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Analysis of the perceptions about the organizational environment in Colombia's Public sector: Is burnout on the way?*

Fabian Telch & Pablo Sanabria**

Abstract. Public servants are conditioned by perceptions about their jobs environments that can lead them to have less appreciation for their organizations. There are few studies that focus on a theoretical and practical understanding of the organizational environment as a factor that may lead public workers to low motivation and job satisfaction levels. We aim to explore organizational environment of Colombia's public-sector entities as a key organizational aspect, considering the demographic characteristics of Colombian public servants. Through multivariate statistics we explore whether some demographic and organizational traits of public officials play a role on their appreciations of their organizational environments. To do so, we use data from a survey of the National Department of Statistics of Colombia, covering more than 6,000 public officials at the regional level. This article aims to inform practice since it provides empirical evidence about Colombia's public organizations employees, suggesting that graduate middle professionals with more than six years of service, and technicians with more than twelve years of service tend to purport negative perceptions about the organizational environments of Colombian public organizations. Thus, seniority in Colombia appears to have a key role on such perceptions.

Key words: public sector, organizational environment, public official's perceptions, multivariate analysis, Colombia, *Burnout*.

Percepciones acerca del ambiente laboral en el sector público en Colombia: ¿existirá síndrome de quemarse por el trabajo (Burnout)?

Resumen. El trabajo de los servidores públicos está condicionado por sus percepciones acerca del ambiente de trabajo, las cuales pueden llevarlos a afectar sus visiones sobre la organización. No existen muchos estudios que, a nivel teórico o práctico, analicen en Colombia el ambiente laboral como un factor relacionado con la motivación y la satisfacción laboral de los servidores públicos. A través del uso de técnicas estadísticas multivariadas, este artículo explora si: diferentes factores sociodemográficos y organizacionales tienen un efecto sobre las percepciones de los servidores acerca del ambiente laboral. Utilizamos datos del DANE, cubriendo más de 6,000 oficiales públicos a nivel regional. Este artículo busca informar la práctica en el sector público, ya que aporta evidencia empírica acerca de las percepciones del ambiente laboral de servidores públicos en Colombia, sugiriendo que son los profesionales de rango medio con más de seis años de servicio y técnicos con más de doce años de servicio los

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que pueden apreciar menos sus ambientes laborales. Así, la antigüedad aparece como un factor determinante de las percepciones negativas de los funcionarios acerca del ambiente laboral.

Palabras clave: sector público, clima organizacional, percepciones servidores públicos, estadísticas multivariadas, *Burnout*.

Content. Introduction. 1. Review of the literature on burnout. 2. Stressors related to burnout. 3. Organizational environment as a stressor of burnout. 4. Methodology. 4.1 Research question and participants. 4.2 Measures. 4.3 Results. 4.4 Analysis. 5. Conclusions. 6. Acknowledgements. 7. References

Introduction

The Maslach Burnout Inventory (MBI) defines burnout as the answer to chronic job stress conditioned by a permanent emotional exhaustion, depersonalization/cynicism and diminished personal accomplishment (Maslach & Jackson, 1981). Even if burnout has been conceptualized differently in the field due to the different approaches regarding the order in which these three dimensions present themselves (Golembiewski & Munzenrider, 1989; Leiter, 1993), this phenomenon has been widely recognized in the literature as a process influenced by diverse organizational and individual stressors (Ashforth & Lee, 1997; Bedi et al. 2013; Cordes & Dougherty, 1993; Halbesleben & Buckley, 2004; Hamann & Gordon, 2000). At the organizational level, stressors as job demands, information access, occupation and organizational characteristics can foster this phenomenon affecting performance of employees (Wright & Bonett, 1997). At the individual level, demographic characteristics such as age, work experience, gender, marital status, level of education, personality traits and job attitudes can determine its emergence, affecting the well-being of employees (Maslach, Schaufeli & Leiter, 2001; Şenel & Şenel, 2012). Consequently, burnout signs and symptoms have been associated to lower productivity, risk of errors and mistakes, reduced energy and motivation, headaches or digestive problems, sleeplessness, anger or irritability, frustration, and in advanced stages to self-medication, cynicism, negative attitudes, serious self-esteem problems and minimum productivity (Brown & Quick, 2013).

In the public sector, burnout has become an important phenomenon of study due to the impact of public organizations in the quality of life of citizens, as main providers of street level services (Hsieh, 2014). Working in some particularly demanding public services as health and education can foster degenerative interactions among public bureaucrats. As well, constant calls for efficiency in public administrations have led public employees to low autonomy, emotional exhaustion, high levels of depersonalization and a diminished sense of accomplishment (Golembiewski, 1996; Perry et al., 1999). Consequently, burnout in public organizations can have negative consequences on job satisfaction, productivity and physical health (Kim & Wright, 2007).

At the international level, different studies have shown the need to moderate burnout to control turnover intentions, conflict in organizations and medical costs associated to this condition in public organizations (Golembiewski et al., 1998). In the Chinese public sector, burnout has been associated to emotional exhaustion due to high pressure and low income (Hou, 2014). Regarding Latin America and Colombia, burnout dimensions have been studied and confirmed in some studies covering employees of the health, education and public sectors (Olivares, Jélvez, Sepúlveda & Sepúlveda, 2014; Tejada & Gomez, 2012).

This article aims to inform practice since it provides empirical evidence of the role of organizational environment of the Colombian public sector as a stressor of burnout. In Colombia, there are few studies that focus on the theoretical and practical understanding of burnout determinants. Research made about burnout in Colombia regards teachers (Bambula et al., 2010; Gomez et al., 2009) and health physicians (Marrugo, 2014; Tejada & Gomez, 2009). Research on Colombian private companies has also shown high levels of emotional exhaustion, calling for actions to improve the organizational environment of these organizations (Bernal & Ramirez, 2011). All these articles coincide in the fact that emotional exhaustion appears as the first dimension of burnout, particularly in younger professionals who have direct contact with clients (Tejada & Gomez, 2012). Other findings have referred to elements such as demanding work environments and the absence of resources to deal with the job (Gómez-Restrepo, et al., 2009).

1. Review of the literature on burnout

Burnout has been defined in three dimensions: permanent emotional exhaustion, depersonalization/cynicism and diminished personal accomplishment (Maslach & Jackson, 1981). Emotional exhaustion has been defined as the primary component of burnout (Halbesleben, Bowler & Zedeck, 2007) and is represented by a lack of energy and emotional fatigue that can also be accompanied by frustration and stress in the job place due to the impossibility to perform as usual (Cordes & Dougherty, 1993). Emotional exhaustion can also be linked to other reactions such as anxiety, psychosomatic complaints and job-related depression, affecting job performance, organizational commitment and turnover (Cropanzano, Rupp, Byrneand & Zedeck, 2003). In relation to depersonalization, this dimension of burnout can be defined as an indifferent interest about the job, about the colleagues and about those who are served. Its effects are associated to a self-protective strategy aimed to relieve emotional strains (Şenel & Şenel, 2012). Finally, diminished personal accomplishment addresses negative feelings about job competences characterized by a feeling of lack of progress or being lost due to the absence of feedback and rewards for accomplishing work goals and activities. This low sense of accomplishment can follow depersonalization, as the dehumanization of clients can lead to diminished self-esteem (Cordes & Dougherty, 1993).

Some authors in the field have aimed to understand burnout in public organizations trying to establish its drivers, emphasizing that burnout is a developmental phenomenon that gradually affects the quality of employees and organizations (Golembiewski, 1996; Kim & Wright, 2007). Golembiewski and Munzenrider (1988) have shown that its progression is connected to gradual increases in emotional exhaustion, as employees do not become burned out suddenly (Leiter, 1993). In the public sector, professionals struggle with the realities of the public workplace namely bureaucratic constrains, tedious paperwork, isolation from other professionals, complex human problems and conflicts due to poor management (Leiter, 1991). In addition, public sector's employees are conditioned by a more rigid legal framework, values and interests than those that apply to private employees (Stackman, Connor & Becker, 2006; Turkyilmaz, Akman, Ozkan & Pastuszak, 2011). In this way, the pressures of recent public-sector management reforms have increased the levels of stress, dissatisfaction and intentions of retiring of public employees from public organizations, particularly in environments characterized by limitations in flexibility,

autonomy, vague goals, media examination and political constraints (Noblet, Rodwell & Allisey, 2009; Rush et al., 1995).

In Latin America's public sector, research has confirmed also results found at international level. In Chile, a study of the public sector's administrative and health employees confirmed these findings (Olivares et al., 2014). In Mexico, high levels of burnout have been identified in the public (Gracia et al., 2013) and health sector (García Rivera, Maldonado & Ramírez Barón, 2015), establishing that most of public employees present an important level of emotional exhaustion and that burnout can be contagious if is not encountered on time. In addition, burnout has been associated in this country to decrements of work-life balance of health workers due to work overload and job satisfaction (Patlán Pérez, 2013), affecting at first younger employees and women, confirming the findings in the literature about emotional exhaustion, depersonalization and diminished accomplishment. In Colombia, findings on teachers of Bogota suggested that burnout in Colombia is a consequence of negative work environments (Gómez-Restrepo, Rodríguez, Padilla & Avella-García, 2009), due to conflicts with clients and absence of resources to do the job. These studies, although specific for some sectors, suggest the importance to monitor and implement actions to help workers to overcome the factors that produce burnout in Colombian public organizations.

2. Stressors related to burnout

Cordes, Dougherty and Blum (1997) defined stressors as variables at individual and organizational level that can be associated to dimensions of burnout. Thus, 1) variables associated to job demands and role characteristics could lead to exhaustion, (2) variables associated to the organizational environment could be connected to depersonalization and (3) variables about personal perception can generate a diminished personal accomplishment sensation (Cordes et al., 1997). In addition, burnout may be considered as a response to interpersonal and emotional stressors that are conditioned by environmental conditions and their interactions with the three dimensions of the syndrome (Leiter, 1993; Maslach, Schaufeli & Leiter, 2001).

Job stressors are due to work overload, high emotional demands or work life balance conflicts when meeting those represent to employee's efforts from which they do not recover (Schaufeli, Bakker & Van Rhenen, 2009). Activities at the workplace require the consumption of resources from employees that demanded in a continuous pattern can lead to negative effects in individuals as absence of recovery, exhaustion, health problems and losses of function, among others (Sonnetag & Zijlstra, 2006). Moreover, some authors have argued that job insecurity, workload, salary, control at work and managerial style can act as stressors towards employees (Sparks, Faragher & Cooper, 2001; Ryu, 2015).

Kahn (1990) affirmed that psychological conditions of individuals are influenced by their organizational environment as work contexts create particular conditions that can motivate engagement or disengagement. In the public sector, some job categories are conditioned by social complex work environments that can lead to produce burnout dimensions (Wang et al., 2014). Furthermore, job conditions as psychosocial environment, work shift, differences among departments within organizations and role overload have been proved to affect stress and burnout in organizations (Brown & Quick, 2013).

3. Organizational environment as a stressor of burnout

Leiter (1991) affirmed that organizational problems were associated to burnout, particularly for those new in service, as they experience conflicts between their original idea about their professional role and the reality of their workplace. In addition, these conflicts could be more relevant for medium level professionals who have to deal frequently with the mediation of conflicts between top-down authorities and the more autonomous technical positions. In organizations with a negative environment, the no solution of these conflicts can take a personal toll on individuals, weakening their personal sense of efficacy, demanding more from them in the process of adapting to changes of their organizations (Bandura, 1977). Consequently, employees tend to perform worse when they do not work in healthy organizational environments that contribute to improve their perceptions about them.

There are aspects relevant to equity and fairness in the organizational design and management that discourage collegiality among employees and affect their perceptions on the organizational environment. Consequently, one could argue that negative work environments affect the performance of public policies and programs (Jung, Chan, & Hsieh, 2017), as these rely on the common effort of administrative units and the organization as a whole to be successful. In addition, working in public organizations usually take place in large sets, which include a set of hierarchies, rules, resources and space distribution, making the values that condition these organizational structures and processes relevant in shaping emotions and relations among employees to perform their work (Halbesleben and Buckley, 2004; Van Dierendonck, Schaufeli, & Buunk, 2001). Furthermore, processes of downsizing and merging in public organizations have modified these rules and values, particularly affecting the psychological contract between organizations and employees (Rousseau, 1995). Therefore, the erosion of the concept of reciprocity in the public organization has the potential to elicit burnout as it has affects the well-being of individuals.

Research has suggested that burnout could be associated to sociodemographic factors as age, gender, level of education, time of service, as well as personal characteristics and attitudes to work. Yet, burnout is a phenomenon that, according to the literature, relies more on social than individual factors (Cordes & Dougherty, 1993). At individual level, the literature on burnout has not established gender as strong predictor of burnout (Maslach, Schaufeli, & Leiter, 2001). In addition, employees with higher levels of education report higher levels of burnout due to higher responsibilities, levels of stress and expectations about their jobs. At geographical level, some studies have reported that relationships of burnout and work stressors change across nations, which suggests that cultural contexts also can have an effect on burnout (Schaufeli & Janczur, 1994). Consequently, there are differences in the organizational environment of territorial entities that condition their performance in the provision of services to citizens (Manning & Mukherjee, 2000). In Colombia, decentralization processes have encouraged the strengthening of regional and local public organizations at administrative, political and fiscal level. However, these changes have not been implemented in the same way at regional and local levels (DANE, 2016).

Based on the previous assumptions on organizational environment and demographic factors as a stressors of burnout, we propose the following hypotheses:

Hypothesis 1: male public employees have lower appreciation of their organizational environment than their female counterparts.

Hypothesis 2: public employees in middle positions (professionals) have lower appreciation of their organizational environment than public employees in other positions.

Hypothesis 3: public employees with less than 7 years¹ of service have lower appreciation of their organizational environment than public employees with more years of service.

Hypothesis 4: public employees from the capital city have lower appreciation of their organizational environment than public employees from other regions.

Hypothesis 5: public employees with a graduate degree have lower appreciation of their organizational environment than public employees with other levels of education.

Hypothesis 6: Position and seniority affect employee's perceptions of their organizational environments.

4. Methodology

4.1. Research question and participants

This article aims to explore whether demographic variables such as gender, position, years of service, region and level of education affects organizational environment as a stressor of burnout. The unit of analysis for this study is public employees of different entities and regions of Colombia (N = 6,098). These were chosen randomly by the National Administrative Department of Statistics of Colombia (Departamento Nacional de Estadística DANE, 2016) to participate in the Survey of Institutional Performance by Department for the year 2016 (Encuesta Sobre Ambiente y Desempeño Institucional Departamental – EDID 2016). This survey included items measuring several factors as organizational environment, administration of physical resources, evaluation and control, internal mandates, external policies, accountability, planning, budgeting, planning for development and citizens' participation. The average respondent lives mostly in the central and oriental part of the country (N = 3,715), works as a professional (N = 3,035), has worked more than 16 years in the entity (N = 2,723), is a woman (N = 3,566) and has a graduate degree (N = 2,677).

The respondents held positions as directives (3.9%), advisers (2.5%), professionals (49.8%), technicians (17.9%) and assistants (25.9%). Concerning the region where respondents work, 26.5% works in Bogota, 16.3% in the Oriental region, 18.2% in the Central region, 18% in the Atlantic region and 21,1% in the Pacific region. Concerning their level of education, 74.4% had at least college course work experience with 43.9% and 24.5% with a post-graduate and undergraduate degree, respectively.

4.2. Measures

This study calculated a summated scale for organizational environment based on the 89 items of EDID's organizational environment sub-scale, in the aim to measure the perception of public employees on different characteristics and situations of their organizational environments. For this study, survey items were recoded into binary scores

¹ This threshold was defined according to the seniority categories defined by the DANE survey

(1 for a positive perception or existence of a positive condition/practice and 0 for a negative perception or absence of a positive condition/practice), with the purpose to assess the positive perceptions of public employees of their organizational environments. Consequently, lower scores on organizational environment would reflect less appreciation of public employees for their organizations, which would suggest for public employees a higher risk to suffer burnout.

4.3. Results

The authors performed the analyses of data through SPSS 16. The analyses included descriptive statistical techniques, independent t-test, one-way and two-way variance analysis techniques.

Table 1: Descriptive statistics organizational environment scores

	N	Minimum	Maximum	Mean	Std. Deviation
TOTSCORE	6,098	7	87	61.35	13.81
Male	2,532			61.50	13.83
Women	3,566			61.25	13.80

Table 2: Between participant's gender and organizational environment T-Test results

Organizational Environment	Levene's Test for Equality of Variances		Levene's Test for Equality of Variances			
	F	Sig	t	df	Sig. (2tailed)	
Equal variances assumed	0.240	0.624	0.683	6096	0.494	
Equal variances not assumed			0.683	5442.55	0.495	

The T-Test, statistically significant at 5%, showed that gender and organizational environment scores are not significantly correlated. Consequently, there is not a statistical significant difference in the mean scores of organizational environments for male and female public employees.

Table 3: One Way ANOVA test descriptive results between participant's position and organizational environment

Test Descriptive Statistics				
	N	Mean	Std. deviation	Std. error
Directive	239	68.63	10.46	0.67
Advisor	153	65.51	12.63	1.02
Professional	3,035	59.55	13.89	0.25
Technician	1,089	61.67	14.06	0.42
Assistant	1,582	63.09	13.37	0.33

Table 4: One Way ANOVA test results between participant's position and organizational environment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29977.428	4	7494.357	40.254	.000
Within Groups	1134376.912	6093	186.177		
Total	1164354.34	6097			

The One-way ANOVA Test, statistically significant at 5%, revealed that position and organizational environment are statistically correlated (.000). Consequently, those respondents that are professionals appear to have lower appreciation for their organizational environment (Table 3).

Table 5: One Way ANOVA test descriptive results between participant's years of service and organizational environment

Test Descriptive Statistics				
	N	Mean	Std. deviation	Std. error
6 months - six years	2,222	63.47	12.81	0.27
7 - 11 years	654	60.75	14.11	0.55
12 - 16 years	499	59.47	14.25	0.63
More than 16 years	2,723	60.12	14.24	0.27

Table 6: One-Way ANOVA test descriptive results between participant's years of service and organizational environment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16050.247	3	5350.082	28.393	.000
Within Groups	1148304.092	6094	188.432		
Total	1164354.34	6097			

The One-way ANOVA Test, statistically significant at 5%, revealed that years of service and organizational environment are statistically correlated (.000). Consequently, those respondents that have less than 7 years working for the organization have a higher sense of appreciation for it (Table 5).

Table 7: One Way ANOVA test descriptive results between participant's country region and organizational environment

Test Descriptive Statistics				
	N	Mean	Std. deviation	Std. error
Bogotá	1613	60.42	13.64	0.33
Atlántica e Insular	1099	61.95	13.46	0.40
Oriental	993	62.36	13.33	0.42
Central	1109	63.26	13.53	0.40
Pacífica	1284	59.60	14.63	0.40

Table 8: One Way ANOVA test results between participant's country region and organizational environment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10811.498	4	2702.875	14.277	.000
Within Groups	1153542.842	6093	189.323		
Total	1164354.34	6097			

The One-way ANOVA Test, statistically significant at 5%, revealed that country's region and organizational environment are significantly correlated (.000). Consequently, those respondents that work in Bogotá and Pacífica region have a lower sense of appreciation for their organizations and their job environments (Table 7).

Table 9: One-way ANOVA test descriptive results between participant's level of education status and organizational environment

Test Descriptive Statistics				
	N	Mean	Std. deviation	Std. error
None	6	66.50	15.17	6.19
Elementary	23	67.78	12.22	2.54
Junior High	152	64.59	12.33	1.00
High school	314	65.31	12.68	0.71
Technical without title	241	62.98	14.27	0.91
Technical with title	825	63.69	13.33	0.46
Undergraduate without title	369	61.73	13.50	0.70
Undergraduate with title	1,243	60.94	13.80	0.39
Graduate without degree	248	58.37	14.46	0.91
Graduate with degree	2,677	60.19	13.89	0.26

Table 10: One-way ANOVA test descriptive results between participant's level of education status and organizational environment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18847.502	9	2094.167	11.13	.000
Within Groups	1145506.838	6088	188.158		
Total	1164354.34	6097			

The One-way ANOVA Test, statistically significant at 5%, revealed that level of education and organizational environment are significantly correlated (.000). Consequently, those respondents that have college course work have lower appreciation for their organizational environment (Table 9).

Table 11: The two-way ANOVA test descriptive results among position, years of service and organizational environment

Position you held in the entity	Years of service	Mean	Std. Error	95% Confidence Interval
				Lower bound
Directive	6 months – 6 years	67.94	10.95	66.1986
	7 to 11 years	71.12	5.23	68.9576
	12 to 16 years	71.14	5.52	66.0372
	More than 16 years	69.09	11.23	66.0250
Advisor	6 months – 6 years	65.41	12.13	62.8908
	7 to 11 years	65.68	15.40	58.2571
	12 to 16 years	63.75	11.95	56.1539
	More than 16 years	66.38	13.04	61.6021
Professional	6 months – 6 years	61.13	13.21	60.3178
	7 to 11 years	57.46	13.99	56.0122
	12 to 16 years	57.74	14.44	55.9482
	More than 16 years	59.28	14.13	58.5501
Technician	6 months – 6 years	64.70	12.49	63.4424
	7 to 11 years	64.23	13.25	61.3766
	12 to 16 years	58.02	14.91	54.9504
	More than 16 years	59.74	14.64	58.4957
Assistant	6 months – 6 years	65.22	12.13	64.2419
	7 to 11 years	63.91	13.60	61.8313
	12 to 16 years	62.65	13.14	60.4368
	More than 16 years	61.16	14.10	60.1110

Table 12: The two-way ANOVA test descriptive results among position, years of service and organizational environment

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	47954.155	19	2523.903	13.741	0.000	0.041
Intercept	3707186.887	1	3707186.887	20182.979	0.000	0.769
Position	21022.493	4	5255.623	28.613	0.000	0.018
Years of service	1270.568	3	423.523	2.306	0.075	0.001
Position * Years of Service	6665.402	12	555.450	3.024	0.000	0.006
Error	1116400.185	6078	183.679			
Total	24123347.000	6098				
Corrected Total	1164354.340	6097				

The Two-way ANOVA Test, statistically significant at 5%, revealed that organizational environment is significantly correlated with position and years of service. Professionals who have worked more than 6 years and technicians that have worked more than 12 years in their entities have less appreciation for them (Table 11).

4.4. Analysis

The sample of 6,098 public employees on average reported a modest appreciation for their organizational environment (mean = 61.35; min = 7, max = 87). Consistent with hypothesis 1, the t-test conducted to compare the organizational environment scores for males and females showed that there was not a significant difference in scores for males ($M = 61.50$, $SD = 13.83$) and females ($M = 61.25$; $SD = 13.80$; $t(6096) = 0.683$, $p = .49$, two tailed). In addition, in line with hypothesis 2, the one-way ANOVA conducted to explore the effect of position on organizational environment showed that there was a statistical significant difference at the $p < .05$ level in organizational environment scores for almost all five position groups: $F(4, 6093) = 40.25$, $p = .000$. Despite reaching statistical significance, the actual mean difference in mean scores among groups was small. The effect size, calculated using eta squared was .02. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for directives ($M = 68.63$, $SD = 10.46$) and advisers ($M = 65.51$, $SD = 12.63$) did not differ significantly from each other, as well as for technician ($M = 61.67$, $SD = 14.06$) and assistants ($M = 63.09$, $SD = 13.37$).

For hypothesis 3, the one-way ANOVA conducted to explore the relationship with of years of service on organizational environment showed that there was a statistical significant difference at the $p < .05$ level in organizational environment scores for the four years-of-service groups: $F(3, 6094) = 28.39$, $p = .000$. Despite reaching statistical significance, the actual mean difference in mean scores among groups was again small. The effect size, calculated using eta squared was .01. Post-hoc comparisons using the Tukey HSD test indicated that mean scores for less than 7 years of service group ($M = 63.47$, $SD = 12.81$) was significantly different from all the other groups. Public employees with 7-11 years of service ($M = 60.75$, $SD = 14.11$) did not differ significantly from those public employees with 12-16 years of service and more than 16 years of service.

For hypothesis 4, the one-way ANOVA conducted to explore the role of country's region on organizational environment showed that there was a statistical significant difference at the $p < .05$ level in organizational environment scores for all five region groups: $F(4, 6093) = 14.27$, $p = .000$. Despite reaching statistical significance, the actual mean difference in mean scores among region groups was small. The effect size, calculated using eta squared was .01. Post-hoc comparisons using the Tukey HSD test indicated that mean scores for public employees working in Bogota ($M = 60.42$, $SD = 13.64$) and the Pacifica region ($M = 59.60$, $SD = 14.63$) were significantly different from all other groups. Public employees from the Oriental region ($M = 62.36$, $SD = 13.33$) did not differ significantly from those public employees in the Central and Atlántica e Insular regions.

For hypothesis 5, the one-way ANOVA conducted to explore the relationship with of level of education on organizational environment showed that there was a statistical significant difference at the $p < .05$ level in organizational environment scores for the nine level-of-education groups: $F(9, 6088) = 11.13$, $p = .000$. Despite reaching statistical significance, the actual mean difference in mean scores among the educational groups was, as in previous variables, small. The effect size, calculated using eta squared was .01. Post-hoc comparisons using the Tukey HSD test indicated that mean scores for public employees with graduate degrees ($M = 60.19$, $SD = 13.89$) were significantly different from junior high, high school and technicians with degree groups. Consequently, they did not differ significantly from other employees with college course education.

Finally, for hypothesis 6, the two-way ANOVA conducted to explore the interaction effect between position and years of service was statistically significant $F(12, 6078) = 3.02, p = .00$; however, the effect size was small (partial eta squared = .006). Additional analyses of simple effects were conducted to explore the effect of position on years of service. Post-hoc comparisons using the Tukey HSD test indicated that mean scores for professionals with less than 7 years of service were significantly different from other years-of-service groups. For technicians, mean scores were significantly different for those that have served 12 years or more. Finally, at assistance level, mean scores were significantly different for those that have served less than 7 years and more than 16 years.

5. Conclusions

The purpose of this study is to explore the relationship of demographic variables as gender, position, years of service, region and level of education on organizational environment as stressors of burnout. To answer this objective, six hypotheses were suggested and examined: perceptions of male and female public employees of their organizational environments are different, professionals have a lower perception of their organizational environment, public employees with less than 7 years of service have a lower perception of their organizational environment, public employees from Bogota have a lower perception of their organizational environment, public employees with a graduate degree have a lower perception of their organizational environment, and position and years of service are related to organizational environment. We tested those hypotheses based on the results of t-test and analyses of variance, and these findings have implications for the public employees of the Colombian public service.

For hypothesis 1, this study found that there are not differences between the organizational environments mean scores of male and female public employees that corresponds to what the literature has suggested about gender and its relationship with organizational environment as a stressor of burnout. Another finding is that organizational environment mean scores are lower for professional employees, which supports what the literature has suggested about lower appreciation of the organizational environment by medium level employees, due to their mediation role among the different levels of the organization (hypothesis 2). For hypothesis 3 and 5, the study found that public employee's appreciation for their organizational environment gets lower due to years of service (more than 6 years) and level of education (graduate course work).

For hypothesis 4, the study concluded that there are differences among regions on organizational environment mean scores, supporting the conclusions of other studies about the effects of cultural contexts on organizational environment and burnout, as different ways to show affection and support among colleagues can help in coping with stressful situations and work demands of the public-sector set. Finally, for hypothesis 6, this study revealed that organizational environment is correlated with position and seniority (years of service), being professionals with more than 7 years of work and technicians with more than 12 years in their organizations those that have less appreciation for their organizational environments and those that are at more risk to suffer burnout. These findings suggest that the perceptions about the organizational environment appear to deteriorate as seniority grows in Colombian public servants. Those results are consistent with prior literature exploring the determinants of negative perceptions about the organizational environment in public organizations and factors such as seniority and tenure.

Since perceptions about the organizational environment are consistently considered as a key predictor of burnout in the extant scholarship, one future avenue of research is to empirically explore the relationship between such perceptions and burnout in the context of Colombia's public sector. Prior research on human capital management in public organizations in this country (Sanabria et al, 2015, Sanabria, 2016) has shown the need to enhance human capital management in public sector organizations, by fostering key actions of HR such as job design, job flexibility and organizational climate improvement in order to enhance the well-being of Colombian public officials at work and the effectiveness of public sector organizations.

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References

- Ashforth, B. & Lee, R. (1997). "Burnout as a process: Commentary on Cordes, Dougherty and Blum". In: *Journal of Organizational Behavior*, 18(6), 703-708.
- Bambula, F. D., Sánchez, A. L. & Arévalo, M. T. V. (2010). "Factores asociados al síndrome de burnout en docentes de colegios de la ciudad de Cali, Colombia". In: *Universitas Psychologica*, 11(1), 217-227.
- Bandura, A. (1977). "Self-efficacy: Toward a unifying theory of behavioral change". In: *Psychological Review*, 84, 191-215.
- Bedi, A., Courcy, F., Paquet, M. & Harvey, S. (2013). "Interpersonal aggression and burnout: The mediating role of psychological climate". In: *Stress and Health*, 29(5), 350-359.
- Bernal, F. & Ramírez Pallares, N. (2011). *Impacto del Burnout en el bienestar y clima de las organizaciones: una perspectiva de mutuo beneficio entre las personas y la organización*. Bogotá, Universidad del Rosario.
- Brown, L. & Quick, J. (2013). "Environmental influences on individual burnout and a preventive approach for organizations". In: *Journal of Applied Bio-behavioral Research*, 18(2), 104-121.
- Cordes, C. & Dougherty, T. (1993). "A review and an integration of research on job burnout". In: *Academy of Management Review*, 18(4), 621-656.

Cordes, C., Dougherty, T. & Blum, M. (1997). "Patterns of burnout among managers and professionals: A comparison of models". In: *Journal of Organizational Behavior*, 18(6), 685-701.

Cropanzano, R., Rupp, D., Byrne, Z. & Zedeck, Sheldon. (2003). "The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors". In: *Journal of Applied Psychology*, 88(1), 160-169.

Departamento Nacional de Estadística. (2016). *Metodología general encuesta sobre ambiente y desempeño*. DANE. Retrieved from http://formularios.dane.gov.co/Anda_4_1/index.php/catalog/442/related_materials

García Rivera, B. R., Maldonado Radillo, S. E. & Ramírez Barón, M. C. (2015). "Determinación de las diferencias de género usando las escalas de limitaciones en el trabajo (wlq), compromiso organizacional (oc) y MBI de Maslach en un grupo de servidores públicos del sector salud". In: *Revista Internacional Administración and Finanzas*, 8(2), 21-36.

Golembiewski, R. (1996). "Public-sector change and burnout: phases as antecedent, limiting condition, and common consequence". In: *Public Productivity and Management Review*, 20(1), 56-69.

Golembiewski, R. T. & Munzenrider, R. F. (1988). *Phases of Burnout: Developments in Concepts and Applications*. New York, Praeger.

Golembiewski, R. & Munzenrider, R. (1989). "Burnout as an indicator of gamma change II: state-like differences between phases". In: *Journal of Health and Human Resources Administration*, 12(2), 245-260.

Golembiewski, R., Boudreau, R., Sun B. & Luo, H. (1998). "Estimates of burnout in public agencies: worldwide, how many employees have which degrees of burnout, and with what consequences?" In: *Public Administration Review*. January/February, 58 (1), 59-65.

Gómez-Restrepo, C., Rodríguez, V., Padilla, M., Andrea, C. & Avella-García, C. B. (2009). "El docente, su entorno y el síndrome de agotamiento profesional (SAP) en colegios públicos en Bogotá (Colombia)". In: *Revista Colombiana de Psiquiatría*, 38(2), 279-293.

Gracia, T. J. H., Zorrilla, D. M. N., Velázquez, M. D. R. G., Jimenez, S. D. P., Monjaraz, V. G. S. & Garcia, A. C. (2013). "Burnout syndrome and engagement, a descriptive study in public sector workers". In: *European Scientific Journal*, 9(23).

Halbesleben, J. R.B. & Buckley, M. R. (2004). "Burnout in organizational life". In: *Journal of Management*, 30(6), 859-879.

Halbesleben, J., Bowler, W. & Zedeck, Sheldon. (2007). "Emotional exhaustion and job performance: The mediating role of motivation". In: *Journal of Applied Psychology*, 92(1), 93-106.

Hamann, D. & Gordon, D. (2000). "Burnout: an occupational hazard". In: *Music Educators Journal*, 87(3), 34-39.

Hou, L. (2014). "Job burnout and thriving in Chinese public sector". In: *Global Conference on Business and Finance Proceedings*, 9 (1), 94-97

Hsieh, C. W. (2014). "Burnout among public service workers: The role of emotional labor requirements and job resources". In: *Review of Public Personnel Administration*, 34(4), 379-402.

Jung, C. S., Chan, H. S. & Hsieh, C. W. (2017). "Public employees' psychological climates and turnover intention: evidence from Korean central government agencies". In: *Public Management Review*, 19(6), 880-904.

Kahn, W. A. (1990). "Psychological conditions of personal engagement and disengagement at work". In: *Academy of Management Journal*, 33, 692-724.

Kim, S. & Wright, B. (2007). "IT employee work exhaustion: Toward an integrated model of antecedents and consequences". In: *Review of Personnel Administration*, 27 (147), 147-170

Leiter, M. (1991). "The dream denied: Professional burnout and the constraints of human service organizations". In: *Canadian Psychology/Psychologie Canadienne*, 32(4), 547.

Leiter, M. (1993). "Burnout as a developmental process: Consideration". In: *Professional burnout: Recent developments in theory and research*, 237-249.

Manning, N. P. & Mukherjee, R. (2000). *Public officials and their institutional environment: An analytical model for assessing the impact of institutional change on public sector performance* (Vol. 2427). Washington, World Bank Publications.

Marrugo, E. A. B. (2014). "Síndrome de Burnout en un hospital público en el departamento de Bolívar-Colombia". In: *Aglala*, 5(1), 69-85.

Maslach, C. & Jackson, S. (1981). *MBI: Maslach Burnout Inventory*. Manual. Palo Alto. University of California, Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001). "Job burnout". In: *Annual Review of Psychology*, 52(1), 397-422.

Noblet, A., Rodwell, J. & Allisey, A. (2009). "Job stress in the law enforcement sector: comparing the linear, non-linear and interaction effects of working conditions". In: *Stress and Health*, 25(1), 111-120.

Olivares-Faúndez, V., Mena-Miranda, L., Jélvez-Wilke, C. & Macía-Sepúlveda, F. (2014). "Validez factorial del Maslach Burnout Inventory Human Services (MBI-HSS) en profesionales chilenos". In: *Universitas Psychologica*, 13(1), 145-160.

Patlán Pérez, J. (2013). "Effect of burnout and work overload on the quality of work life". In: *Estudios Gerenciales*, 29(129), 445-455.

Perry, J., Thomson, A., Tschirhart, M., Mesch, D. & Lee, G. (1999). "Inside a Swiss army knife: An assessment of AmeriCorps". In: *Journal of Public Administration Research and Theory: J-PART*, 9(2), 225-250.

Rousseau, D. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Sage Publications.

Rush, M. C., Schoel, W. A. & Barnard, S. M. (1995). "Psychological resiliency in the public sector: Hardiness and pressure for change". In: *Journal of Vocational Behavior*, 46(1), 17-39.

Ryu, G. (2015). "The cross-domain effects of work and family role stressors on public employees in South Korea". In: *Review of Public Personnel Administration*, 35(3), 238-260.

Sanabria, P. (Comp.) (2016). *De la Recomendación a la Acción: Cómo poner en Marcha un modelo de Gestión Estratégica del Talento Humano para el Sector Público Colombiano*. Bogotá, Ediciones Uniandes.

Sanabria, P., Telch, F., Rodas A., Astudillo, M. & Estrada, S. (2015). "Lineamientos para una política de talento humano en el sector público colombiano. Para servir mejor al país: cómo hacer estratégica la gestión del talento humano en las organizaciones públicas colombianas. En: Sanabria, P. (Comp.) (2015). *Gestión del Talento Humano en el Sector Público: Estado del Arte, Diagnóstico y Recomendaciones para el Caso Colombiano*. Bogotá, Ediciones Uniandes, 195-340.

Schaufeli, W., Bakker, A. & Van Rhenen, W. (2009). "How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism". In: *Journal of Organizational Behavior*, 30(7), 893-917.

Schaufeli, W. B. & Janczur, B. (1994). "Burnout among nurses: A Polish-Dutch comparison". In: *Journal of Cross-Cultural Psychology*, 25(1), 95-113.

Şenel, M. & Şenel, B. (2012). "Investigation burnout of employees in public sector". In: *Journal of Applied Global Research*, 5(12).

Sonnentag, S. & Zijlstra, F. R. H. (2006). "Job characteristics and off-job time activities as predictors of need for recovery, well-being, and fatigue". In: *Journal of Applied Psychology*, 91, 330-350.

Sparks, K., Faragher, B. & Cooper, C. (2001). "Well-being and occupational health in the 21st century workplace". In: *Journal of Occupational and Organizational Psychology*, 74(4), 489-509.

Stackman, R., Connor, P. & Becker, B. (2006). "Sectoral ethos: an investigation of the personal values systems of female and male managers in the public and private sectors". In: *Journal of Public Administration Research and Theory*, 16(4), 577-597.

Tejada, P. A. & Gómez, V. (2009). "Factores psicosociales y laborales asociados al Burnout de psiquiatras en Colombia". In: *Revista Colombiana de Psiquiatría*, 38(3), 488-512.

Tejada, P. & Gomez, V. (2012). "Prevalencia y factores demográficos y laborales asociados al burnout de psiquiatras en Colombia". In: *Universitas Psychologica*, 11(3), 863-874.

Turkyilmaz, A., Akman, G., Ozkan, C. & Pastuszak, (2011). "Empirical study of public sector employee loyalty and satisfaction". In: *Industrial Management and Data Systems*, 111(5), 675-696.

Van Dierendonck, D., Schaufeli, W. B. & Buunk, B. P. (2001). "Burnout and inequity among human service professionals: A longitudinal study". In: *Journal of Occupational Health Psychology*, 6(1), 43.

Wang, Y., Zheng, L., Hu, T. & Zheng, Q. (2014). "Stress, burnout, and job satisfaction: Case of police force in China". In: *Public Personnel Management*, 43(3), 325-339.

Wright, T. & Bonett, D. (1997). "The contribution of burnout to work performance". In: *Journal of Organizational Behavior*, 18(5), 491-499.