Assessment of worker satisfaction at a Brazilian oil company

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Abstract

The search for excellence is intrinsic in any organization. As such, a good understanding of the different factors involving workers is essential, primarily in times of economic crisis. Accordingly, the aim of the present study is to assess employee satisfaction at a Brazilian oil company using structural equation modeling. The methodology consisted of three stages: first, a pre-existing theoretical framework was applied, followed by a survey of the company's employees in order to determine the importance of the variables established by the framework and, finally, structural equation modeling to identify the factors that contribute to the process investigated. The study complied with all the statistical criteria for its validation, in addition to exhibiting good model fit, proving to be statistically adequate. Moreover, it was important for employee satisfaction, the current organizational crisis environment (CE) and good communication (GC) of company values, but did not obtain a significant relationship between participation and commitment incentives (PI) and training and development (TD).

Keywords: Structural Equation Modeling. Employee Satisfaction. Organizational Environment.

Introduction

Studies on job satisfaction have been conducted over the years, mainly since the 1970s, dealing with a number of issues, from employee satisfaction itself to understanding its impact on worker performance.

In conjunction with the descriptive aspect, Nannetti, Mesquita and Teixeira (2015) sought to assess the impact of worker satisfaction on customer satisfaction. To that end, structural equation modeling (SEM) was used in a theoretical framework that integrated human resource practices and history customer satisfaction. This material was adapted to the study of an oil company.

The company selected has undergone a number of economic crises since 2009, resulting in significant cost cutting and reduced investments, in an attempt at restoring its financial health. It is safe to assume that worker perception of the company and employee performance would be affected. This raises the following question: How does the current organizational environment of the Brazilian multinational oil company affect worker satisfaction?

Thus, this study **is justified** since it allows a better understanding of how the employees of a large international company react to an unfavorable environment, thereby contributing to optimizing human resources and maintaining the emotional aspects related to satisfaction.

As such, the **aim** of the present study is to assess worker satisfaction of a Brazilian oil company in crisis.

With a view to reaching the aforementioned objectives, structural equation modeling (SEM) was applied to the model proposed by Nannetti, Mesquita and Teixeira (2015), given that this structure produced satisfactory statistical results, making it possible to measure and explain employee satisfaction.

This study is divided into three stages: first, the entire theoretical framework is presented, whereby all the concepts are explained for a good understanding of the issue. Next, the methodology adopted to achieve the objectives is described. Finally, the results obtained by SEM are presented as well as their impact on employee satisfaction.

Theoretical Framework

The framework presented is subdivided into three aspects: first the basic principles are presented to understand the nuances of customer satisfaction. Second, the effects of the crisis environment on worker satisfaction are put forth. Finally, the theoretical model adopted as well as the essential aspects attributed to it are discussed.

Employee satisfaction:

Employee satisfaction is a state of emotional pleasure resulting from an individual's assessment (LOCKE, 1969). Certain organizational aspects moderate satisfaction relationships, and their effects are due to complex interactions between individuals and organizations (SPECTOR, 1985). In this respect, the importance of job satisfaction has been growing over the years. Social and economic changes increa-

singly hinder retention of competent, motivated and satisfied workers (GEORGELLIS; LANGE, 2007).

Five key elements characterize best practices for personnel management practices, as follows: i) **good communication** of company values, ii) **incentives for employee participation and commitment**, iii) empowerment of employee **decision-making**, iv) assessment and provision of **training and development** and v) encouraging and facilitating **teamwork** (OAKLAND; OAKLAND, 1998).

Good communication of company values:

The mission, vision and policies of a company define its objectives (COLLA et al., 2016). As such, some employees may place a high value on company goals and this attitude may supersede, to a certain extent, their enjoyment of the specific functions required to meet these objectives (PORTER et al., 1974). Thus, they would not really be satisfied in their jobs, but merely performing the activity out of a "sense of duty". For men, job satisfaction is closely related to the organizational environment, while for women it lies in the balance between work and family (RICHARDSEN; BURKE, 1991). However, aligning company and employee goals tends to improve job satisfaction, even in the presence of work-family conflicts (ALEGRE; MAS-MACHUCA; BERBEGAL-MIRABENT, 2016). In other words, good communication of company values tends to increase employee satisfaction, regardless of sex.

Good communication is so integral to employee satisfaction that staff whose expectations, needs or promises are not met, tend to exhibit a decline in job satisfaction (RAYTON; YALABIK, 2014). Moreover, for the young and elderly alike, a positive relationship can be inferred between their perceptions of work values and employee satisfaction (TO; TAM, 2016). Thus, the following hypothesis arises:

Hypothesis 1 (H1): Good communication has a positive effect on overall employee satisfaction (NANNETTI; MESQUITA; TEIXEIRA, 2015).

Incentives for employee participation and commitment:

Employee participation and commitment can be encouraged by creating self-directed work teams involving continuous improvement activities and training in problem resolution (OAKLAND; OAKLAND, 1998). Companies that provide organizational support tend to have employees that are more satisfied with their jobs, more committed to their daily activities and tend to remain in the company (RIGGLE; EDMONDSON; HANSEN, 2009). In this respect, a study conducted with employees of the Islamic Azad University of Birjand reported a direct relationship between organizational commitment and job satisfaction (KHOSHHAL; KESHTEGAR, 2016).

Hypothesis 2 (H2): Participation and commitment incentive have a positive effect on overall employee satisfaction (NANNETTI; MESQUITA; TEIXEIRA, 2015).

Empowering employee decision-making:

With respect to decision making, studies conducted by Cooper, Rout and Faragher (1989) reported high satisfaction levels in professional environments where responsibility and freedom are fostered. Furthermore, providing appropriate work control, freedom of choice and security contribute to increasing employee satisfaction (YOON; BEATTY; SUH, 2001).

More recently, a study found that a lack of day-to-day decision making resulted in employee dissatisfaction (Al-Yaseen and Al-Musaileem, 2013).

Ghani (2015) identified a positive correlation between decision making, satisfaction and professional performance. Finally, studies carried out by Khoshhal and Keshtegar (2016) also found that delegating authority culminated in a positive correlation with employee satisfaction. That is, empowerment is an important variable acting on the affective responses of professionals, including satisfaction (KIM; LIU, 2016).

Hypothesis 3 (H3): decision making has a positive effect on overall employee satisfaction (NANNETTI; MESQUITA; TEIXEIRA, 2015).

Assessing and providing training and development:

Training and development, in turn, tend to act on workers in two ways: first, they tend to indicate a company's concern about professional growth and a lasting relationship with their employees and second, an increased feeling of professional control, since they feel more empowered to make decisions (FELDMAN, 1996). Experimentally, professionals that were given the opportunity to improve their skills and competencies develop a high sense of confidence and employee satisfaction (CHOI; JOUNG, 2017; ELLINGER et al., 2011; LEE; BRUVOLD, 2003). This experiment not only acts as a catalyst in the way professionals view their company, but also increases employee retention (FLETCHER; ALFES; ROBINSON, 2016). In other words, providing appropriate training increases employee effectiveness, proactive behavior, and enhances not only health but the balance between private life and work (WOOD; MENEZES, 2011).

On the other hand, some studies demonstrated that professionals who sought training and development independently tend to not associate this activity with their work place, decreasing their identification with the company and, consequently, seek other employment (BEYNON et al., 2014). Moreover, training contributes to developing the social aspects of a company, such as socialization and integration, in addition to raising the satisfaction levels of employees in multiple domains (TABVUMA; GEORGELLIS; LANGE, 2015).

Hypothesis 4 (H4): Training and development has a positive effect on overall employee satisfaction (NANNETTI; MESQUITA; TEIXEIRA, 2015).

Encouraging and facilitating teamwork:

Cooperation aims to establish a strategic difference through teamwork (MONTEIRO; DOMINGUES; BUENO, 2017). Thus, it is hoped that different employees will help one another, in addition to becoming more qualified to take on the interrupted tasks of a workmate or cope with a sudden increase in work load, and that they should know how to manage environments permeated with daily conflicts (FELDMAN, 1996).

Thus, teamwork can be connected with employee satisfaction through the actions of supervisors, given that companies with a strong teamwork policy tend to mitigate the influence of supervisors and enhance job enrichment, factors that have a positive influence on employee perception of their job (GRIFFIN et al., 2001). Furthermore, the alignment of professional and company values, high levels of teamwork, and good relationships among colleagues contribute to increased employee satisfaction, even in an environment of conflict (ALEGRE; MAS-MACHUCA; BERBEGAL-MIRABENT, 2016).

Hypothesis 5 (H5): teamwork has a positive effect on overall employee satisfaction (NANNETTI; MESQUITA; TEIXEIRA, 2015).

The effects of organizational environment on employees:

It is noteworthy that stressful aspects in the workplace, such as conflicts, work tension and stress among others, tend to increase employee dissatisfaction (KIVIMÄKI et al., 2007; HSIEH; HUANG, 2017).

Happiness declined in the economically active European population during the economic crisis (BELL; BLANCHFLOWER, 2011). Furthermore, insecurity in the work environment increases cases of depression, in addition to other variables (MELTZER et al., 2010). During an economic crisis, marked by unemployment and recession, the number of suicides tends to rise (ANTONAKAKIS; COLLINS, 2014). Finally, an environment in which there is a decline in the workforce and infrastructure results in an increase in disease, with a direct relation between the degree of recession and number of maladies (VAHTERA; KIVIMÄKI; PENTTI, 1997).

The five personality factors (neuroticism, extroversion, openness to experiences, agreeableness and conscientiousness) play a moderating role on employee satisfaction, neuroticism (negative affective response) being the most relevant (JUDGE et al., 2002). An economic crisis affects worker perceptions of their job, since they are forced to settle for a lower position. Thus, there is an influence on satisfaction in both extrinsic (remuneration, management policies, physical conditions and personal development) and extrinsic aspects (opportunities for advancement, creativity, personal development, etc.) (MARKOVITS; BOER; DICK, 2014). As such, companies must concentrate on the work environment in order to improve employee satisfaction (LAMBERT; HOGAN; BARTON, 2001).

Hypothesis 6 (H6): The current crisis environment has a negative effect on overall employee satisfaction.

Theoretical model:

As described in **chapter 1**, we used the model adopted by Nannetti, Mesquita and Teixeira (2015). This framework was applied to measure the job satisfaction of software company employees and the impact of this variable on customer satisfaction. It consists of the following five variables: I) **good communication (GC)**, II) **participation and commitment incentives (PI)**, III) **decision-making power (DP)**, IV) **training and development (TD)** and V) **teamwork (TW)** (Figure 1).

In this model, practically all the indicators were important in forming the constructs (Table 1), except the fourth indicator (Teamwork), which was not significant, but nevertheless maintained for assessment in a new environment. Furthermore, the model exhibited high composite reliability (above 0.7) and acceptable Cronbach's alpha (above 0.6), with the exception of Teamwork (0.593547) (NANNETTI; MESQUITA; TEIXEIRA, 2015). In addition to this good statistical validity, the model showed significant agreement with the previously applied theoretical framework, as described in **subchapter 2.2**.

Next, how the current crisis environment of the company affects employee satisfaction was analyzed. To that end, and based on what was presented in **subchapter 2.3**, we added a new construct to the model, denominated **Crisis Environment (CE)**, as depicted in Figure 2. This added variable becomes the linking element be-

tween the study conducted by Nannetti, Mesquita and Teixeira (2015) and the present investigation, making it possible to pursue the desired objectives.

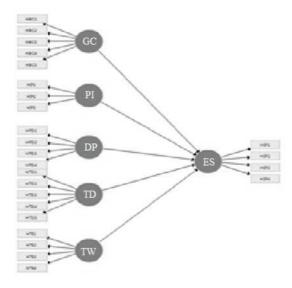


Figure 1: Theoretical model proposed by Nannetti, Mesquita and Teixeira (2015)

Inclusion of the variable aims to measure the responses of employees to the current environment, broaden the horizons presented by the earlier study by Nannetti, Mesquita and Teixeira (2015) and understand how and to what extent the negative phase experienced by the company affects worker satisfaction.

La tent Variable	Indicator	ator Load	Composite	Cronbach's	
			Reliability	Alpha	
	HBCL	0,5752			
Good Communication	HB52	0,5555			
130)	HBC5	0,7514	0,8157	0,7245	
(uc)	HBC4	0,7058			
	HECS	0,5349			
Participation incentive	HIP1	0,791			
(PI)	HIP2	0,804	0,5054	0,5508	
(PI)	HIP5	0,597			
	HPD1	0,555			
Decision-making	HPD2	0,718	0.8155	0.5989	
power(DP)	HPD5	0,852	5,5255	0,0505	
	HPD4	0,554			
	HTD1	0,557			
Terlalases d	HTD2	0,725			
Training and Development (TD)	HTD5	0,722	0,8517	0,7475	
perelahment (10)	HTD4	0,754			
	HTD5	0,589			
	HTEL	0,555	<u> </u>	_	
Teamwork (TW)	HTE2	0,859	0.7558	0.5955	
resultable (198)	HTE5	0,884	9,7555	·2, 2555	
	HTE4	0,255			
	HST1	0,859			
Employee Satisfaction	HST2	0,550	0.8447	0.7575	
(ES)	H5T5	0,742	0,8447	0,7525	
-	HST4	0,555			

Table 1: Results obtained by Nannetti, Mesquita and Teixeira (2015)

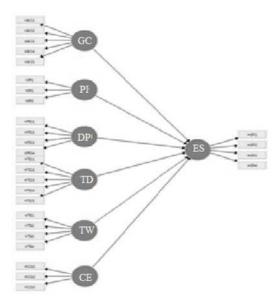


Figure 2: Model proposed in this study Source: Research data.

Research Method

The methodology adopted in this article consisted of three main stages: first, a survey of the state of the art, followed by the theoretical framework and, finally, a **quantitative study**. The first two stages were of an **exploratory nature**, whose objective was to guide how the study would develop in terms of the authors and journals (state of the art) and the theoretical base to construct the models and research hypotheses (framework). The third stage is characterized as **confirmatory descriptive**, where a satisfaction survey was conducted with the **employees of the company under study**, applying a **questionnaire** composed of 28 questions using **5-point Likert scale** (1 - "Totally Disagree" to 5 - "Totally Agree"); next, the result of this data collection was applied to the model developed in the second stage, and, using **Structural Equation Modeling (SEM)**, we tested and confirmed the structure and hypotheses of the study, in accordance with the methodology suggested by Hair JR. et al. (2014).

Framework Methodology:

To collect the articles for the theoretical framework of this study, we conducted a keyword search in two databases: Scopus and Science Direct. First, information was collected from the databases regarding the number of publications in recent years, the authors who published the largest number of articles on the topic and the most cited published articles. This information provided a broader perspective and better understanding in order to determine the subsequent steps.

Next, we obtained the title, authors and abstracts of all the articles found in the two databases. Following this collection and screening to remove duplicate articles, their eligibility was assessed. To that end, abstracts were read, and studies that evaluated the factors affecting employee satisfaction were selected, whether the influence was positive or not.

Finally, after qualitative screening, the next step involved a critical assessment of the articles. The most referenced articles by the leading authors on the subject and/or the most recent (last five years) were used, thereby ensuring the quality of the information obtained.

Quantitative study:

In order to guarantee a clear understanding of the quantitative study, we divided it into two stages. The first discusses the general characteristics of the questionnaire, and the second presents the statistical method used to analyze the information obtained (structural equation modeling).

Data collection (Questionnaire):

A questionnaire adapted from that used by Nannetti, Mesquita and Teixeira (2015) and obtained from the Survey Monkee site was applied. It consists of 28 closed questions on a 5-point Likert scale, as follows: 1 - "I totally disagree", 2 - "I disagree", 3 - "Indifferent", 4 - "I agree" and 5 - "I totally agree". It was applied to employees from several sectors of the company, fields and schooling levels, excluding retirees, ex-employees and outsourced workers.

Structural Equation Modeling - SEM:

Structural equation modeling provides an understanding of the complex relationships involved in data analysis, given that it simultaneously examines the relationships of multiple variables, such as: personnel, companies and activities (HAIR JR. et al., 2014). Thus, SmartPLS software was used to test the model proposed by Nannetti, Mesquita and Teixeira (2015).

We adopted the PLS algorithm (3000 maximum interactions and a 10^-10 stop criterion) and Blindfolding (omission distance of 7). However, Bootstrapping was executed with a total of 5000 subsamples, since this decreased the difference between the subsamples created by the program and the real sample, mitigating the difference between the values (Hair et al., 2014).

Case Study:

According to the company's website, it is a mixed economy state company operating jointly in twenty-seven countries and specializing in the oil, natural gas and energy industries. Its activities lie in the areas of exploration and production, refining, sale, transport, petrochemicals, in addition to the distribution of derivatives, natural gas, electrical energy, chemical gas and biofuels. The company was founded in 1953 with the objective of engaging in oil-related activities in Brazil, and enjoyed a monopoly in the sector until 1997.

It is involved in several fields of the energy-producing chain, ranging from crude oil extraction, with daily production of more than two million barrels, refinement, providing items such as plastic, fuel, fertilizers, asphalt and cleaning products, among others, and powering thermoelectric plants.

However, despite its colossal size, the company has undergone a number of crises since 2009 that have had a devastating effect on its results. Corruption, disastrous investments and the falling price of oil led to a loss of R\$ 21,587,000 (US\$

6.663,000) in 2014 and R\$ 34,836,000 (US\$ 10,752,000) in 2015, causing its stock to fall from US\$ 36.29 (May 1, 2009) to US\$ 12.40 (May 5, 2016).

Results:

The questionnaire obtained a total of 143 responses, representing a good sampling, given that the minimum number required is 5 responses per indicator (28), totaling a minimum of 140 responses (HAIR JR. et al., 2014).

Another important aspect regarding the sample is related to its characterization. Approximately 93.7% of those interviewed were men and 6.3% women, average age of 37 years, most living in Northeastern Brazil (79.7%), working in operations (46.8%), university graduates (37.7%) and employed in the company between 6 and 10 years (34.62%). More information on the sample is provided in Table 2.

Total Sample	145		
	Men	95,70%	
Sex	Wamen	5, 50%	
Average Age	57 years	blc	
	North	0,14%	
	Northeast	79,70%	
Region	Center-west	0,14%	
	Southeast	19,55%	
	South	0,14%	
	Administrativo	14,70%	
	Engen haria	24, 50 %	
Sector	Jurid les	4, 2099	
	Operacional	45, 80 %	
	Sutres	9, 80%	
	0-5 years	28,70%	
	5-10 years	54, 52 %	
Duration of	1.1-15 years	15,50%	
Employment	15-20 years	0, 1459	
zinpio ymene	21-25 years	0, 1459	
	Mare than 25	25,20%	
	yea ra		
	Secondary	4, 90%	
	Techinical	14,70%	
	Unive raity	9.50%	
	Student .	Mary Mary M	
	Unive raity	57,70%	
5cho oling	Sraduate	21,1275	
	5 pecialist	15, 80%	
	Master	10,50%	
	Doctorate	1,40%	
	Other Graduate	4.20%	
	Degree	÷, =371	

Table 2: Sample Characterization

Source: Research data.

The aim in this stage is to analyze the results in order to statistically validate the values obtained, that is, ensure their reliability so that they can then be critically assessed. To that end, six statistical aspects were determined: I) Kurtosis and Asymmetry; II) Outer Loadings; III) Cronbach's Alpha and Composite Reliability; IV) Discriminant Validity; V) Variance Inflation Factor (VIF); and VI) Construct Redundancy and Construct Communality (HAIR JR. et al., 2014).

The first aspect investigated was Kurtosis and Asymmetry, in order to analyze the extent to which the data deviated from normality. To that end, the ideal variation

was considered to be between -1 and +1 for Kurtosis and values greater than +1 and less than -1 for Asymmetry (HAIR JR. et al., 2014). Thus, HGC2 and HTW1 were inconsistent with respect to Kurtosis, and were excluded.

Outer Loadings were essential to assess reflexive measuring models (HAIR JR. et al., 2014). In general, we used values greater than or equal to 0.70; however, variables between 0.4 and 0.7 are acceptable and only excluded to obtain a better average variance extracted (AVE) (greater than 0.5) (HAIR JR. et al., 2014). Table 4 shows that the variables HGC1, HGC2, HGC3, HGC4, HDP4, HTD2, HTD5, HTW2 and HTW4 exhibited values between 0.4 and 0.7. As such, to obtain better AVE values, we removed the indicators with the lowest values (HGC4, HDP4, HTD2 and HTW4), obtaining satisfactory values (Table 3).

	AVE
GC	0.428
CE	0.652
PI	0.720
DP	0.543
ES	0.575
TD	0.490
TW	0.499

Table 3: AVE results obtained Source: Research data.

Next, we analyzed the internal consistency of the model, using Cronbach's alpha and composite reliability. Alpha values above 0.7 are ideal; however, composite reliability, which can be interpreted in the same way as alpha, ranges between 0.7 and 0.9, acceptable values being between 0.6 and 0.7 for exploratory studies (NUNNALLY, 1994). Thus, as shown in Table 5 and since it is an exploratory study, a good fit to these data can be inferred.

	GC	CE	PI	DP	ES	TD	TW
HBC1	0.672						
HBC3	0.651						
HBC4	0.520						
HBC5	0.733						
HC01		0.792					
HCO2		0.835					
HC03		0.796					
HIP1			5.831				
HIP2			5.897				
HIP3			0.816				
HPD1				3.727			
HPD2				2.785			
HPD3				0.822			
HPD4				0.588			
HSF1					0.801		
HSF2					0.780		
HSF3					0.702		
HSF4					0.745		
HTD1						0.718	
HTD2						0.575	
HTD3						0.782	
H=D4						3.756	
HTD5						0.650	
H=E2							0.698
H_E3							0.805
HTE4							0.574

Table 4: Outer Loading results

Source: Research data.

	Cronbach's Alpha C	omposite Reliability
GC	0.664	0.787
CE	0.733	0.849
PI	0.806	0.885
DP	3.715	5.824
E5	0.755	0.844
TD	0.736	0.826
- _W	0.653	0.797

Table 5: Cronbach's Alpha and Composite Reliability results Source: Research data.

Discriminant validity ensures the distinction between constructs. This can be observed in the cross loadings of the indicators, whereby the relationship between the same constructs should be higher than the relationship between discriminant validity and any another variable (HAIR JR. et al., 2014). Table 6 shows that all the constructs satisfy this condition, attesting to the conformity of this stage of the study.

			I.E.				
	BC	co	IP	PD	SIF	TD	TE
GC	0.734						
CE	-0.213	0.808					
PI	0.488	-0.245	0.849				
DP	0.512	-0.182	0.520	0.805			
ES	0.614	-0.477	0.435	0.587	0.758		
TD	0.454	-0.290	0.561	0.667	0.526	0.746	
TW	0.457	-0, 209	0.500	0.592	2.551	0.414	0.848

Table 6: Cross loading results

Source: Research data.

When there is a strong correlation between two or more constructs, that is, when they contain essentially the same information, collinearity occurs, which hinders analysis of the model. In order to mitigate this phenomenon, the variance inflation factor (VIF), which should be less than 5, was assessed (HAIR JR. et al., 2014). Table 7 shows that all the values exhibited goodness of fit with respect to this aspect.

	SF
GC	1.548
CE	1.115
PI	1.772
DP	2.374
ES	
TD	2.116
TW	1.705

Table 7: VIF results Source: Research data.

In order to confirm the predictive validity of the model, Stone-Geisser's Q^2 , values were determined. These can be calculated in two ways, as follows: the first is by using cross-validated redundancy, and the second by cross-validated communality; both should exhibit values greater than 0 for the structure to be relevant (HAIR JR. et al., 2014). Tables 8 and 9 show that the model in question has predictive relevance.

	SSO S	SSE	Q2 (=1-SSE/SSO)
GC	429.000	429,000	
CE	429.000	429,000	
PI	429.000	429,000	
DP	429.000	429,000	
ES	572.000	385, 611	0.326
TD	572.000	572,000	
TW	2.86.000	286,000	

Table 8: Cross-validated redundancy results Source: Research data.

	SSO S	SE	Q2(=1-SSE/SSO)
GC	429.000	388.877	0.094
CE	429.000	302, 954	0.294
PI	429.000	245, 904	0.427
DP	429.000	307,011	0.284
ES	572.000	409, 692	0.284
TD	572,000	428, 103	0.252
TW	286,000	230, 276	0.195

Table 9: Cross-validated communality results

Source: Research data.

Finally, the model displayed a good adjusted R^2 value (0.620). Furthermore, it provided results for pathway coefficients as well as T and P-values, as shown in Table 10.

	Original Sample (O)	Sample Mean (M)	STDEV	T Statistics	P Values
GC->ES	0.334	0.32 7	0.072	4.620	0.000
CE-> E5	-0.314	-0.317	0.05/9	5.345	0.000
PI -> ES	-0.067	-0.058	0.084	0.801	0.423
DP->ES	0.208	0.204	0.088	2,370	0.018
TD -> ES	0.102	0.103	0.083	1.229	0.219
TW -> ES	0.203	0.201	0.072	2.815	0.005

Table 10: Pathway coefficients and T and P-values

Source: Research data.

The first aspect to observe is the statistical validity of the model and data collected. As described in this chapter, the study met all the statistical criteria for its validation, in addition to exhibiting good data fit, proving to be statistically adequate and suitable for analysis.

With respect to the hypotheses of the studies presented in chapter 2 of this article, and based on the pathway coefficient values observed (Table 10), no significant relationship was obtained between participation and commitment incentive (PI) and training and development (TD), which demonstrates that these variables were not preponderant for satisfaction among the oil workers under study, and as such, H2 and H4 were rejected. Since teamwork (TW) and decision-making power (DP) revealed certain significance, H3 and H5 were confirmed. Finally, good communication (GC) and crisis environment (CE) are the most important variables for the employees of the Brazilian oil company interviewed for this study, underscoring the negative relationship found in CE. Thus, H1 and H6 were ratified.

Conclusions:

The aim of this study was to assess employee satisfaction at a multinational oil company. It was concluded that the current organizational environment and good communication of company values were essential for the satisfaction of these workers. It is believed that the aforementioned variables stand out from the others owing primarily to the critical situation that the company finds itself in, which places its employees in a stressful and unhealthy environment, raising questions about the moral values transmitted by the corporation.

In relation to future investigations, the model proposed by Nannetti, Mesquita and Teixeira (2015) could be applied to other sectors of the economy in order to validate it in different segments. A different approach is to seek a better understanding of the interrelationship between each of the most relevant variables (GC and CE), leading to characterization of these phenomena and an improvement in the handling of these variables. Another significant measure would be to remove the participation and commitment incentive (PI) and training and development (TD) constructs and reapply the model, in order to enhance the fit.

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Received: 08/22/2017

Approved: 10/05/2017