

Organizational climate in Spanish Public Health Services: Administration and Services Staff

Muñiz, José; Peña-Suárez, Elsa; Roca, Yolanda de la; Fonseca-Pedrero, Eduardo; Cabal, Ángel L.; Garcia-Cueto, Eduardo

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

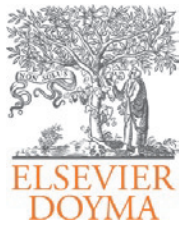
Muñiz, J., Peña-Suárez, E., Roca, Y. d. l., Fonseca-Pedrero, E., Cabal, Á. L., & Garcia-Cueto, E. (2014). Organizational climate in Spanish Public Health Services: Administration and Services Staff. *International Journal of Clinical and Health Psychology*, 14(2), 102-110. [https://doi.org/10.1016/S1697-2600\(14\)70043-2](https://doi.org/10.1016/S1697-2600(14)70043-2)

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY-NC-ND Lizenz (Namensnennung-Nicht-kommerziell-Keine Bearbeitung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier: <https://creativecommons.org/licenses/by-nc-nd/3.0/deed.de>

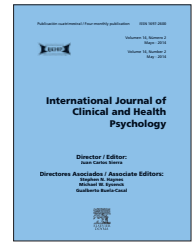
Terms of use:

This document is made available under a CC BY-NC-ND Licence (Attribution-Non Commercial-NoDerivatives). For more information see: <https://creativecommons.org/licenses/by-nc-nd/3.0>



International Journal of Clinical and Health Psychology

www.elsevier.es/ijchp



ORIGINAL ARTICLE

Organizational climate in Spanish Public Health Services: Administration and Services Staff

José Muñiz^{a,b,*}, Elsa Peña-Suárez^a, Yolanda de la Roca^a, Eduardo Fonseca-Pedrero^c,
Ángel L. Cabal^d, Eduardo García-Cueto^a

^a Universidad de Oviedo, Spain

^b Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Spain

^c Universidad de La Rioja, Spain

^d Gobierno del Principado de Asturias, Spain

Received November 21, 2013; accepted January 30, 2014

KEYWORDS

Job satisfaction;
Health services;
Public health system;
Survey descriptive
study

Abstract The main goal of this research is to explore the organizational climate perceived by administrative and healthcare personnel working in Spanish healthcare services, analyzing the differences according to their health specialization, sex, age and professional status. The sample was made up of 3,787 individuals working in the administrative and healthcare services of the Public Health System of the Principality of Asturias, 88.7% were working in specialist care and 11.3% in primary care. Mean age was 51.88 (standard deviation of 6.28); 79.9% were women and 20.1% men. The organizational climate was assessed with the CLIOR scale. The organizational climate perceived is moderately positive, with a global mean of 3.03 on a scale of 1 to 5 points. The differences are statistically significant ($p < .01$) according to specialty, age and profession. A better working climate is perceived in primary care than in specialist care, and among older as compared to younger workers. The results indicate that the working climate perceived by administration and services staff employees in the Spanish healthcare context is moderately positive, with a better perceived climate in primary care than in specialist care.

© 2013 Asociación Española de Psicología Conductual. Published by Elsevier España, S.L.

All rights reserved.

PALABRAS CLAVE

Satisfacción laboral;
Personal sanitario;
Salud pública;
Estudio descriptivo
mediante encuesta

Resumen El objetivo de este trabajo es conocer el clima organizacional percibido por los trabajadores de administración y servicios del sistema español de salud pública, analizando su especialidad sanitaria, género, edad y categoría profesional. La muestra estuvo compuesta por 3.787 trabajadores de administración y servicios del Servicio de Salud Pública de Asturias, 88,7% procedían de atención especializada y 11,3% de atención primaria. La media de edad es de 51,88 años (desviación típica 6,28); 79,9% fueron mujeres y 20,1% hombres. El clima organizacional se evaluó mediante la escala CLIOR, obteniéndose una media de 3,03 en una escala de

*Corresponding author at: Facultad de Psicología, Plaza Feijoo, s/n, 33003 Oviedo, Spain.
E-mail address: jmuniz@uniovi.es (J. Muñiz).

1 a 5 puntos. Las diferencias halladas son estadísticamente significativas ($p < 0,01$) por la especialidad, edad y profesión. Se encuentra un mejor clima laboral en atención primaria que en especializada, y entre los trabajadores de mayor edad. Los resultados indican que el clima laboral percibido por los trabajadores de administración y servicios del ámbito sanitario español es moderadamente positivo, observándose un mejor clima organizacional en atención primaria que en especializada.

© 2013 Asociación Española de Psicología Conductual. Publicado por Elsevier España, S.L.
Todos los derechos reservados.

Improving the quality of mental health assistance in healthcare services is a main objective for both professionals and the administration (Figueiredo-Ferraz, Grau-Alberola, Gil-Monte, & García-Jueas, 2012). There is currently growing interest in using a positive approach in institutions, promoting health at the workplace and other relevant factors (Ariza, Quevedo-Blasco, Ramiro, & Bermúdez, 2013; Bakker, Rodríguez-Muñoz, & Derks, 2012; Fuente, et al., 2013). A good example of this is work satisfaction, given that high satisfaction indices among healthcare professionals influences the quality of the service provided and the satisfaction of the patient him/herself (DeVoe, Fryer, Hargraves, Phillips, & Green, 2002; Mello et al., 2004; Paquet & Gagnon, 2010; Pratt, 2010), whereas workers with high indices of dissatisfaction are more prone to suffering from *burnout* (Escriba-Agüir, Artazcoz, & Pérez-Hoyos, 2008; Lu, Barriball, Zhang, & While, 2011), physical and mental deterioration (Faragher, Cass, & Cooper, 2005) and an increase in absenteeism, change of post, with all the damage that this entails at the personal and institutional spheres (Buchbinder, Wilson, Melick, & Powe, 1999). Job satisfaction can be defined as the affective orientation an individual has toward his/her work (Price, 2001). Spector (1997) determined this affect through eleven main aspects: appreciation, communication, cooperation, rewards, work conditions, promotion, recognition, security, and supervision. Scheurer, McKean, Miller, and Wetterneck (2009) conducted a systematic review of 1,157 studies to identify the personal and organizational indicators of job satisfaction among medical staff. Among the most influential personal variables, they found age and professional specialty, and among the organizational ones they found demands, control, and colleague support, pay and incentives. Other factors that also were found to have an effect were degree of autonomy (Linzer et al., 2000; Reschovsky, Reed, Blumenthal, & Landon, 2001), quality of service appreciation (Pratt, 2010; Ziller, Coburn, & Yousefian, 2006) and gender. However, contradictory effects have been reported with respect to this last factor; Emmons, Nichols, Schulkin, Kenneth, and Cain (2006) and Keeton, Fenner, Johnson, and Hayward (2007) found that gender is neutral in the assessment of satisfaction, whereas Sparks, Corcoran, Nabors, and Hovanitz (2005) found that men feel more satisfied in their medical careers and, on the contrary, Frank, McMurray, Linzer, and Elon (1999) and McMurray, Linzer, Konrad, Douglas, Shugerman, and Nelson (2000) found that women feel more satisfied with their professional careers.

An approach of great interest which is used for the study of job environment in nursing professionals is what is called

magnet hospital (Aiken, Clarke, & Sloane, 2000) that is distinguished by holding certain characteristics capable of retaining these types of professionals, such as policies for the decentralization of leadership, training, promotion, working hours flexibility, autonomy, responsibility in patient assistance, and communication with specialized personnel (Chen & Johantgen, 2010; Lu et al., 2011; McClure, Poulin, Sovie, & Wandelt, 1983). Among these aspects, the importance of interpersonal relationships is apparent, such as medical and nursing staff communication (Wanzer, Wojtaszczyk, & Kelly, 2009). Relationships with patients also have an influence on this sensation; thus, Figueiredo-Ferraz et al. (2012) found relationships between job satisfaction, *burnout syndrome* symptoms, emotional exhaustion, and depersonalization.

The comparison between the job environment of healthcare and non-healthcare personnel in the Spanish population has been investigated in a previous study (García-Pozo, Moro-Tejedor, & Medina-Torres, 2010) that assessed the climate and satisfaction of 1,676 nurse and nurse assistants. The obtained results confirm that the greater the specialization, the greater the degree of job satisfaction. These results are similar to those obtained in other studies (Menárguez, Saturno, & López, 1999; Robles-García, et al., 2005). In these studies (Arce, Martínez, & Sánchez, 1994; López-Fernández, et al., 1998), healthcare personnel (medicine and nursing) and non-healthcare personnel in primary care were studied, finding positive assessments in the organizational climate as well as significant differences among several of the assessed professions. The assessment of organizational climate in the healthcare setting is difficult to approach, as these are characterized by being complex systems based on collective activities where multiple and heterogeneous labour environments coexist and where it is probable that one same individual participates in several groups simultaneously (Ancarani, di Mauro, & Giammanco, 2009; Dawson, González-Romá, Davis, & West, 2011; Ortún, 2013). Kikuzawa, Olafsdottir, and Pescosolido (2008) describe three types of health care systems: the social insurance system, the centralized system of ex-socialist countries, and the National Health Service System (NHS Model). These systems differ by organizational configuration and by the role of the three principal actors: the medical profession, the state, and the payers. Under the NHS Model, the state provides universal health care through publicly-owned hospitals, dictating more state involvement than in the Insurance Model. However, complete state control of all health care facilities is absent, the medical profession has more autonomy, and physicians are allowed to opt out of the

system (Lasse, Lasse, & Jink, 1997; Stevens, 2001). The Spanish Public Health System (SPHS) is included in a NHS Model, according to the International Social Survey Programme, ISSP (2008). In the SPHS there are two main levels of care: primary and specialized care. Primary care is the basic and initial level of patient care, and is mainly carried out by local clinics and health centers, while the specialized care deals with the health problems that should be treated by specialists in large hospitals and specialized centers. In 2011 Spain had 4.1 practising physicians per 1000 population, above the Organisation for Economic Co-operation and Development (OECD) average of 3.2. On the other hand, there were 5.5 nurses per 1000 population, well below the average of 8.7 in OECD countries. The number of hospital beds in Spain was 3.2 per 1000 population in 2011, less than the OECD average of 4.8 beds. Spain ranks slightly below the OECD average in health spending per capita. OECD reports (OECD, 2013) have pointed out Health spending in Spain grew, in real terms, by an average of 5.6% per year between 2000 and 2009, faster than the OECD average of 4.8, but it has fallen by 0.5% in 2010 and by 2.8% in 2011. This negative growth has been driven by a large reduction in public spending on health (Peiró, Artells, & Meneu, 2011).

Within this frame of reference, the present instrumental study (Hartley, 2012; Montero & León, 2007) had two main objectives: the first was to learn about the organizational climate of administration and services personnel in the Spanish healthcare system, and the second was to detect the differences that may exist in organizational climate in relation to professional category, gender, and age. The work was carried out in the administration and services personnel working in primary and specialized care, a population scarcely studied to date. As noted in the literature review, medical and nursing staff have been the most studied to date; however, administration and services personnel working in health care settings become essential with respect to patient satisfaction and to the general functioning of healthcare centres.

Method

Participants

The sample was comprised of 3,787 workers from the administration and health services of the Principality of

Asturias; medical and nursing staff was not included, since the objective of the present research was focused on administration and health services workers. Excepting minimal differences due to random causes, the sample practically matches the entire population. Eighty-eight point seven percent of the cases originated from centers of specialized service and 11.3% from primary assistance. The mean age was 51.88 years, with a standard deviation of 6.28 years. 79.9% of the sample was female and 20.1% male. Table 1 shows the distribution of participants by professional category.

The analyses will focus on those professions that were more frequent; there are other occupations (such as kitchen workers (4.10%), X-ray specialist technicians (1.70%), electricians (1.20%), telephone operators (1.00%), etc.) that were included on the "other" category given its low frequency.

Instruments

The CLIOR scale, composed of 50 Likert-type items with five options (1 = *completely disagree*, 5 = *completely agree*) was used for the assessment of Organizational Climate (OC). The scale assesses the essential facets that comprise OC (Delgado-Rico, Carretero-Dios, & Ruch, 2012; Jarde, Losilla, & Vives, 2012; Peña-Suárez, Muñiz, Campillo-Álvarez, Fonseca-Pedrero, & García-Cueto, 2013): job organization, autonomy, participation, cooperation, rewards, relationships, involvement, innovation, working hours, and work/family conciliation. The reliability coefficient of the scale is very high ($\alpha = .97$), which indicates that the scale has a high internal consistency. Its structure is essentially one-dimensional and the discrimination index of items has values that are equal or higher than .40, not showing differential functioning with regard to the gender of participants (Peña-Suárez et al., 2013).

Procedure

Workers received the Organizational Climate scale addressed to them at the Personnel Services of the center where they worked, being informed of the confidential and anonymous nature of their responses. Once the scale was completed, they put it into a blank envelope that was returned to Personnel Services. The due date was established for three months after its reception, and its

Table 1 Professional category of participants.

Care	Professional Category	N	%
Primary	Nurse Assistant	44	10.43
	Administrative Assistant	155	36.73
	Orderly	49	11.61
	Specialized Laboratory Technician	2	0.47
	Other	172	40.76
Specialized	Nurse Assistant	1,316	39.54
	Administrative Assistant	556	16.71
	Orderly	465	13.97
	Specialized Laboratory Technician	105	3.16
	Other	886	26.62

Table 2 Descriptive statistics, effect size, and significance of mean comparisons among gender, age, health assistance and professional categories in the Organizational Climate scale.

Groups	<i>M (SD)</i>	η^2	<i>p</i>
<i>Gender</i>		0.002	> .050
Male	150.99 (31.65)		
Female	151.94 (33.33)		
<i>Age</i>		0.01	< .001
35 to 45 years	150.19 (31.34)		
46 to 55 years	150.49 (32.57)		
56 to 70 years	156.63 (31.03)		
<i>Assistance</i>		0.02	< .001
Primary	162.58 (29.00)		
Specialized	150.68 (32.10)		
<i>Professional category</i>		0.02	< .001
Nurse assistant	147.99 (32.80)		
Administrative assistant	157.38 (28.97)		
SLT	156.23 (26.04)		
Orderly	147.29 (33.21)		
Other	155.63 (31.85)		

Note. SLT = Specialized Laboratory Technician; *M* = mean; *SD* = Standard Deviation; η^2 = effect size; *p* = significance.

completion was considered a mandatory requisite on the part of the administration. The data were gathered during 2009.

Data analysis

The corresponding descriptive statistics for the different variables analyzed in the CLIOR scale were calculated. Comparison tests were performed with a level of significance of .05. Eta square (η^2) was the statistic applied to measure the effect size with values ranging from low (values below or equal to .02), moderate (values between .03 and .14) to high (over .14), according to Cohen (1988). Organizational Climate comparisons were performed according to health specialty, gender, age, and profession. The homogeneity of variances and mean equality contrast was analyzed using Student's *t*-test for independent samples with two categories; Analysis of Variance tests were conducted with the independent variables with three or more levels and, subsequently, Tukey's *post-hoc* test was used to determine between which categories there were significant statistical differences. The analyzed occupations are those that presented sample sizes which were representative of the population; therefore, nurse assistants, administrative assistants, Specialized Laboratory Technicians (TEL) and orderlies, were analyzed. The age variable was transformed into three groups: from 35 to 45; from 46 to 55; and from 56 to 70.

Results

Table 2 shows the descriptive statistics, significance level of the comparisons of the means and effect sizes among the different groups analyzed. The perceived organizational climate of the participants is moderately positive, with a mean of 151.5 on the CLIOR scale, which has a minimum score of 50 and a maximum of 250.

The effect size in all variables analyzed was low. Student's *t*-test comparing OC for all categories of health specialty, assuming the non-homogeneity of variances, was statistically significant [$t_{(559,901)} = 7.92, p < .001$], with a more positive assessment for the primary care than in specialized care personnel. Between the genders, presuming equality of variances, no global differences were found [$t_{(3,522)} = 0.76, p = .447$]. The analyses of variance indicate that the three age groups assessed showed significant differences [$F_{(2,3,784)} = 14.37, p < .001$]; in the Tukey test, it was found that these differences are found between the older age group and the other two groups. Thus, the group between 56 and 70 years of age assessed the OC as more positive than the groups of a lesser age. The occupations that were compared also showed significant differences [$F_{(4,3,782)} = 17.63, p < .001$]; these differences were found between nurse assistants with respect to administrative assistants and other categories; in addition, statistically significant differences were obtained between administrative assistants and orderlies.

Table 3 displays the differences between the type of health specialty within each profession. The Specialized Laboratory Technician (SLT) were excluded from the analyses due to the small sample size in primary care ($N = 2$). The results indicate that within nurse assistants, administrative assistants, orderlies and other professional categories there are statistically significant differences depending on whether they are of primary or specialized care, obtaining a better assessment of OC from those professionals in primary care [$F_{(7,3,583)} = 24.59, p < .001$]. Moderate effect sizes were found in the administrative assistant and orderly categories.

Distinguishing between specialties (Tables 4 and 5), gender was not a significant variable in primary care [$t_{(281)} = -1.314, p > .05$] or in specialized care [$t_{(3,207)} = 1.213, p > .05$]. Age was not significant in primary care [$F_{(2,419)} = 2.53, p > .05$], whereas in specialized care statistically significant

Table 3 Organizational Climate differences between Primary and specialized care according to professional category.

	Primary <i>M (SD)</i>	Specialized <i>M (SD)</i>	η^2	<i>p</i>
Nurse assistant	165.18 (32.67)	147.39 (32.86)	0.01	< .0005
Administrative Assistant	174.58 (20.96)	156.98 (29.03)	0.08	< .0005
Orderly	145.50 (31.82)	136.44 (26.06)	0.10	< .0005
Other	162.38 (28.20)	154.11 (32.34)	0.01	< .001

Note. *M* = mean; *SD* = Standard Deviation; η^2 = effect size; *p* = significance.

Table 4 Descriptive statistics, effect size and significance of comparisons of means across gender, age, health assistance and profession on the Organizational Climate scale in Primary Care.

Groups	<i>M (SD)</i>	η^2	<i>p</i>
<i>Gender</i>		0.00	> .05
Female	162.22 (29.47)		
Male	167.74 (28.50)		
<i>Age</i>		0.01	> .05
35 to 45 years	160.34 (29.16)		
46 to 55 years	163.45 (29.32)		
56 to 70 years	169.70 (28.11)		
<i>Professional category</i>		0.02	< .05
Nurse assistant	165.18 (32.67)		
Administrative assistant	159.43 (29.94)		
Orderly	173.16 (24.73)		
Other	162.38 (28.20)		

Note. *M* = mean; *SD* = Standard Deviation; η^2 = effect size; *p* = significance.

Table 5 Descriptive statistics, effect size and significance of comparisons of means across gender, age, health assistance and profession on the Organizational Climate scale in Specialized Care.

Groups	<i>M (SD)</i>	η^2	<i>p</i>
<i>Gender</i>		0.00	> .05
Female	151.07 (31.95)		
Male	149.35 (33.45)		
<i>Age</i>		0.01	< .001
35 to 45 years	147.21 (31.70)		
46 to 55 years	149.26 (32.80)		
56 to 70 years	155.84 (31.15)		
<i>Professional category</i>		0.02	< .001
Nurse assistant	147.39 (32.86)		
Administrative assistant	156.98 (29.03)		
Orderly	144.55 (33.10)		
SLT	156.44 (26.06)		
Others	154.11 (32.34)		

Note. SLT = Specialized Laboratory Technician; *M* = mean; *SD* = Standard Deviation; η^2 = effect size; *p* = significance.

differences were found [$F_{(2,3,325)} = 18.33$, $p < .001$], specifically between the groups of lower (147.21) and medium age (149.26). With respect to professions in primary care, the results indicate that there are statistically significant differences [$F_{(3,416)} = 2.89$, $p < .050$] between orderlies (173.16) and administrative assistants

(159.43). In specialized care, statistically significant differences were also present [$F_{(3,2,438)} = 17.586$, $p < .001$]: in nurse assistants (147.39) with respect to administrative assistants (156.98), SLT and other categories (154.11); orderlies (144.55) with respect to administrative assistants, SLT and other.

Differences in the facets of organizational climate

Among the different facets that comprise the CLIOR scale, statistically significant differences were found according to gender in the cooperation facet [$t_{(3,522)} = 2.91$ (Table 6), $p < .05$], with higher scores for females (3.22). Regarding age, it was found that the older group scored significantly higher in comparison to the other two age groups in all facets with the exception of working hours and work/family conciliation [$F_{(2,3,759)} = 2.60$, $p > .05$].

Regarding health specialty, differences were found in all facets, obtaining significantly higher mean scores in primary care; for example, in participation [$t_{(570,252)} = 7.90$, $p < .001$] and in relationships [$t_{(559,080)} = 7.24$, $p < .001$], facets that presented higher effect sizes. Among professional categories there were also statistically significant differences in all facets. Administrative assistants were those with a more positive assessment of autonomy [$F_{(4,3,779)} = 5.29$, $p < .001$], working hours and work/family conciliation [$F_{(4,3,757)} = 38.769$, $p < .001$], participation [$F_{(4,3,782)} = 21.12$, $p < .001$], rewards [$F_{(4,3,782)} = 12.26$, $p < .001$] and relationships [$F_{(4,3,782)} = 19.23$, $p < .001$]. Moreover, this professional group, along with SLT, are those who more positively value innovation [$F_{(4,3,781)} = 7.910$, $p < .001$], involvement [$F_{(4,3,782)} = 6.009$, $p < .001$] and, along with other professional categories, most value job organization [$F_{(4,3,781)} = 12.268$, $p < .001$]. On the contrary, orderlies are those with a more negative assessment of the innovation, reward and involvement facets, along with nursing assistants who gave a more negative assessment of organization and participation. Orderlies only value cooperation as significantly more positive than the rest of professionals [$F_{(4,3,782)} = 15.873$, $p < .001$].

Discussion and conclusions

The present study had two main objectives: the first, to learn about the organizational climate among administration and service workers in the health care area, and the second, to analyze the differences among groups making up the sample, attending to characteristics such as the type of healthcare specialty, gender, age, and professional category. The results indicate that the Organizational Climate of administration and service workers in the healthcare area (medical and nursing staff is not included) is moderately positive, with a mean of 151.5 on the CLIOR scale (minimum score 50, maximum 250). Primary care workers perceive the organizational climate as more positive (162.58) than the specialized care workers (150.68) and the same occurs with older workers as opposed to the younger ones. Regarding the analyzed professions, nurse assistants and orderlies obtained lower scores on their organizational climate perception. Primary care workers showed a more positive assessment of their work environment than those in specialized care. If an analysis is made within these two sectors (primary and specialized care) we find that age is only an influence in specialized care, and contrary to the global data, orderlies in primary care are those who showed a better organizational climate, whereas orderlies in specialized care showed the worst perception of

organizational climate among all professional categories analyzed. Considering the different facets that make up organizational climate, statistically significant differences were only found according to gender in cooperation, with females scoring higher. The remaining results were similar to those obtained in the global scale. Older workers presented higher scores on all facets except in working hours and work/family conciliation, as this was the facet most positively valued by the three age groups compared. Primary care personnel appear to be more satisfied than those of specialized care in all facets of organizational climate. The profession of administrative assistant showed significantly higher scores in comparison to nurse assistants and orderlies in every facet of organizational climate, with the exception of cooperation, which is more valued among orderlies.

The obtained results are congruent with those found in previous studies, indicating that in general there is a fairly negative perception of the work environment on the part of healthcare centers collectively (Chen & Johantgen, 2010; Emmons et al., 2006; Robles-García et al., 2005; Wanzer et al., 2009) and a better perception in primary care (García-Pozo et al., 2010; Robles-García et al., 2005). The influence of age on organizational climate has already been indicated in previous studies (DeVoe et al., 2002; Pratt, 2010) as well as the differences between professional categories (Chen & Johantgen, 2010; Emmons et al., 2006; Wanzer et al., 2009). Gender does not seem to exert a significant influence (Price, 2001; Spector, 1997). In light of these findings, it would be recommend that the public administrations involved set out follow-up and training programs in order to palliate the weak aspects detected.

The results should be interpreted in light of several limitations; however, the sample used is very ample and representative of the administration and service personnel of the health sector, with the exception of medical and nursing staff. To improve the generalization of results to the healthcare sphere, it would be advisable to include these two groups in future studies; without them the table of organizational climate in the healthcare sphere is incomplete. On the other hand, to make the assessment of organizational climate in comparison to other work contexts possible, it would be advisable to have equivalent samples available in other work contexts in future studies. The data presented here are of a transversal nature (Jarde et al., 2012) and they are obtained at a given moment in time (2009), for which a longitudinal assessment would be desirable allowing us to detect the possible evolution of organizational climate. Finally, from a psychometric point of view an approach within the classic framework has been followed; in the future we would need to incorporate analysis models derived from the Item Response Theory, and if possible, implement Adaptive Computerized Tests for the assessment of organizational climate.

Funding

This research was funded by the Department of Public Administration of the Government of the Principality of Asturias (FUO-EM-305-06) and Spanish Ministry of Science

Table 6 Descriptive statistics, effect size and significance of comparison of means across gender, age, health assistance and profession in the facets that comprise the Organizational Climate Scale.

Facets	Statistics	Gender		Age			Specialty		Professional category				
		<i>F</i>	<i>M</i>	35-45	46-55	56-70	Primary	Specialized	Nurse assistant	Admin. assistant	SLT	Orderly	Others
Autonomy	<i>M</i>	3.01	2.98	2.96	2.98	3.12	3.18	2.99	2.97	3.10	2.88	3.04	3.06
	<i>SD</i>	0.93	1.02	0.94	0.93	0.98	0.88	0.95	0.95	0.89	1.01	0.80	0.96
	η^2	0.00		0.01			0.01		0.01				
	<i>p</i>	>.05	<.001			<.001		<.001					
Cooperation	<i>M</i>	3.22	3.13	3.19	3.19	3.27	3.43	3.18	3.17	3.31	3.03	3.37	3.27
	<i>SD</i>	0.72	0.75	0.72	0.74	0.72	0.69	0.73	0.73	0.67	0.75	0.62	0.75
	η^2	0.00		0.00			0.01		0.02				
	<i>p</i>	<.05	<.01			<.001		<.001					
Working hours and work/family Conciliation	<i>M</i>	3.61	3.62	3.63	3.58	3.68	3.92	3.58	3.36	3.95	3.58	3.71	3.75
	<i>SD</i>	1.14	1.07	1.11	1.14	1.11	1.01	1.14	1.25	0.91	1.08	0.97	1.04
	η^2	0.00		0.00			0.01		0.04				
	<i>p</i>	>.05	>.05			<.001		<.001					
Innovation	<i>M</i>	2.92	2.92	2.90	2.88	3.04	3.13	2.90	2.88	3.04	3.04	2.81	2.97
	<i>SD</i>	0.85	0.92	0.85	0.85	0.89	0.79	0.87	0.89	0.82	0.71	0.91	0.84
	η^2	0.00		0.01			0.01		0.01				
	<i>p</i>	>.05	<.01			<.001		0.001					
Organization	<i>M</i>	3.11	3.11	3.07	3.08	3.21	3.31	3.09	3.03	3.19	3.04	3.15	3.19
	<i>SD</i>	0.69	0.69	0.67	0.70	0.67	0.63	0.69	0.71	0.64	0.69	0.58	0.67
	η^2	0.00		0.01			0.01		0.01				
	<i>p</i>	>.05	<.01			0.001		0.001					
Participation	<i>M</i>	3.13	3.13	3.12	3.11	3.22	3.37	3.11	3.04	3.26	3.04	3.21	3.23
	<i>SD</i>	0.69	0.72	0.67	0.71	0.68	0.61	0.70	0.70	0.62	0.73	0.58	0.71
	η^2	0.00		0.00			0.02		0.02				
	<i>p</i>	>.05	<.01			<.001		<.001					
Rewards	<i>M</i>	2.96	2.92	2.91	2.91	3.07	3.14	2.93	2.89	3.04	2.84	3.06	3.03
	<i>SD</i>	0.72	0.71	0.69	0.73	0.70	0.65	0.72	0.78	0.64	0.72	0.56	0.67
	η^2	0.00		0.01			0.01		0.01				
	<i>p</i>	>.05	<.01			<.001		<.001					
Relationships	<i>M</i>	2.98	2.98	2.95	2.95	3.09	3.19	2.96	2.89	3.10	2.92	3.03	3.07
	<i>SD</i>	0.66	0.67	0.65	0.67	0.65	0.60	0.66	0.68	0.61	0.68	0.54	0.64
	η^2	0.00		0.01			0.02		0.02				
	<i>p</i>	>.05	<.01			<.001		<.001					
Involvement	<i>M</i>	3.07	3.06	3.03	3.04	3.19	3.27	3.05	3.03	3.16	3.01	3.15	3.10
	<i>SD</i>	0.69	0.71	0.69	0.69	0.68	0.63	0.70	0.72	0.64	0.69	0.62	0.69
	η^2	0.00		0.01			0.01		0.01				
	<i>p</i>	>.05	<.01			<.001		<.001					

Note. Statistically significant values in bold. Admin. Assistant = Administrative Assistant; SLT = Specialized Laboratory Technician; *M* = mean; *SD* = Standard Deviation; η^2 = effect size; *p* = significance level.

and Innovation (PSI2011-28638). We thank the Government of the Principality of Asturias for their collaboration in the gathering of data.

References

- Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2000). Hospital restructuring: Does it adversely affect care and outcomes? *Journal of Nursing Administration, 30*, 457-465.
- Ancarani, A., di Mauro, C., & Giammanco, M. D. (2009). How are organizational climate models and patient satisfaction related? A competing value framework approach. *Social Science & Medicine, 69*, 1813-1818.
- Arce, M. A., Martínez, C., & Sánchez, M. L. (1994). El clima laboral en los trabajadores de atención primaria. *Gaceta Sanitaria, 8*, 79-84.
- Ariza, T., Quevedo-Blasco, R., Ramiro, M. T., & Bermúdez, M. P. (2013). Satisfaction of health science teachers with the convergence process of the European higher education area. *International Journal of Clinical and Health Psychology, 13*, 197-206.
- Bakker, A. B., Rodríguez-Muñoz, R., & Derks, D. (2012). La emergencia de la psicología de la salud ocupacional positiva. *Psicothema, 2*, 66-72.
- Buchbinder, S. B., Wilson, M., Melick, C. F., & Powe, N. R. (1999). Estimates of costs of primary care physician turnover. *The American Journal of Managed Care, 5*, 1431-1438.
- Chen, Y. M., & Johantgen, M. E. (2010). Magnet Hospital attributes in European hospitals: A multilevel model of job satisfaction. *International Journal of Nursing Studies, 47*, 1001-1012.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Dawson, J. F., González-Romá, V., Davis, A., & West, M. A. (2011). Organizational climate and climate strength in UK hospitals. *European Journal of Work and Organizational Psychology, 17*, 89-111.
- Delgado-Rico, E., Carretero-Dios, H., & Ruch, W. (2012). Content validity evidences in test development: an applied perspective. *International Journal of Clinical and Health Psychology, 12*, 449-460.
- DeVoe, J. G., Fryer, E., Hargraves, J. L., Phillips, R. L., & Green, L. A. (2002). Does career dissatisfaction affect the ability of family physicians to deliver high-quality patient care? *Journal of Family Practice, 51*, 223-228.
- Emmons, S. L., Nichols, M., Schulkin, J., Kenneth, E. J., & Cain, J. (2006). The influence of physician gender on practice satisfaction among obstetrician gynecologists. *American Journal of Obstetrics & Gynecology, 194*, 1728-1738.
- Escriba-Agüir, V., Artazcoz, L., & Pérez-Hoyos, S. (2008). Efecto del ambiente psicosocial y de la satisfacción laboral en el síndrome de burnout en médicos especialistas. *Gaceta Sanitaria, 22*(4), 300-308.
- Faragher, E. B., Cass, M., & Cooper, C. L. (2005). The relationship between job satisfaction and health: A meta-analysis. *Occupational and Environmental Medicine, 62*, 105-112.
- Figueiredo-Ferraz, H., Grau-Alberola, E., Gil-Monte, P. R., & García-Juegas, J. A. (2012). Síndrome de quemarse por el trabajo y satisfacción laboral en profesionales de enfermería. *Psicothema, 24*, 271-276.
- Frank, E., McMurray, J., Linzer, M., & Elon, L. (1999). Career satisfaction of U.S. women physicians: Results from the Women Physicians' Health Study. Society of General Internal Medicine Career Satisfaction Study Group. *Archives of Internal Medicine, 159*, 1417-1426.
- Fuente, E., Lozano, L. M., García-Cueto, E., San-Luis, C., Vargas, C., Cañadas, G. R., Cañadas-Fuente, G. A., & Hambleton, R. K. (2013). Development and validation of the Granada Burnout Questionnaire in Spanish police. *International Journal of Clinical and Health Psychology, 13*, 216-225.
- García-Pozo, A., Moro-Tejedor, M. N., & Medina-Torres, M. (2010). Evaluación y dimensiones que definen el clima y la satisfacción laboral en el personal de enfermería. *Revista de Calidad Asistencial, 25*, 207-214.
- Hartley, J. (2012). New ways of making academic articles easier to read. *International Journal of Clinical and Health Psychology, 12*, 143-160.
- International Social Survey Programme, ISSP (2008). *General information: Organizational structure and working principles* [accessed 14 Jan 2014]. Available from: <http://www.issp.org/index.php>
- Jarde, A., Losilla, J. M., & Vives, J. (2012). Suitability of three different tools for the assessment of methodological quality in ex post facto studies. *International Journal of Clinical and Health Psychology, 12*, 97-108.
- Keeton, K., Fenner, D. E., Johnson, T. R. B., & Hayward, R. (2007). Predictors of physician career satisfaction, work-life balance, and burnout. *Obstetrics and gynecology, 109*, 949-955.
- Kikuzawa, S., Olafsdottir, S., & Pescosolido, B. (2008). Similar pressures, different contexts: Public attitudes toward government intervention for health care in 21 nations. *Journal of Health and Social Behavior, 49*, 385-399.
- Lassey, M. L., Lassey, W.R., & Jink, M.J. (1997). *Health care systems around the world: Characteristics, issues, reforms*. Upper Saddle River, NJ: Prentice Hall.
- Linzer, M., Konrad, T. R., Douglas, J., McMurray, J. E., Pathman, D. E., Williams, E., Schwartz, M. D., Gerrity, M., Scheckler, W., Bigby, J. A., & Rhodes, E. (2000). Managed care, time pressure, and physician job satisfaction: Results from the physician worklife study. *Journal of General Internal Medicine, 15*, 441-450.
- López-Fernández, L. A., Sánchez-Cantilejo, E., Calzas-Urrutia, D., Siles-Román, D., Sevilla-García, E., & De Oleaga-Usátegui, I. (1998). Elaboración de un cuestionario para el estudio del clima organizacional de los centros de salud. *Atención Primaria, 5*, 531-535.
- Lu, H., Barriball, K. L., Zhang, X., & While, A. E. (2011). Job satisfaction among hospital nurses revisited: A systematic review [electronic article]. *International Journal Nursing Studies* [accessed 29 Feb 2012]. Available from: <http://www.sciencedirect.com/science/article/pii/S0020748911004536>
- McClure, M. L., Poulin, M. A., Sovie, M. D., & Wandelt, M. (1983). *Magnet Hospitals: Attraction and Retention of Professional Nurses*. Kansas City: Academy of Nursing.
- McMurray, J. E., Linzer, M., Konrad, T. R., Douglas, J., Shugerman, R., & Nelson, N. (2000). The work lives of women physicians results from the physician work life study. *Journal of General Internal Medicine, 15*, 372-380.
- Mello, M. M., Studdert, D. M., DesRoches, C. M., Peugh, J., Zapert, K.E., Brennan, T. A., & Sage, W. M. (2004). Caring for patients in a malpractice crisis: Physician satisfaction and quality of care. *Health Affairs, 23*, 42-53.
- Menárguez, J. F., Saturno, P. J., & López, A. (1999). Validación de un cuestionario para la medición del clima organizacional en Centros de Salud. *Atención Primaria, 23*, 192-197.
- Montero, I., & León, O. G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology, 7*, 847-862.
- Organisation for Economic Co-operation and Development, OECD (2013). *OECD Health Data 2013. How does Spain compare* [retrieved 14 Jan 14, 2014]. Available from: <http://www.oecd.org/els/health-systems/oecdhealthdata.htm>
- Ortún, V. (2013). Primary care at the crossroads. *Gaceta Sanitaria, 27*, 193-195.
- Paquet, M., & Gagnon, S. (2010). "Collective climate" in hospital settings: A tool to better target work climate improvement strategies. *Health Manage Forum, 23*, 25-31.

- Peiró, S., Artells, J.J., & Meneu, R. (2011). Identificación y priorización de actuaciones de mejora de la eficiencia en el Sistema Nacional de Salud. *Gaceta Sanitaria*, *25*, 95-105.
- Peña-Suárez, E., Muñiz, J., Campillo-Álvarez, A., Fonseca-Pedrero, E., & García-Cueto, E. (2013). Assessing organizational climate: Psychometric properties of CLIOR scale. *Psicothema*, *24*, 137-144.
- Pratt, W. R. (2010). Physician career satisfaction: Examining perspectives of the working environment. *Hospital Topics*, *88*, 43-52.
- Price, J. L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, *22*, 600-624.
- Reschovsky, J., Reed, M., Blumenthal, D., & Landon, B. E. (2001). Physicians' assessments of their ability to provide high quality care in a changing health care system. *Medical Care*, *39*, 254-269.
- Robles-García, M., Dierssen-Sotos, T., Martínez-Ochoa, E., Herrera-Carral, P., Díaz-Mendi, A. R., & Llorca-Díaz, J. (2005). Variables relacionadas con la satisfacción laboral: un estudio transversal a partir del modelo EFQM. *Gaceta Sanitaria*, *19*, 127-134.
- Scheurer, D., McKean, M., Miller, J., & Wetterneck, T. (2009). U.S. physician satisfaction: A systematic review. *Journal of Hospital Medicine*, *4*, 560-568.
- Sparks, S. A., Corcoran, K. J., Nabors, L. A., & Hovanitz, C. A. (2005). Job satisfaction and subjective well-being in a sample of nurses. *Journal of Applied Social Psychology*, *35*, 922-938.
- Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. London: SAGE Publications.
- Stevens, F. (2001). The convergence and divergence of modern health care systems. In W. C. Cockerham, & J. J. Martin (Eds.), *The Blackwell companion to medical sociology* (pp. 158-179). Malden, M.A.: Blackwell Publishers, Inc.
- Wanzer, M. B., Wojtaszczyk, A., & Kelly, J. (2009). Nurses' perceptions of physicians' communication: The relationship among communication practices, satisfaction, and collaboration. *Health Communication*, *24*, 683-691.
- Ziller, E., Coburn, A. F., & Yousefian, A. E. (2006). Out-of-pocket health spending and the rural underinsured. *Health Affairs*, *25*,