: Satisfaction with co-workers, Satisfaction with salary, Satisfaction with management, Satisfaction with the nature of the work, and Satisfaction with promotions. The five dimensions in Siqueira's study (2008) showed alpha accuracy indices equal to 0.81, 0.90, 0.84, 0.77, and 0.81, respectively. Regarding the response system, a 7-point Likert scale was used, ranging from "totally dissatisfied" (1) to "totally satisfied" (7).

General Job Performance Scale (EGDT; Queiroga et al., 2008). The EGDT consists of 20 items. Eleven make up Factor 1 and can be defined as the set of behaviors that the individual performs in the context of their work. Nine items comprise Factor 2 and can be defined as the set of actions performed by the individual that promote good performance of their tasks. The two factors showed alpha accuracy indices equal to 0.88 and 0.82, respectively. Regarding the response system, a 5-point Likert scale was used, ranging from "Never" (1) to "Always" (5).

Sociodemographic questionnaire (SDQ). The SDQ was applied only for the first subsample to obtain the following information from the respondents: age, gender, segment of business, and headcount of the company in which they work. The last two sets of information related to the total sample are described above.

Data Collection Procedures and Ethical Considerations

For Subsample 1, the Survey Monkey digital platform was used to load the instruments, capture the responses, and feed the database. The survey was conducted by the author, in person, in dozens of sessions in classrooms in the university environment, more specifically with students from higher education, evening courses of Business Administration, Production Engineering, Chemical Engineering, Logistics, Accounting Sciences and Marketing at private universities in the state of São Paulo –

Brazil. A total of 901 responses were obtained, of which 194 were discarded for various reasons, such as the respondents not agreeing with the Free and Informed Consent Form (FICF - 9 people), not being in employment (101), and not having fully answered the instrument of Study 1 (84 people). Thus, the sample used in the study consisted of 707 respondents.

The second subsample included 669 respondents. The survey was administered online and answered via the workers' own smartphones, with the company leaders providing an access link to the questionnaires. In this data collection, the items were answered via an html-based web platform developed using the Shiny package in the free R software environment.

Data Analysis Procedures

The factor structures of the SSS were analyzed using confirmatory factor analysis (CFA). As items in the self-report format answered on a Likert scale are considered ordinal data, a diagonally weighted least squares (DWLS) estimator was used. To interpret the fit indices, we used Marsh (2007) criteria: Confirmatory Fit Index $CFI \geq .90$ (acceptable) and $\geq .95$ (excellent), Tucker-Lewis Index $TLI \geq .90$ (acceptable) and $\geq .95$ (excellent), Root Mean Square Error of Approximation $RMSEA \leq .08$ (acceptable) and $\leq .05$ (excellent). The internal consistency of the SSS factors was analyzed using the omega coefficient.

Regarding the validity of the evidence based on the relationships with external variables, the Pearson correlations between the SSS and EST factors, as well as between the SSS and EGDT factors, were calculated. To interpret the magnitudes of the correlations, Cohen's (1992) cut-off points were applied, thus considering: $0.10 < r < 0.29$ as weak correlations; $0.30 < r < 0.49$ as moderate ones; and $r \geq 0.50$ as strong correlations.

Results of Study 1: Development of the Stakeholder Satisfaction Scale (SSS)

The unifactorial structure was tested, and the items presented good loads (i.e., $> .30$), however, the fit indices were very poor (i.e., CFI and $TLI < 0.80$ and $RMSEA > 0.13$). Therefore, we chose to test a hierarchical structure based on the 22 items, in which five first-order factors (i.e., Financiers, Customers, Communities, Suppliers, and Employees) explained the items directly, and a second-order factor interpreted as Performance Index – General (PING) explained the five first-order factors. This model was adapted to the data satisfactorily: $\chi^2 = 1587.98$; $df = 204$; $p < 0.01$; $CFI = 0.92$; $TLI = 0.91$; $RMSEA = 0.08$. The results are shown in Table 1.

Twenty-one items out of a total of 22 presented loads above 0.51 and were distributed in the five factors without showing cross loads. All the five factors explained by the second-order factor presented loads above 0.60. The first-order factors presented omega precision indices above 0.70, except for the customers and suppliers' factors, which presented an omega equal to 0.60. The second-order factor presented an omega equal to 0.89. Table 2 shows positive correlations between all SSS factors.

Table 2 shows that the 15 correlations tested were positive and significant. Four of the five factors presented correlations of strong magnitude (> 0.65) with the second-order factor (PING). Seven out of ten tested correlations between first-order factors presented moderate magnitudes. Table 3 shows the correlations between the factors in SSS and those in EST.

It can be seen in Table 3 that the 30 correlations tested

were positive, and that 27 of them were significant. The second-order factor PING and the factor Employees of the SSS showed higher degrees of correlation with all five EST factors of moderate and strong magnitude. Subsequently, the SSS factors Financiers, Customers, and Suppliers showed moderate correlations with the EST factors. The Communities factor showed weak correlations with EST. Table 4 shows the correlations between the factors in SSS and those in EGDT.

Table 4 shows that all 12 tested correlations between SSS and the two EGDT factors were positive and significant. Two of them were of moderate magnitude, while the other 10 presented weak magnitude results.

Method of Study 2: Development of the Performance Culture Scale (PCS)

The objective of Study 2 was the construction of the Performance Culture Scale (PCS), along with a proper psychometric study aimed at its validation. The PCS is composed of 85 items, whereby respondents give their opinion according to their knowledge of the company for which they work. It is, therefore, a hetero-report scale that indicates how intense the values and or how frequent the practices are, allowing for the assessment of the levels of organizational culture in its various factors.

Participants

The total sample for Study 2 consisted of 1,252 working adults. It is the same total sample already detailed in Study 1, with the only difference being the number of participants in Subsample 1, which was reduced from 707 to 583 respondents. Subsample 2 is the same as in Study 1, which was composed of 669 respondents.

Instruments

The Performance Culture Scale. The PCS is composed of 85 items and 6 factors representing the values and practices of a culture oriented to organizational performance. It is a hetero-report instrument in which the items are answered using a 4-point Likert scale, with intensity or frequency variants for responses to the items.

Construction of the Performance Culture Scale (PCS) items. The items proposed by this author, who has more than 40 years of experience in business management, reflect the practices and values most commonly applied in organizational management. The initial list of 115 items, submitted to analysis, was reduced to the 85 items that were the subject of this study. The analysis of the items comprised three phases, namely, semantic and content analyses, which had the support and help of two specialists on psychometrics, who have agreed with items content. As third phase, in the study 2, with Subsample of 583 respondents, exploratory factor analyzes were also carried out using the criteria of eliminating items with a lower factor loading of 0.30.

The instrument comprises dimensions of values and practices as per the culture concept proposed by Hofstede et al. (1990). There are six PCS factors corresponding to the values and practices of an organizational culture configured to aim for performance; the number of items are as indicated: Organizational values (12 items), Practices of: organizational routines (15 items), organizational goals (14 items), continuous improvement (13 items), monitoring indicators (16 items), and

Table 1*Internal consistency and factorial loadings of the SSS in CFA*

First-order Factors		Load
Financiers $\omega = 0.73$		
Does the company, in general, have advantage over its competitors?		.70
Does the company, in general, differentiate itself positively in the market?		.78
Does the company, in general, lose to competitors?		-.55
As for market share, how is the company doing?		.55
In your opinion, what is the general level of satisfaction of the company's owners and shareholders?		.67
Customers $\omega = 0.60$		
Do customers return for new purchases?		.63
Do customers recommend the company's products and/or services to others?		.64
In your opinion, what is the general level of satisfaction of the company's customers?		.71
Communities $\omega = 0.85$		
Is the company criticized for causing noise pollution?		-.83
Is the company criticized for causing air pollution?		-.88
Is the company criticized for polluting rivers, lakes, or water sources in its surroundings?		-.89
Is the company criticized for causing traffic disturbances on the streets and avenues around it?		-.78
Suppliers $\omega = 0.60$		
Is the company criticized for delays in delivering its products and/or services?		-.51
Is the company criticized for the poor quality of its products and/or services?		-.59
Do suppliers delay deliveries and/or support to the company?		-.42
In your opinion, what is the general level of satisfaction of the company's suppliers?		.80
Employees $\omega = 0.90$		
In your opinion, what is the level of satisfaction of the company's employees in relation to the nature of the work performed?		.78
In your opinion, what is the level of satisfaction of the company's employees in relation to the spirit of collaboration that exists in the work environment?		.83
In your opinion, what is the level of satisfaction of the company's employees in relation to their relationships with their superiors?		.83
In your opinion, what is the level of satisfaction of the company's employees in relation to the recognition they receive for work performed?		.85
In your opinion, what is the level of satisfaction of the company's employees in relation to the remuneration received?		.73
In your opinion, what is the general level of satisfaction of the company's employees?		.84
Second-order factor		Load
Performance Index – General (PING) $\omega = 0.89$		
Financiers		.86
Customers		.94
Communities		-.36
Suppliers		-.86
Employees		.73

Table 2*Correlations between SSS factors*

Factors	PING	Financiers	Customers	Suppliers	Communities	Employees
PING	1					
Financiers	.74**	1				
Customers	.65**	.49**	1			
Suppliers	.69**	.35**	.35**	1		
Communities	.45**	.17**	.12**	.39**	1	
Employees	.81**	.47**	.41**	.39**	.11**	1

Note. *: $p < 0.05$; **: $p < 0.01$. $n = 1,373$.

Practices of personnel management (15 items).

The same item construction procedures adopted for Study 1 were also considered for the item construction in Study 2.

The Brazilian Instrument for the Assessment of Organizational Culture (IBACO; Ferreira et al., 2002). The IBACO aims to assess the culture of organizations according to the perceptions of their members. The instrument, in its

reduced version, is composed of 30 items grouped into 6 factors, namely: Values of cooperative professionalism, Values of competitive and individualistic professionalism, Values of employee satisfaction and well-being, External integration practices, Reward and training practices, and Interpersonal relationship promotion practices. The internal consistency of the IBACO factors was satisfactory, with an alpha ranging from

Table 3

Correlations between SSS and EST

Factors	Financiers	Customers	Suppliers	Communities	Employees	PING
Teammates	.33**	.25**	.19**	.08*	.49**	.46**
Salary	.29**	.24**	.20**	.05	.48**	.43**
Superiors	.34**	.27**	.26**	.06	.53**	.49**
Nature	.35*	.27**	.19**	.10*	.49**	.47**
Promotion	.36**	.27**	.21**	.04	.49**	.46**

Note. *: $p < 0.05$; **: $p < 0.01$. $n = 576$.

Table 4

Correlations between SSS and EGDT

Factors	Financiers	Customers	Suppliers	Communities	Employees	PING
Context	.26**	.18**	.20**	.23**	.21**	.32**
Task	.26**	.21**	.23**	.27**	.19**	.34**

Note. *: $p < 0.05$; **: $p < 0.01$. $n = 552$.

0.71 (Interpersonal relationship promotion practices) to 0.88 (Values for employee satisfaction and well-being). Regarding the response system, a 5-point Likert scale was used, with responses ranging from “not applicable at all” (1) to “totally applicable” (5).

Sociodemographic questionnaire (SDQ). The SDQ was the same applied for the study 1.

Data Collection Procedures and Ethical Considerations

The PCS surveys were scheduled for and carried out on the same occasions and sequentially to the surveys related to the instruments of Study I. For Subsample 1, the sequence of presentation of the instruments in Study 2 was PCQ and IBACO. The sample used consisted of 583 respondents due to the fact 208 people not having fully answered the two instruments. Subsample 2 totaled 669 respondents, with the PCS survey being conducted on the same occasion, sequentially to the SSS survey.

Data Analysis Procedures

The factor structures of the PCS were analyzed using CFA. The same analysis parameters used in study 1 were applied in study 2. Regarding the validity of the evidence based on the relationships with external variables, Pearson correlations between the PCS and IBACO factors were calculated. To interpret the magnitudes of the correlations, same as done in the study 1, Cohen’s (1992) cut-off points were applied.

Results of Study 2: Development of the Performance Culture Scale (PCS)

For the PCS, unifactorial structures were tested, one for each set of items that represented each factor of the instrument. All analyses were favorable, as all the items presented good loads (i.e., $> .30$) and factors with good fit indices. Thus, a hierarchical model was sequentially tested containing all 85 PCS items explained by the six first-order factors (i.e., Organizational values, Practices of: organizational routines, organizational goals, continuous improvement, monitoring indicators, and of personnel management) which, in turn, were explained by the second-order factor understood as Culture for performance ($X^2 = 14325,95$; $df = 3479$; $p < 0.01$; CFI = 0.92;

TLI = 0.92; RMSEA = 0.06). The results are shown in Table 5.

Checking on the items of the six factors together, it was observed that 82 items out of a total of 85 presented loads greater than 0.70. All six factors explained by the second-order factor presented loads above 0.85. The first-order factors presented omega precision indices above 0.95. The second-order factor presented an omega value equal to 0.99. Table 6 shows the positive correlations among all PCS factors.

Table 6 shows that the 21 correlations tested were positive, significant, and of strong magnitude. The highest magnitudes, all above 0.89, can be observed in the correlations between all six factors and the second-order factor Culture for performance (P.cult). Table 7 shows the correlations between PCS and IBACO.

In Table 7, it can be seen that 42 tested correlations were positive and significant, with 40 of them presenting a strong magnitude above 0.50. The second-order factor (P.cult) from the PCS showed strong correlations, all above .60, with the IBACO factors.

Method of Study 3: Test of the Predictive Effect of Organizational Culture on Organizational Performance

The objective of study 3 was to test the prediction of organizational culture on organizational performance.

Participants

As in Study 2, the sample consisted of 1,252 working adults.

Instruments

The Stakeholder Satisfaction Scale (SSS) and the Performance Culture Scale (PCS), as described in Studies 1 and 2, respectively.

Data Collection Procedures and Ethical Considerations

The data for this study were obtained through applications of the SSS and PCS instruments. The sample used in the study consisted of a total of 1,252 respondents, 583 from Subsample I and 669 from Subsample II.

Table 5*Internal consistency and factorial loadings of the PCS in CFA*

First-order factors	Load
Organizational values $\omega = 0.95$	
Regarding stakeholders, does your company explain to the employees that the company's objective is to satisfy them?	.72
Do the employees benefit when the company satisfies its stakeholders?	.79
Do the employees uphold the company's values?	.74
In your company, do employees perform their tasks responsibly?	.60
Does your company value the participation of employees in continuous improvement groups?	.91
Does your company value the participation of employees in Action Plan implementation groups?	.89
Does your company value the participation of employees in the training of co-workers?	.90
Does your company value the participation of employees in groups that help social entities in the community?	.87
Does your company disclose its ethical values to employees?	.85
Does your company disclose to employees which illegal or unethical behaviors are not accepted?	.72
Does your company provide an anonymous channel for reporting irregularities (e.g., a phone number or sealed ballot box)?	.78
Does the company value prudence in the activities carried out by employees to avoid risks, inconveniences, and dangers?	.85
Practices of organizational routines $\omega = 0.96$	
Does the company use error prevention practices, procedures, or devices?	.86
Does the company selectively and properly dispose of garbage and residues from operations?	.65
Does the company train new employees before taking on tasks?	.82
Does the company post up-to-date, written, or videotaped instructions on workstations?	.86
Do the work instructions stay in visible places at the workstations?	.87
Do the work instructions stay available for free consultation?	.86
Does the company track its received and/or produced item batches to ensure efficient item turnover (FIFO – First In, First Out)?	.81
Does the company track its received and/or produced item batches to ensure traceability?	.83
Does the company clearly identify inventory locations for active/approved items?	.82
Does the company clearly identify the inventory locations of obsolete/expired items?	.83
Does the company clearly identify the storage locations and positions for the tools, devices, and utensils of the operation?	.84
Does the company clearly identify the locations and positions of furniture and work accessories?	.81
Does the company clearly identify vehicle parking lots?	.80
Do employees follow company quality norms and standards?	.81
Do employees know what to do when a case of “non-conformity” arises?	.78
Practices of organizational goals $\omega = 0.96$	
Does the company explain to employees what its value proposition to the market is?	.85
Does the company explain to employees what are the key activities that enable the delivery of value to the customer?	.85
Does the company explain to employees what are the key resources that make it possible to carry out its key activities?	.86
Does the company seek to identify new market needs?	.83
Does the company establish plans to meet new market needs?	.86
Does the company seek to identify weaknesses in its processes, products, and/or services?	.87
Does the company continually seek to improve the efficiency of its key resources?	.93
Does the company continually seek to improve the efficiency of its key activities?	.95
Does the company establish target plans to reduce its defect rates and/or operational, product, or service failures?	.86
Does the company establish target plans to reduce its energy consumption?	.86
Does the company establish target plans to reduce its water consumption?	.87
Does the company establish target plans to reduce its level of pollutant emissions?	.86
Does the company establish target plans to reuse the discards from each operational cycle?	.83
Does the company promote its brand/image on social media?	.49
Practices of continuous improvement $\omega = 0.96$	
Does the company stimulate and reward the “continuous improvement” efforts of its processes and resources?	.85
Does the company disclose the results of continuous improvement actions to employees?	.91
Does the company research the best operational practices in its business segment?	.89
Does the company seek to improve delivery times of its products and services to customers?	.85
Does the company seek to improve its machines, equipment, instruments, and tools?	.83
Does the company seek to improve its facilities (buildings, rooms, offices, patios, gardens, parking areas, etc.)?	.82
Does the company seek to improve its furniture (tables, chairs, work benches, cabinets, etc.)?	.79

Table 5 (continued)*Internal consistency and factorial loadings of the PCS in CFA*

First-order factors		Load
Practices of continuous improvement $\omega = 0.96$		
Does the company stimulate employees to promote organization and cleaning of equipment, devices, and work instruments?		.80
Does the company stimulate employees to promote organization and cleaning of their workstations?		.82
Does the company rotate employees responsible for organization and cleaning of the company's areas and spaces?		.75
Does the company audit the organization and cleaning of areas and spaces of the company?		.84
Does the company stimulate efforts for safety at work?		.88
Does the company audit the safety conditions of workplaces?		.85
Practices of monitoring indicators $\omega = 0.97$		
Does the company inform employees what the total headcount is?		.73
Does the company inform employees about the statistics of accidents that have occurred in the company?		.86
Does the company inform employees about the performance of products received from its key suppliers?		.90
Does the company inform employees about the performance of the products and services delivered to its customers?		.90
Does the company inform employees about the performance of its operational processes?		.92
Does the company inform employees about the costs of losses generated by the poor quality of its products or services?		.84
Does the company inform employees about its market share levels?		.89
Does the company inform employees about the reasons that explain customer preferences for its products and services?		.89
Does the company inform employees about the reasons that explain customer preferences for its competitors' products and services?		.84
Does the company inform employees of market comments regarding the company itself?		.76
Does the company inform employees of market comments regarding competing companies?		.78
Does the company inform employees about its defect rates compared to the defect rates of competing companies?		.81
Does the company inform employees of its delivery times compared to the delivery times of competing companies?		.82
Does the company inform employees about its after-sales service complaints compared to the after-sales service complaints from competing companies?		.81
Does the company inform employees of its ability to develop products and services compared to the ability of competing companies to do the same?		.83
Does the company inform employees of its ability to propose innovations compared to the ability of competing companies to do the same?		.82
Practices of personnel management $\omega = 0.96$		
Does the company provide adequate conditions for carrying out the work?		.79
Does the company train employees internally?		.90
Does the company support and encourage employees who study?		.78
Does the company allow employees the freedom to convey private information and news on internal bulletin boards and monitors?		.72
Does the company guarantee employees the right to reject and not perform tasks that present safety risks?		.85
Does the company hold collective meetings with employees to communicate general information and the financial and non-financial results achieved?		.86
Does the company hold meetings to encourage dialogue between leaders and subordinates, such as "Coffee with the Management"?		.87
Does the company have regular employee assessment programs, such as "360 Assessment"?		.87
Does the company have regular environmental safety programs?		.89
Does the company adopt regular support programs for social entities?		.87
Does the company regularly promote social days between employees' family members at the company's units or in appropriate places for festive meetings?		.84
Does the company promote culture and leisure activities among employees?		.84
Does the company promote sports activities among employees?		.80
Does the company promote educational lectures for employees' family members?		.76
Do supervisors and leaders promote daily dialogues on matters of interest to workers and the company?		.83
Second-order factor		Loads
Performance culture $\omega = 0.99$		
Organizational values		.89
Practices of organizational routines		.87
Practices of organizational goals		.90
Practices of continuous improvement		.95
Practices of monitoring indicators		.85
Practices of personnel management		.93

Table 6*Correlations between PCS factors*

Factors	P.cult	Values	Routines	Goals	C.impr	P.monit	P.mgmt
P.cult	1						
Values	.89**	1					
Routines	.89**	.80**	1				
Goals	.91**	.76**	.78**	1			
C.impr	.93**	.79**	.81**	.85**	1		
P.monit	.87**	.66**	.68**	.78**	.77**	1	
P.mgmt	.92**	.80**	.78**	.77**	.93**	.79**	1

Note. **: $p < 0.01$. $n = 1,252$. P.cult = Culture for performance; Values = Organizational values; Routines = Practices of organizational routines; Goals = Practices of organizational goals; C.impr = Practices of continuous improvement; P.monit = Practices of monitoring indicators; P.mgmt = Practices of personnel management.

Table 7*Correlations between PCS and IBACO*

Factors	IBACO					
	V.Coop.P.	V.Comp.P.	V.E.S.	Ext.I.P.	R.T.P.	P.P.I.R.
PCS						
P.cult	.72**	.60**	.79**	.67**	.76**	.61**
Values	.68**	.50**	.69**	.60**	.67**	.55**
Routines	.57**	.43**	.59**	.56**	.57**	.44**
Goals	.64**	.52**	.67**	.62**	.64**	.52**
C.impr	.64**	.53**	.70**	.60**	.67**	.54**
P.monit	.63**	.53**	.66**	.60**	.65**	.54**
P.mgmt	.68**	.65**	.82**	.54**	.80**	.63**

Note. **: $p < 0.01$. $n = 560$. V.Coop.P. = Values of cooperative professionalism; V.Comp.P. = Values of competitive professionalism; V.E.S. = Values of employee satisfaction and well-being; Ext.I.P. = External integration practices; R.T.P. = Reward and training practices; P.P.I.R. = Practices to promote interpersonal relationships; P.cult = Culture for Performance; Values = Organizational values; Routines = Practices of organizational routines; Goals = Practices of organizational goals; C.impr = Practices of continuous improvement; P.monit = Practices of monitoring indicators; P.mgmt = Practices of personnel management.

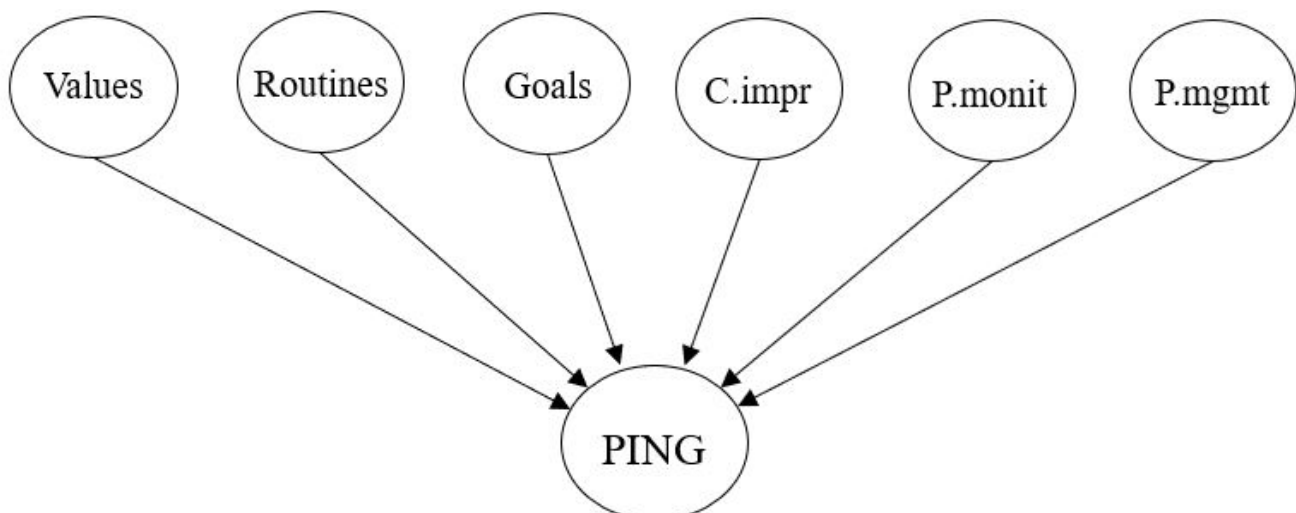
Data Analysis Procedures

As the first step, the six PCS factors were correlated with PING using Pearson's correlations. To test the predictive power of organizational culture on organizational performance, structural equation modeling was performed (see Figure 1). Therefore, a model was tested in which the PCS factors were examined as predictors of the overall organizational performance, labeled as PING. To interpret the magnitudes of the correlations between the organizational culture factors and the organizational Performance Index – General (PING), same

as done in the studies 1 and 2, Cohen's (1992) cut-off points of were applied.

Results of Study 3: Test of the Predictive Effect of Organizational Culture on Organizational Performance

Table 8 shows the strong, positive, and significant correlations of the six factors of the PCS with organizational performance assessed through the second-order factor of the SSS, labeled as PING. Table 9 shows the predicted values of the PCS factors on PING, along with the significance indicators

Figure 1*Predictive model of organizational culture on organizational performance*

Note. Values = Organizational values; Routines = Practices of organizational routines; Goals = Practices of organizational goals; C.impr = Practices of continuous improvement; P.monit = Practices of monitoring indicators; P.mgmt = Practices of personnel management; PING = Performance Index – General.

Table 8

Correlations between PCS factors and PING

Factors	Values	Routines	Goals	C.impr	P.monit	P.mgmt
PING	.62**	.56**	.58**	.58**	.51**	.55**

Note. **: $p < 0.01$. PING = Performance Index – General; Values = Organizational values; Routines = Practices of organizational routines; Goals = Practices of organizational goals; C.impr = Practices of continuous improvement; P.monit = Practices of monitoring indicators; P.mgmt = Practices of personnel management.

Table 9

Structural equation model of PCS factors on PING

Factors	Values	Routines	Goals	C.impr	P.monit	P.mgmt
PING	.60**	.12*	.06	.07	-.05	.08
R^2	.32**					

Note. **: $p < 0.01$; * $p < 0.05$; Ns = non-significant; $\chi^2 = 15579.09$; $df = 5547$; CFI = 0.93; TLI = 0.93; RMSEA = 0.048; PING = Performance Index – General; Values = Organizational values; Routines = Practices of organizational routines; Goals = Practices of organizational goals; C.impr = Practices of continuous improvement; P.monit = Practices of monitoring indicators; P.mgmt = Practices of personnel management.

and model fit indices.

Positive and significant predictions were obtained from the two factors in the PCS, Organizational values and Practices of organizational routines on organizational performance, labeled as PING. The first-order factors of organizational culture were regressed against PING. From this, it can be seen that the six cultural factors together were able to explain 32% of the variance in PING.

Discussion

The objective of this work was to test the validity of two instruments, SSS, and PCS, and, in addition, to test the predictive relationship between organizational culture and organizational performance. In Study 1, the SSS was originally planned with a theoretical structure of five first-order factors explaining the items and the factors themselves being explained by a second-order factor interpreted as Performance Index – General (PING). Given that the results obtained showed that the items presented good factorial loads without showing cross-loads between first-order factors, h1 can be considered to have been corroborated. Also, considering that all five factors explained by the second-order factor presented loads above 0.30, it is possible to conclude that h2 was corroborated.

The results can be explained by the fact that the SSS five factors represent groups of stakeholders which interact naturally to create value. According to Freeman et al. (2010), business is about how stakeholders interact to create value. Per Freudenreich et al, (2020) business models are developed and managed to create value.

The second-order factor presented an omega value equal to 0.89. The first-order factors presented omega precision indices above 0.70, except for the Customers and Suppliers factors, which presented omega values equal to 0.60, partially corroborating h3. For these two factors did not present high internal consistency indexes, it is necessary to consider the small number of items in each factor (i.e., three and four items), which tends to lower the omega values.

All of the tested correlations between the factors in the SSS and EST were positive, and most of them, 27 out of 30, were significant. The tested correlations between SSS and EGDT were positive, significant, and of strong magnitude, corroborating h4 and, further indicating that there is evidence of the validity of the SSS in the relationship to the external variables.

The second-order factor PING, and first-order Employees and Financiers factors presented the highest magnitude

correlation with the EST factors, which is understandable, as EST assesses job satisfaction while the SSS assesses stakeholders' satisfaction, and its own factor PING also has predominant correlations with financiers and employees.

All 12 correlations between the SSS and EGDT factors were positive and significant. Two of them and the second-order factor PING presented moderate magnitude correlations with the EGDT Context and Task factors. All of the first-order SSS factors presented results of weak magnitude. Overall, this absence of strong magnitude correlations can be explained by the fact that the SSS assesses organizational performance, as its items seek to investigate the level of satisfaction of distinct groups of stakeholders through their conduct, reactions, and positioning in relation to the company. In turn, the EGDT evaluates the performance of employees, as its items seek to capture how employees act in the performance of their tasks.

In Study 2, the PCS was originally planned with a theoretical structure of six factors: Organizational values, Practices of: organizational routines, organizational goals, continuous improvement, monitoring indicators, and practices of personnel management. All six factors were tested through a unifactorial CFA, with all their respective items presenting good loads. Considering the results, h5 can be considered to have been corroborated.

The favorable results can be explained by the fact that the factors proposed for PCS are values and practices relevant to the organizational culture. They were based on theory and, more specifically, on the definitions and/or statements proposed by organizational scholars. Scholars of organizational culture attest to the importance of the values and practices for the firm's performance (Bloom et al, 2019; Busso et al, 2021; Deng et al, 2018; Wang, 2018).

The first-order factors presented omega precision indices above 0.95. The second-order factor presented an omega value equal to 0.99, thus corroborating h7. All of the correlations tested between PCS and IBACO were positive, significant, and most of them were of strong magnitude (40 out of 42). These results corroborated h8 and further indicated that there is evidence of the validity of the PCS in the relationship with external variables.

High correlations between the factors of PCS and IBACO can be explained by the fact that both scales seek to explore how intense the values and frequent the practices of a business organization are by the fact that the organizations are very similar in pursuit of their interests. Private business is a pivotal stakeholder commanding the most resources and capabilities to realize desirable goals (Evans et al, 2018). This definition

helps to explain the high correlations between both instruments measuring the same construct.

The factors Organizational values and Practices of organizational routines were shown to be positive and significant predictors of PING. The grade of magnitude 0.60 can be explained by revisiting the theory. According to Schwartz (1994), values serve as an interest of some social entity, can motivate actions, they, the values, function as standards for judging and justifying actions, and they are acquired via socialization.

The explained variance between organizational culture and PING was positive, significant, and of moderate magnitude ($R^2 = .32$). These results, the positive and significant explained variance, as well as the positive predictive relationships between the organizational culture variables, values, and routines and the organizational Performance Index—General (PING) allow us to consider h9 to have been partially corroborated.

Conclusions

The following limitations of this project should be noted: the Subsample 1 included respondents from companies from different industries, different segments, and different sizes in terms of number of employees. The Subsample 2 was performed in a company with known characteristics. This collected information could allow more detailed comparative analyzes between groups of companies differentiated by sector, business segment, and size, however these more segmented analyzes were not carried out in this study. We suggest that in future studies, the factorial structures of SSS and PCS be replicated, and that the invariance of these measures be tested with respect to sector, business segment, and company size.

The joint use of the SSS and the PCS instruments is justified by their possible applicability to a variety of companies interested in evaluating their performance and understanding the aspects of their culture that may influence it. This is justified by individually providing the respondents with the same understanding of their company's performance and culture, thus enabling them to enter into a dialogue with their colleagues and superiors on the subject. In addition, the joint application of the instruments also allowed the respondents to understand aspects related to their own relationship with the organization with regard to their position as stakeholders. It should be added that the application of the SSS and the PCS provides managers with the possibility of directing their teams' efforts toward higher levels of performance, thus allowing the company to fulfill its first objective, that is, the satisfaction of its stakeholders, as per the precepts of Freeman et al. (2010).

The main result of this work is that it has demonstrated, conceptually and empirically, that there are predictive relationships between the organizational culture construct for performance and organizational performance, as seen from a stakeholder satisfaction perspective. This result has important meaning for companies and managers who understand that stakeholder satisfaction is the first and main objective of an organization. This study has considerable value for filling a gap in the existing literature and for constituting a qualified support tool for those who wish to develop an organizational culture composed of performance-oriented management values and practices through stakeholder satisfaction.

The evaluation of performance and organizational culture through the joint use of the SSS and the PCS is also and especially justified by its significant socio-environmental relevance in these times when society and companies are increasingly

guided by sustainability actions and practices, for example, through the ESG movement. Still, regarding the topicality of the theme, it can be mentioned that the application of the instruments translates into a valuable and very current tool for measuring commitment to stakeholder satisfaction. It should be recalled that this commitment was recently endorsed by the senior executives of large global companies who are members of the BRT, with the purpose of reformulating the way business is conducted and shifting the focus from the satisfaction of shareholders to the satisfaction of all stakeholders (Business Roundtable, 2019).

With this commitment, the pro-socio-environmental bias of capitalism is now anchored in a powerful ally. No other association in the world brings together, interacts with, or can satisfy the interests of such a large number of stakeholders. The BRT gathers up millions of employees and customers, millions of small and large P&S suppliers, thousands of communities served, and countless social entities that benefit from this immense network. These data alone seem enough to remove any doubt that the objective of satisfying stakeholders will be consolidated as the new format of capitalism for decades to come.

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