

## **I**nfluence of Internal Communication on the Organizations' Performance: Proposition of Model

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### **ABSTRACT**

The aim of study was to develop a model to identify the influence of communication, organizational identification and trust on the organizations' performance and proposition of model. The research was descriptive and quantitative, and it was conducted in a soft drink Industry, in Brazil. Hypotheses (n=9) were raised and was applied a questionnaire for 310 employees, considering the constructs: Internal Communication, Trust in the Co-workers, Trust in the Manager, Organizational Identity and Performance. The results showed that the hypotheses H1, H3 and H7 were confirmed. The higher the organizational identification, the greater will be the trust in the manager and the performance. In H4, the study confirmed that there is a lower influence of the Internal Communication on Performance. Thus, the Internal Communication does not support the Performance. Although the direct effect on Performance is contrary (-0.139), the indirect effect was positive (0.476), generating a total effect of 0.337.

**Keywords:** Internal communication. Trust. Organizational identification. Organizational performance. Communication. Organizational communication.

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## **Influência da Comunicação Interna, Identificação Organizacional e da Confiança no Desempenho Individual: Proposição de um Modelo**

### **RESUMO**

O objetivo do estudo foi desenvolver um modelo para identificar a influência da comunicação, identificação organizacional e confiança no desempenho e propor um modelo para as organizações. A pesquisa foi descritiva e quantitativa, e foi conduzida em uma indústria de refrigerantes, no Brasil. As hipóteses (n = 9) foram levantadas e foi aplicado um questionário para 310 funcionários, considerando as construções: comunicação interna, confiança nos cooperadores, confiança no gerente, identidade organizacional e desempenho. Os resultados mostraram que as hipóteses H1, H3 e H7 foram confirmadas. Quanto maior a identificação organizacional, maior será a confiança no gerente e no desempenho. Em H4, o estudo confirmou que há uma menor influência da comunicação interna sobre o desempenho. Assim, a comunicação interna não suporta o desempenho. Embora o efeito direto sobre o desempenho seja contrário (-0,139), o efeito indireto foi positivo (0,476), gerando um efeito total de 0,337.

**Palavras chave:** Comunicação interna. Confiança. Identificação organizacional. Desempenho organizacional. Comunicação. Comunicação organizacional.

## 1 INTRODUCTION

The changes that have occurred in recent decades highlight the advancement of internal communication, where performance is acquired through an organizational culture that values people and seeks to retain talents. The higher the interpersonal relationship index, on interior of the organization, more trust.

The organizational development depends on this integration of the various intellectual abilities, coming from human identification, this being one of the factors that has been highlighted in recent years, a construct of ample value that provides strategies well to scope of objectives, enabling the focus on results.

The performance in organizations depends on many factors and can be analyzed, conceptually or empirically, through different models of study, based on specific constructs at the individual (beliefs, values, skills), organization (rewards and incentives, training , information systems, leadership), environment (strategy, culture, climate, external demands) or group (type of task, rules, objectives and group composition) level (Castro et al.,2016, Hrmo et al.,2016, Zenteno-Hidalgo & Silva,2016, Dastmalchian et al.,2015, Varnali,2015, Xiaoming & Junchen,2012, Ravasi & Schultz,2006, Huselid,1995, Deshpande & Webster, 1989,Guest,1987). There aren't models that relate the constructs communication, trust and organizational identification in the performance of an organization.

Although the literature points out that internal communication has a strong relationship to performance, many companies still maintain retrograde management, in which the communication area is not considered strategic for the company, being neglected or even managed by people in the human resources sector who, in many cases, are not empowered or properly empowered to deal with the complexity of a communication system (Torquato, 2002).

The communication in organizations should be dynamic and updated with new technology to increase the exchange of knowledge (Borca & Baesu, 2014), Social process common to all organizations (Flórez,2015), greater cohesion and connectivity (Fayoyin,2015), to improve business value and engage employees (Verghese,2017).

It is not only based on the training of employees to develop effective skills to meet the challenges of organizations.

Communication promotes organizational values, guides employees in the processes of structural change, propagation of information about intangibles, constructs and protégés the image of the organization (Hoyos,2015, Vallejo-Alonso, Garcia-Merino & Arregui-Ayastuy,2015). The organizational communication is the exchange of information within organizations, and the internal communication is the interaction of the exchange of information and ideas within these organizations. The internal communication aims to implement projects and daily actions involving the employees to the achievement of the organizational strategies (Ince & Gül,2011, Norbin, Halib & Ghazali, 2011).

Hosmer (2010) believes that trust is the result of a decision or action that recognizes and protects the rights and interests of other people through the application of ethical principles of analysis. It is assumed that the trust-based relations will bring benefits to those involved (Verghese,2017, Kramer, 1999).

Given this argument, the aim was to analyze the influence of the internal communication with the constructs, trust and organizational identification on the performance of an organization.

In this study was adopted the functionalist perspective, in the field of organizations in Brazil enabling its extension to Latin America and other countries (Gonzales-Miranda, Ocampo-Salazar & Gentilin,2018).

## **2. THEORETICAL REFERENCE**

### **2. 1 Performance**

Huselid (1995) states that the human resource management practices (HRM) can also influence the performance of the organization through the provision of organizational structures that encourage the participation among employees and allow them to improve the way the work is done. Cross-functional teams, job rotation and quality circles are examples that could be highlighted.

The HRM theory proposed by Guest (1987), Bertucci (2005), Zapata and Ramirez (2009) relates some HRM practices, such as rewards systems and

communication, with results expected by the HRM, such as commitment, flexibility, strategic integration and quality, and these are related with the desired organizational performance, such as high operating effectiveness.

Organizational effectiveness is a measure of several indicators, such as: internal functioning trust and goodwill between workers, clear information flow, strategies that respond to customers, employees and stockholders, success in terms of outputs and production goals, and environment success (Silva & Paiva, 2015, Calderón-Hernández, Álvarez-Girado & Naranjo-Valencia, 2010). Other indicators of efficacy were related by Behn (1995) and Straight (2000) and divided into indicators of input, process, output, result and impact. The organizational effectiveness was achieved as it fulfilled the goals (Sankowska, 2016, Calderón-Hernández et al., 2010, Bertucci, 2006, Cameron, 1980). Therefore, the performance encompasses several individual and organizational factors being a complex strategy.

The Internal communication is strongly related to the financial performance and organizational stability (Yates, 2006). Therefore, several perspectives demonstrate that the communicational strategy is the pillar for efficiency, performance and general productivity of the organization and its employees, it also provides gain trust, instill a sense of belonging, create awareness and engage employees (Verghese, 2017, Titang, 2016, Hoyos, 2015, Yates, 2006).

### **Hypotheses**

*H4: The Internal Communication affects significantly and positively the Performance.*

### **2.2. Internal Communication**

Communication is important for the relationship between the people at work, the clarification and explanation of the decisions and the orientation for the performance of the tasks. "People, communication, organization and administration are interrelated factors that need to be examined in detail" (Thayer, 2012, p. 29).

The internal communication intends to make the employees realize their values and participate in programs aimed at achieving the organization's

strategies. The people responsible for this area should argue with the top management that the employees need to be aware about the organizational strategies and results (Verghese,2017, Abdullah & Antonay, 2012). This makes the top management has a clear and secure communication, linking their efforts for an effective management, because the success of the organization depends on the form of communication (Verghese,2017).

Communication must be ethical and responsible, meaning that people should interact, participate, issue opinions to allow the enrichment of their peers and the organization itself. This enrichment should not only be greater profits for the company, but as personal and professional growth for all those involved in the process (Bueno, 2005, p. 94).

According to Zaremba (2003), it is a central and non-secondary constituent for organizational efficiency. Therefore, it surpasses the praxis of receiving and sending messages either through bulletins, letters, warnings, crafts, memos, Intranet, Internet, videoconferencing, Blogs, wikis, calls (Yates,2006), also is a means of interlocution formal and informal of information passing by management and employees (Titang,2016).

### **Hypotheses**

*H1: The Internal Communication affects significantly and positively the Organizational Identification.*

*H2: The Internal Communication affects significantly and positively the Trust in the Co-workers.*

*H3: The Internal Communication affects significantly and positively the Trust in the Manager.*

### **2.3. Organizational Identification**

According to Hughes and Ahearne (2010), the organizational identification is formed by the set of representations that its members formulate about the meaning of this organization, in a social context. Therefore, the expected results of organizational identification lead to the organizational performance, which is directly linked to individual performance through commitment and is not directly related to turnover (Deconinck, 2011). The construct is complex has been studied since the 1960 and is

associate with individual values and organizational values (Cavazotte et al., 2017).

Wieske, Kraus, Ahearne and Miquelon (2012) argue that people tend to identify themselves with groups that they perceive as different and attractive, and that members of these groups help improving self-esteem. DeConinck (2011) corroborates with Wieske et al. (2012), when he says that, in organizational contexts, the identification motivates people to adopt desired behaviors such as organizational commitment and greater performance.

Cooper and Thatcher (2010) suggest encouraging the identification as a facet of the organization. Hughes and Ahearne (2010) and Cantisano and Domínguez (2006) point out that the organizational identification generates greater effort, higher performance, greater job satisfaction, lower employee turnover, as well as it strengthens the cooperation and organizational citizenship behaviors. Thus, Hugles and Ahearne (2010) define the behaviors of extra effort as proactive behaviors by employees and behaviors that are outside the scope of the job description, but that adds to the viability and vitality of the company, generating profits.

Pratt (1998) states that the identification is the level of congruence between perceptions, expectations and needs of the individuals and that the higher the level of congruence, the greater the extent to which the individuals identify themselves (Marra et al., 2014, Cantisano & Domínguez, 2006).

Therefore, the organizational identification represents the cognitive link between the definitions of the organization and the definitions of oneself. It follows that there is a great connection between the organizational goals and the goals of the employee when the organizational identification is high. Personal goals have a strong motivating effect on behavior. The organizational identification should moderate the impact of the distribution control systems in the relative effort applied by the individual on behalf of the organizational entity. When an individual identifies himself/herself with an organization, his/her perceptions about the members of this organization are incorporated into his/her overall self-concept (Hughes & Ahearne, 2010).

It is emphasized that to leverage a high level of organizational identity, the employers must hire and retain employees whose values are like the values of the organization. The companies want to retain the employees with best performance (Deconinck, 2011). Wieske et al. (2012) also describe that

the competitive intensity promotes the identification, both at work and staff and at organizational levels.

Therefore, internal communication, trust, organizational identification are mechanisms affecting the company are fundamental prerequisites to understand how the organization and its practices influence the interest, satisfaction and performance of people.

### **Hypotheses**

H5: The Organizational Identification affects significantly and positively the Trust in the Co-workers.

H6: The Organizational Identification affects significantly and positively the Trust in the manager.

H7: The Organizational Identification affects significantly and positively the Performance.

### **2.4. Organizational Trust**

The trust issue has stimulating the scientific production (Sankowska,2016) and many scholars refer to the issue with a transitional approach (Schoorman, Mayer & Davis, 1995, Gambetta, 1988), but it is of great importance in several areas such as communication (Giffin, 1967), management by objectives (Scott,1980), and labor-management relations (Taylor, 1989), team performance, productivity, quality improvement, professional satisfaction, profitability, supply chain management and competitive advantage (Sankowska,2016).

Trust is a multidimensional issue that involves factors such as ability, benevolence and integrity related to the propensity to the risk. The three factors are interdependent, but are interconnected (Schoorman et al.,1995).

Silva and Paiva (2015) demonstrate that trust is the means of expander and perpetuate organizational collaboration behaviors. It features three dimensions being affective, cognitive and behavioral trust and yet three behavioral approaches related to confidence in the superior, coworker and work team.

The greater the confidence the greater likelihood of behaviors of organizational citizenship.



The information as it is shared with employees, these become more motivated and can increase performance. Trust is essence for good relationships and influences identification, commitment and loyalty focused on the promise of the brand. Therefore, adequate information improves confidence. More robustness in relationships, greater confidence and appreciation of information, making internal communication effective (Verghese,2017).

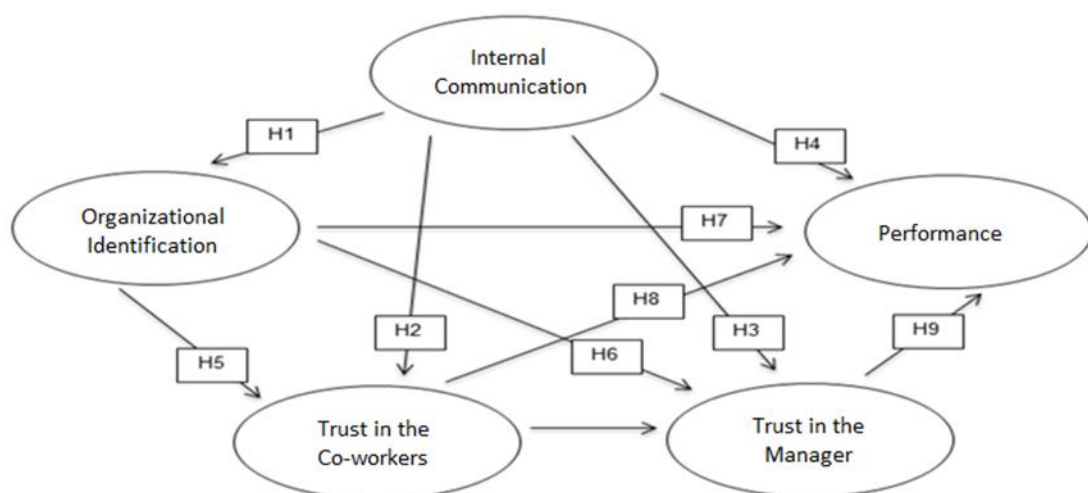
New management models adopted by the organizations and considered stable and secure lose their stability leading to the search for other paths that allow to reach a certain balance in the relations between employee and employer (Zanini, Lusk & Wolff, 2009). Trust-based relationships are supposed to bring benefits to those involved, as the literature indicates (Kramer, 1999).

### **Hypotheses**

H8: The Trust in the Co-workers affects significantly and positively the Performance.

H9: The Trust in the Manager affects significantly and positively the Performance.

The hypothetical model I (Figure 1) was based on the 9 hypotheses presented after constructs.



**Figure 1 – Hypothetical model**

Source: Data from the authors

### 3. METHODOLOGY

The methodological strategy used was the quantitative technique, as to the purposes was descriptive (Gil, 2008). It was applied a structured questionnaire in linear scale from 1 to 10, organized in groups of issues according to the constructs: Internal Communication, Trust in the Co-worker, Trust in the Manager, Organizational Identity and Performance. The participants were the factory, administration and transportation staff. The research is case study. The field study was conducted in a Soft Drinks Industry, composed of 510 employees, located in the metropolitan region of Belo Horizonte. For the statistical analysis, as shown in Figure 1, the R software (version 3.0.2) was used and it was applied the exploratory and confirmatory factor analysis, the dimensionality, reliability, validity and structured equation methods.

The survey was performed with a total of 310 respondents (3 were excluded by absence of replies), in a questionnaire with 32 items on the object of study, divided into internal communication, confidence in the coworker, confidence in the manager, identity Organizational and performance. In a total of 9,920 responses to the 32 questions about the object of study, 86 blank cells were found, totaling 0.86% of the replies, and no question presented another 10% of lost data, not being required to exclude any variables of the study. The data lost at the base of 310 respondents were treated with the imputation by the average variable, being one of the most appropriate and widely employed methods (Hair et al., 2009).

There were two types of outliers: a few, which represent divergent responses based on each of the model variables, and the multivariate, which present a different pattern of response considering all variables at the same time. The outliers were diagnosed by standardizing the results so that the average of the variable is 0 and the standard deviation 1. Thus, outliers were a multivariate of those observations with standardized scores outside the range of  $[-3, 3]$  (Hair et al., 2009).

The multivariate outliers were diagnosed based on the measurement  $D^2$  of Mahalanobis. Individuals who showed significance of the measure less than 0.001 were considered outliers multivariate. The outliers found were not removed from the sample because it was believed that the observations were

valid cases of the population and that, if they were eliminated, they could limit the generality of the multivariate analysis, despite possibly improving their results (Hair et al., 2009).

To present and compare the indicators of each construct, the average and the percentil bootstrap range of 95% were used. The Bootstrap method (Efron & Tibshirani, 1993) is widely used in the realization of inferences when the probability distribution of the variable of interest is not known.

The exploratory factorial analysis was employed to perform a prior analysis of the contribution of each item in the construct to represent the concept of the same. It was adjusted using as a method of extraction the analysis of major components. To analyze the quality and validity of the constructs, it was verified dimensionality, reliability and converged validity. To verify the convergent validity, the criterion proposed by Fornell and Larcker (1981) was used. It ensures such validity if the average variance extracted (AVE), which indicates the average percentage of variance shared between the latent construct and its items, is greater than 50% (Henseler, Ringle & Sinkovics, 2009), or 40% in the case of exploratory surveys (Nunnally & Bernstein, 1994).

To measure reliability, the Cronbach Alfa (AC) (Cronbach, 1951) and Dillon-Goldstein's (DG) (Chin, 1998) were used. According to Tenenhaus et al. (2005), the AC and DG indicators must be greater than 0.70 for an indication of the reliability of the construct, and in exploratory surveys values above 0.60 are also accepted. To verify the dimensionality of the constructs, the criterion of parallel analysis (parallel analysis), elaborated by Horn (1965), was used, which returns the number of factors that must be retained in the exploratory factorial analysis, that is, the number of Dimensions of the construct.

The modeling of structural equations was performed using the Partial Least Square approach (PLS). This approach is an alternative to the traditional approach based on the covariance structure, or covariant-based structural Equation modeling techniques (CB-SEM). The PLS method has been referred to as a smooth modeling technique with minimum demand considering scales of measurements, sample size and residual distributions (Monecke & Leisch, 2012).

The model of structural equations is divided into two parts: measurement model and structural model. To verify the validity of the measurement model, that is, the capacity of the set of indicators of each construct to accurately represent its respective concept, the validity of convergent and discriminatory values was evaluated. The convergent evaluation criterion evaluates the degree to which two measures of the same concept are correlated, while the discriminating assessment measures the degree to which a construct is truly different from the others (Hair et al., 2009). To verify the convergent and discriminatory validity, the criterion proposed by Fornell and Larcker (1981) was used again. To measure the reliability of the constructs, the Cronbach Alfa (AC) and Dillon-Goldstein's (DG) were used. After the validity tests of the measurement model, the structural model was tested.

The bootstrap method was used to calculate the confidence intervals for the weights of the measurement model and the coefficients of the structural model, providing important information on the variability of the estimated parameters, thus provisioning an important validation of the results.

The model of structural equations later to the overall adjustment (the whole sample) was adjusted again to make multigrouping by groups: factory, Transport and ADM. The measurement model through the weights and the structural model Through the coefficients were compared between interest groups, using the calculated confidence intervals via the bootstrap approach.

To check the quality of the adjustments, R<sup>2</sup> and GoF (Tenenhaus et al., 2004) were used. R<sup>2</sup> represents on a scale of 0% to 100% how independent constructs explain dependents, and the closer to 100% the better. The GoF is a geometric average of the average of the birds of the constructs and the average of the model R<sup>2</sup> and ranges from 0% to 100%. Still do not exist in the literature cutting values to consider a fit as good or bad, but it is known that the higher the value, the better the adjustment.

#### **4. RESULTS AND ANALYSIS**

Three hundred and ten employees of a soft drinks factory in Brazil participated. Table 1 shows the reliability, the convergent validity and the quality of the constructs.

**Table 1 - Reliability, convergent validity and dimensionality of the constructs**

Constructs	Items	AVE	AC	DG	KMO	Dim
Internal communication	7	0,52	0,84	0,84	0,84	1
Trust in the co-workers	6	0,54	0,82	0,82	0,79	1
Trust in the manager	6	0,62	0,87	0,86	0,80	1
Performance	6	0,63	0,88	0,87	0,88	1
Organization identification	5	0,65	0,87	0,85	0,83	1

Source Elaborated by the authors.

Table 2 shows the average and the 95% confidence interval for the constructs items in general and stratified by the groups, Factory and Transportation and ADM.

**Table 2 - Average and 95% confidence interval for the items of the constructs internal communication, trust in the co-workers and trust in the manager**

Constructs	Items	General	Factory	Transportation and Administrative
		Average 95 % CI	Average 95 % CI	Average 95 % CI
Internal communication	CI1	4,10 [3,81; 4,40]	4,56 [4,15; 4,99]	3,66 [3,25; 4,07]
	CI2	3,97 [3,69; 4,26]	4,36 [3,93; 4,78]	3,60 [3,21; 3,98]
	CI3	5,60 [5,27; 5,91]	5,56 [5,11; 5,98]	5,64 [5,09; 6,09]
	CI4	4,28 [3,97; 4,60]	4,73 [4,30; 5,15]	3,86 [3,44; 4,29]
	CI5	4,74 [4,39; 5,07]	5,03 [4,58; 5,44]	4,45 [3,99; 4,96]
	CI6	4,76 [4,44; 5,07]	5,31 [4,90; 5,73]	4,23 [3,80; 4,69]
	CI7	5,77 [5,42; 6,11]	6,12 [5,69; 6,55]	5,44 [4,92; 5,99]
Trust in the co-workers	CCT1	7,08 [6,78; 7,37]	7,01 [6,64; 7,41]	7,15 [6,69; 7,57]
	CCT2	6,84 [6,50; 7,15]	6,69 [6,27; 7,11]	6,98 [6,52; 7,41]
	CCT3	6,57 [6,26; 6,84]	6,46 [6,03; 6,87]	6,67 [6,23; 7,13]
	CCT4	6,34 [6,03; 6,68]	6,60 [6,15; 7,02]	6,09 [5,61; 6,57]
	CCT5	4,17 [3,85; 4,50]	4,34 [3,87; 4,81]	4,01 [3,56; 4,49]
	CCT6	6,57 [6,23; 6,92]	6,19 [5,73; 6,69]	6,93 [6,45; 7,40]
	CCT7	5,51 [5,17; 5,87]	5,34 [4,81; 5,87]	5,67 [5,16; 6,15]
Trust in the manager	CG1	6,79 [6,43; 7,17]	7,44 [7,03; 7,85]	6,17 [5,62; 6,70]
	CG2	6,95 [6,63; 7,27]	7,52 [7,15; 7,93]	6,40 [5,88; 6,91]
	CG3	6,60 [6,26; 6,90]	7,17 [6,76; 7,58]	6,06 [5,59; 6,52]
	CG4	6,66 [6,32; 6,98]	6,93 [6,50; 7,36]	6,40 [5,87; 6,87]
	CG5	3,38 [3,05; 3,69]	3,58 [3,13; 4,06]	3,18 [2,77; 3,62]
	CG6	6,64 [6,28; 6,98]	6,62 [6,19; 7,04]	6,65 [6,14; 7,16]
	CG7	6,21 [5,87; 6,55]	6,31 [5,86; 6,78]	6,12 [5,60; 6,66]

Source: Elaborated by the authors.

**Table 3 - Average and 95% confidence interval for the items of the constructs performance and organizational identification**

Constructs	Items	General	Factory	Transportation and Administrative
		Average 95% CI	Average 95% CI	Average 95 % CI
Performance	DE1	8,03 [7,72; 8,31]	7,85 [7,44; 8,23]	8,20 [7,76; 8,59]
	DE2	6,79 [6,45; 7,10]	6,68 [6,25; 7,08]	6,91 [6,41; 7,34]
	DE3	7,33 [7,04; 7,61]	7,13 [6,78; 7,50]	7,52 [7,06; 7,98]
	DE4	7,81 [7,52; 8,10]	8,04 [7,66; 8,40]	7,59 [7,15; 7,98]
	DE5	8,06 [7,78; 8,32]	7,86 [7,48; 8,22]	8,25 [7,86; 8,62]
	DE6	6,67 [6,35; 7,00]	6,70 [6,31; 7,12]	6,65 [6,13; 7,19]
Organization identification	IO1	6,09 [5,72; 6,41]	6,60 [6,13; 7,07]	5,60 [5,13; 6,08]
	IO2	5,70 [5,36; 6,03]	6,23 [5,78; 6,70]	5,20 [4,73; 5,69]
	IO3	6,33 [5,94; 6,57]	6,39 [5,94; 6,81]	6,13 [5,65; 6,56]
	IO4	7,55 [7,26; 7,85]	7,32 [6,93; 7,70]	7,77 [7,35; 8,16]
	IO5	5,85 [5,51; 6,19]	6,06 [5,63; 6,51]	5,65 [5,16; 6,13]

Source: Elaborated by the authors.

It is noticed in Table 2 and table 3 that the construct Internal Communication, in general, for the CI3 and CI7 items, showed highest averages that the other items. The construct Trust in the Co-workers in general, for the CCT1 item, had the highest average compared to other items, while the CCT5 item, had the lowest average. The construct Trust in the Manager, in general, for the CG2 item, had the highest average, while the CG5 item had the smallest average. The construct Performance, in general, for the DE5 and DE1 items, had the highest averages, while the lowest average was for the DE6 item. In the construct Organizational Identification, in general, the highest average was for the IO4 item and the lowest average was for the IO2 item.

In Table 4, it can be seen the average and the 95% confidence interval for the averages of the constructs Internal Communication, Trust in the Co-workers, Trust in the Manager, Performance and Organizational Identification, in general and stratified by the groups Factory and Transportation and ADM.

**Table 4 - Average and 95% confidence interval for the average of the constructs**

Constructs	General	Factory	Transportation and Administrative
	Average 95% CI	Average 95% CI	Average 95% CI
Internal communication	4,746 [4,52; 4,97]	5,096[4,82; 5,38]	4,413 [4,07; 4,74]
Trust in the co-workers	6,152 [5,93; 6,38]	6,089[5,76; 6,44]	6,212 [5,90; 6,53]
Trust in the manager			
Performance	6,174 [5,93; 6,41]	6,512[6,21; 6,78]	5,854 [5,51; 6,22]
Organizational identification	7,449 [7,21; 7,69]	7,376[7,05; 7,69]	7,518 [7,14; 7,85]
	6,289 [6,02; 6,53]	6,521[6,13; 6,87]	6,069 [5,70; 6,40]

Source: Elaborated by the authors.

The construct Performance showed the highest average and the Internal Communication Group presented the lowest average, and in the groups Factory and Transportation and ADM, the scenario was similar.

Through the structural equation method, it was identified that: the higher the Internal Communication, higher (p-value = 0.000) and positive ( $\beta = 0.564$  [0.50, 0.63]) tends to be the Organizational Identification; the Trust in the Co-workers also tends to be higher (p-value = 0.005) and positive ( $\beta = 0.161$  [0.05, 0.28]); and the Performance tends to be lower (p-value = 0.008) and negative ( $\beta = -0.139$  [-0.23, -0.05]). The higher the Organizational Identification, higher (p-value = 0.000) and positive ( $\beta = 0.461$  [0.35, 0.59]) tends to be the Trust in the Co-workers; the Trust in the manager tends to be higher (p-value = 0.000) and positive ( $\beta = 0.496$  [0.39; 0.58]); and the Performance also tends to be higher (p-value = 0.000) and positive ( $\beta = 0.476$  [0.39, 0.58]).

The analysis of convergent validity, discriminant validity, dimensionality and reliability of the constructs was carried out in Table 5.

**Table 5 - Validation of the measurement model**

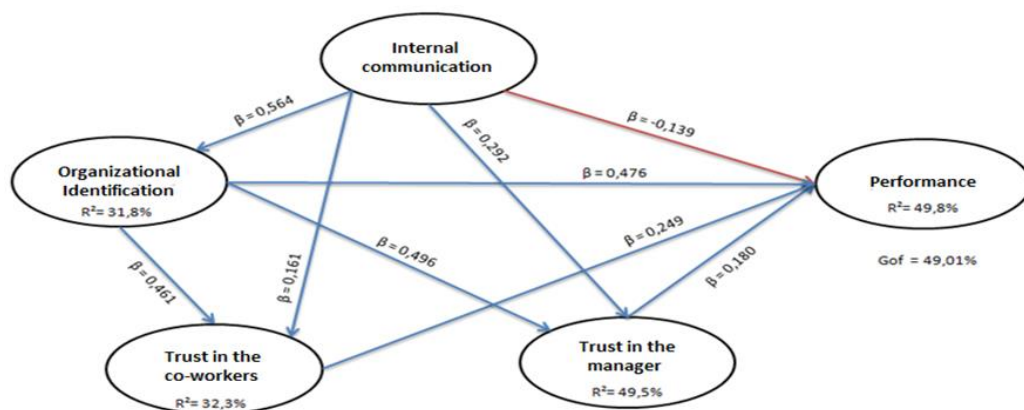
Constructs	Item	A.C.	D.G.	Dim	AVE	1	2	3	4	5
Internal communication	7	0,85	0,88	1	0,52	1				
Organizational identification	5	0,87	0,90	1	0,65	0,32	1			
Trust in the co-workers	6	0,83	0,88	1	0,54	0,18	0,31	1		
Trust in the manager	6	0,87	0,91	1	0,62	0,33	0,44	0,27	1	
Performance	6	0,88	0,91	1	0,63	0,12	0,43	0,30	0,30	1

Source: Elaborated by the authors.

For the model that considers Organizational Identification as endogenous (dependent) variable, it was obtained a significant ( $p$ -value = 0.000) and positive ( $\beta = 0.564$  [0.50, 0.63]) influence of the Internal Communication on the Organizational Identification.

The variable mentioned above was able to explain 31.8% of the Organizational Identification variability. The above results allow the confirmation of the hypotheses H1, H3 and H7, which state that the related constructs affect each other significantly and positively. However, considering the H4 hypothesis, the study confirmed that there is a significant and indirect influence of the Internal Communication on Performance. Thus, the Internal Communication does not support directly the Performance. The GoF model was 49.01%, indicating a good fit of the model.

The structural model that best represents the studied relations can be seen in Figure 2.



**Figure 2 – Structural model illustration**

Source: Data from the authors

Table 6 presents the direct and indirect effects. Thus, although the direct effect of the communication on performance is contrary ( $- 0.139$ ), the indirect effect was positive ( $0.476$ ), generating a positive overall effect of  $0.337$ .



**Table 6 - Analysis of direct and indirect effects**

Relationships	Effects		
	Direct	Indirect	Total
Internal communication - > Organizational identification	0.564	0.000	0.564
Internal communication - > Trust in the co-workers	0.161	0.260	0.422
Internal communication - > Trust in the manager	0.292	0.280	0.572
Internal communication - > Performance	-0.139	0.476	0.337
Organizational identification - > Trust in the co-workers	0.461	0.000	0.461
Organizational identification - > Trust in the manager	0.496	0.000	0.496
Organizational identification - > Performance	0.476	0.204	0.680
Trust in the co-workers - > Performance	0.249	0.000	0.249
Trust in the manager - > Performance	0.180	0.000	0.180

Source: Elaborated by the authors.

Therefore, followed by the Organizational Identification, with a total effect of 0.680 on Performance, the Internal Communication was the second variable that had the most influence on Performance, with a total effect of 0.337. The Trust in the Co-workers and the Trust in the Manager presented, respectively, the total effects of 0.249 and 0.180 on Performance.

In Table 7, the confidence intervals for  $R^2$  overlap themselves, which indicates that the model fits equally and reasonably well to both groups. The GoF had considerably satisfactory values for both groups.

**Table 7 - Quality Comparison of the adjustments for the adjusted models by group**

Factory	Transportation and ADM			
	Endogenous		R <sup>2</sup>	95% C.I.
Organizational identification	R <sup>2</sup>	95% C.I.	R <sup>2</sup>	95% C.I.
Trust in the co-workers	26.5%	[16%; 40%]	37.8%	[28%; 49%]
Trust in the manager	34.3%	[21%; 49%]	34.7%	[18%; 47%]
Performance	44.7%	[33%; 59%]	55.4%	[47%; 65%]
GoF	61.7%	[52%; 72%]	43.7%	[31%; 58%]
	50.03%		49.80%	

Source: Elaborated by the authors.

The Table 8 presents the direct and the indirect effects per group. When the direct effect of the communication on performance was negative, the indirect effect was positive, generating a positive overall effect. Therefore, the Organizational Identification had the highest total effect on Performance

and the Internal Communication was the second variable that most influenced the Performance.

**Table 8 - Analysis of direct and indirect effects**

Relationships	Factory			Transportation and ADM		
	Effects			Effects		
	Direct	Indirect	Total	Direct	Indirect	Total
Internal communication - > Organizational identification	0.515	0	0.515	0.615	0	0.62
Internal communication - > Trust in the co-workers	0.111	0.268	0.379	0.269	0.236	0.51
Internal communication - > Trust in the manager	0.145	0.3	0.445	0.366	0.284	0.65
Internal communication - > Performance	-0.108	0.451	0.343	-0.113	0.495	0.38
Organizational identification - > Trust in the co-workers	0.52	0	0.52	0.384	0	0.38
Organizational identification - > Trust in the manager	0.583	0	0.583	0.461	0	0.46
Organizational identification - > Performance	0.509	0.253	0.762	0.428	0.171	0.6
Trust in the co-workers - > Performance	0.206	0	0.206	0.256	0	0.26

Source: Elaborated by the authors.

In the Model it was found that the internal communication, influence indirectly in the performance (Zapata & Ramirez,2009, Bertucci,2005), but, the Organizational Identification influenced more that Internal Communication in the Performance, already the trust in the Co-workers and the Trust in the manager, the influence small in the Performance (Verghese,2017, Titang,2016, Silva & Paiva,2015, Acosta-Prado & Longo-Samoza,2013, Abdullah & Antonay, 2012, Yates,2006). The findings demonstrate that the Internal Communication influences Organizational Identification and a greater confidence in the managers. Already the Organizational Identification influences more the Performance. Acosta-Prado and Longo-Somoza (2013) emphasize that communication processes provide for the creation and development of organizational identification and technological capacities. Organizational performance depends on several factors such as macroeconomic, sectoral and organizational influences that influence the results obtained, according to the literature data (Riveros et al.,2015).

The results confirmed the authors Deconinck (2011), Hughes and Ahearne (2010) and Cooper and Thatcher (2010). There were no significant differences when comparing the structural model in the Factory and in the transportation and administrative sectors, but it can be noted that in the Factory group, the Organizational Identification had an influence on the Trust in the Co-workers and the Trust in the Manager greater than the Internal Communication, however influences Organizational Identification obtained performance (Verghese,2017, Titang,2016, Silva & Paiva,2015, Abdullah & Antonay, 2012, Yates,2006).

## 5. MAIN CONSIDERATIONS

The structural model I allowed to analyze and confirm the hypotheses H1, H3 and H7 that claim that the related constructs influenced significantly and positively the dependent variable, i.e.: The higher the Internal Communication, the greater will be the Organizational Identification. The higher the Internal Communication, the greater will be the Trust in the Managers. The higher the Organizational Identification, the greater will be the Trust in the Co-workers. The higher the Organizational Identification, the greater will be the Trust in the Manager. The Internal Communication influences indirectly the Performance. The higher the Organizational Identification, the greater will be the Performance. The higher the Trust in the Co-workers, the greater will be the Performance. The higher the Trust in the Manager, the greater will be the Performance.

In Hypothesis H4, the study confirmed that there is a lower influence of the Internal Communication on Performance. Thus, the Internal Communication does not support the Performance. Although the direct effect on Performance is contrary (-0.139), the indirect effect was positive (0.476), generating a total effect of 0.337.

As previous explanation, the measuring instrument meets the purpose of this study presenting one-dimensionality, high reliability indicators and convergent and discriminant validity. The model showed a good fit and validity to the presented results and equal weights assigned to the items of the constructs between the groups, indicating that the way to understand and measure the constructs did not vary by group. It was necessary to remove

only one question for questionnaire adjustment. Thus, the data from this study support the conclusion that the measuring instrument was suitable for application in the transportation and administrative sectors of the Factory.

Throughout the whole literature and the results obtained by this research, it is proposed the following suggestions for future researches: to apply the studies about the direct relationship of communication on performance, because it is necessary to better understand the reasons why the communication low influences in the performance; to test this model in other types of organization; and to include other constructs for the study of the presented model. Limitations: the proposition of the study model was carried out in only one company in Brazil requiring its findings to will be validated in other work contexts and geographical regions.

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