

Individual Differences in Job Crafting and Its Relationship with Burnout in Nursing

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Abstract

Background: The heavy work load and pressure to which nursing professionals are subjected leads to an increase in stress-related problems, such as burnout. Personal resources, such as job crafting, proactive personality, self-efficacy and regulatory focus are fundamental in palliating negative effects in the work environment.

Objective: To analyze individual differences, with attention to proactive personality, regulatory approach and general self-efficacy in job crafting, and to determine the predictive power of these variables for burnout in nursing professionals.

Methods: The sample was made up of 643 nurses. After correlation and descriptive analyses, multiple linear regression models were computed to find out the possible predictor role of the individual variables on burnout. Main Outcome Measures were: Proactive personality, Regulatory focus, Self-efficacy (participant beliefs concerning their ability to handle different daily situations adequately), Job Crafting behavior and Burnout.

Results: The results showed that job crafting, proactive personality, general self-efficacy and the promotion regulatory focus were associated with a decrease in burnout in healthcare workers. Similarly, the predictive models for each of the factors in burnout in all cases included the increase in structural resources dimension of job crafting as the variable with the most weight. Furthermore, the increase in the social resources of Job Crafting for the social climate of the Burnout acted as mediator of this relationship.

Conclusion: Job Crafting has been shown to be a variable promoting positive changes in the work environment that acts as a predictor of employee Burnout levels.

Background

Healthcare professionals are recognized by the World Health Organization [1] as the essential pillar of a strong, secure healthcare system. Of the European countries, Spain has the third smallest number of nursing professionals. So there is an urgent need for planning and improving human resources and working conditions in the healthcare system [2]. This shortage of professionals impacts on the workers employed, increasing their workload and the pressure perceived by nursing professionals [3,4], which leads to an increase in stress-related problems [5].

Burnout in healthcare professionals

Long-term exposure to job stress above the individual's capacity for coping with it can lead to burnout [6]. The burnout syndrome is more likely to appear when workers perceive lack of fairness, absence of reciprocity and imbalance between effort and reward [7]. Nursing professionals are usually faced with high levels of this syndrome, associated with heavy workloads, ineffective interpersonal relations, conflicts between family life and job, and high stress [8-10].

In recent years, the number of nursing professionals who suffer from this syndrome has been increasing [11]. This result is a cause for concern due to the negative consequences to the individual and patients, families and healthcare organization as a whole [12]. This phenomenon can lead to the appearance of physical and psychological health problems among healthcare workers, in addition to being a key risk factor for burnout in nurses [13] and intention of quitting their job [14]. In care work, the presence of burnout has been related to a decrease in patient safety [9,15]. On an organizational level, it leads to high costs associated with the impact of nursing turnover, increase in physical and psychological disorders, and less quality and errors in patient care [16].

Importance of job crafting in nursing work

Although job stress can come about in very diverse situations, it is usually aggravated when the professionals have limited control over their work [17]. According to the World Health Organization [2], in Spain, over 70% of nursing

professionals are somewhat or moderately dissatisfied with their autonomy and opportunities their job offers.

This is partly because to date, the optimization of jobs has been done by the administration based on resources and demand [18]. However, the new economic trends based on the service sector have shown the need to include the professionals as active creators of their job [19], and that this improves the wellbeing and job performance of workers [20,21]. Job Crafting is the process in which workers actively influence their jobs [22]. It specifically refers to physical changes the works can make in their jobs. Physical changes have to do with the way tasks are performed, their scope or their number. And cognitive changes refer to how they perceive the work [23]. Thus, when job crafting is discussed, behavior is directed at increasing professional skills and development (which has been called increasing the job's structural resources), increasing interaction with fellow workers and supervisors (which means increasing the job's social resources), increasing proactivity in developing new and interesting job demands (that is, a growing demand for challenging work) and those which are directed at reducing stressful job demands (diminishing work demands) [24].

Active modification of the job by the employees themselves promotes positive results. For example, nursing professionals who have autonomy for controlling their employment situation, the rate of work and scheduling their tasks perceive their work as a significant experience [25]. Thus, intervention for creating a positive work environment based on significant recognition and active participation by nursing professionals, has shown beneficial effects in reducing burnout [26]. The study by Gordon et al. [21] showed how the presence of job crafting among healthcare professionals increased wellbeing and work significance. These authors observed a decrease in burnout and an increase in engagement and performance among nursing professionals that had received training in job crafting and a posteriori implementation of the jobs designed.

Individual variables and their relationship with job crafting and burnout

Personal resources are fundamental in palliating the negative effects, such as burnout, that the job can generate, and promote work engagement and job crafting in healthcare professionals [4,27]. Professionals with a proactive personality are more likely to create their own jobs, that is, show more job crafting [28,29]. Proactive personality is a tendency to make intentional positive changes in one's setting [30]. In the work environment, this involves predisposition of an employee to identify opportunities, solve problems and take the initiative in promoting changes and improvements [31]. Proactive people tend to actively mold their work environment, promoting their own development and improving their professional adaptability [32]. Thus, this type of personality acts as a promotor of prosperity in the work environment, which in turn leads to improved professional adaptability [33]. Along this line, proactive personality has been shown to mediate in the relationship between presence of conflicts in the family and the job and developing burnout [34]. Furthermore, this type of personality reduces emotional exhaustion and promotes creativity, engagement, effective decision-making, significance of work and feelings of personal achievement and pertaining to the organization [35-37].

Another individual variable that has been associated with job achievement is self-efficacy [38]. Thus, nurses with more faith in their capacity for problem-solving show more creativity in their work and can optimistically overcome the barriers to performing their tasks [39]. General self-efficacy refers to the perception that individuals have about their own performance in a variety of situations [40], affecting the way in which they think, are motivated and act [41]. For example, people with less perceived self-efficacy tend to imitate leaders [42]. Self-efficacy is related to beliefs about the extent to which one controls one's progress [43]. So it affects the choices people make with respect to the tasks, goals and functions they perform [44]. Among nurses with little work experience, perceived self-efficacy is a predictor of satisfaction and job performance [45]. In addition, it is related to dedication to oneself [46]. This variable has also been shown to be closely related to turnover in nursing, increasing retention of these workers in their job and patient satisfaction [47]. In this regard, self-efficacy has been found to be a protector variable against developing burnout [48,49] and a predictor of passion one's work [50]. Specifically, self-efficacy acts as a mediator in the relationship between the work overload to which healthcare professionals are subjected and level of burnout [51,52].

The regulatory focus is another variable related to job performance. According to Higgins' theory [53], to reach their goals, individuals perform certain actions based on two self-regulatory systems: focus on promotion or on prevention. The focus on promotion encourages workers to obtain positive results, while the focus on prevention pays more attention to avoiding possible negative results [54]. Thus, even when people have similar goals, the way they are reached may be very different [55]. Both regulatory focuses can coexist to different extents in the professional [53]. Those who show high levels of regulatory focus on promotion show strong conscientiousness and performance of their tasks, while, professionals oriented toward avoiding errors show more anxiety [56]. Similarly, focus on promotion has a robust association with job crafting [29] and predicts performance of work [57]. The new focus of occupational psychology emphasizes the need to increase the effort to study how certain positive variables can be used to protect employees from job risk [23]. Added to this is the need to investigate the understanding of how job crafting can generate opportunities in different groups of employees [24]. In view of the above, the objective of this study was to analyze individual differences, with attention to proactive personality, regulatory focus and general self-efficacy in job crafting, and also analyze the predictive value of the variables and their relationships with burnout, in nursing professionals.

Method

Participants

The original sample consisted of 672 nurses of whom 29 were eliminated because incongruencies or random answers had been detected. The study sample was therefore made up of a total of 643 nurses.

The participants were aged 22 to 58 with a mean age of 31.60 ($SD=6.86$). Of the total sample, 86.2% ($n=554$) were women and 13.8% ($n=89$) men, with a mean age of 31.66 ($SD=6.88$) and 31.24 years ($SD=6.76$), respectively. Their marital status was 60.8% ($n=391$) single, followed by 36.7% married ($n=236$), and the remaining 2.5% ($n=16$) were separated/ divorced. They worked a mean of 35.97 hours a week, with shifts that were mainly rotating in 70.5% of cases ($n=390$).

Instruments

Proactive personality was evaluated with the Proactive Personality Scale (PPS) [30]. The brief version by Siebert et al. [37] in Spanish was used for this study. The instrument is made up of 17 items with answer choices on a seven-point Likert-type scale (from 1 = never to 7 = always). The McDonald's omega found for the scale was $\omega = .94$.

Regulatory focus was evaluated with the Regulatory Focus Scale (RFS) [58]. This instrument, made up of 10 items, reports orientation toward promotion or prevention, following the Regulatory Focus Theory proposed by Higgins [53]. Each orientation is in turn divided into two scales, openness to new things (ONT) and autonomy (A), in orientation toward promotion; and orientation toward prevention includes the orientation toward expectations from others (OEO) and sense of obligation (SO) subscales. The answers are rated on a seven-point Likert-type scale (from "definitely false" to "definitely true"). The McDonald's omega for the scale was $\omega = .84$.

The Spanish version [59] of the General Self-efficacy Scale [60] was used to find out participant beliefs concerning their ability to handle different daily situations adequately. The instrument consists of 10 items and the answer format follows a four-point Likert-type scale (1= wrong and 4= right). Internal consistency was $\omega = .93$.

For evaluation of Job Crafting behavior, the Spanish version [24] of the Job Crafting Scale (JCS) [61] was used. This instrument consists of 21 items with answers coded on a seven-point Likert-type scale (from 1 "never" to 7 "always"). These items are grouped around four factors: increase in structural resources of the job, decrease in work demands, increase in social demands of the job, and growing demand for challenging work. The McDonald's omega for each of the factors was $\omega = .94$, $\omega = .89$, $\omega = .82$ y $\omega = .84$, respectively.

Burnout was evaluated using the Brief Burnout Questionnaire [62], specifically, the Spanish validation for healthcare workers (Brief Burnout Questionnaire Revised for Nursing Personnel CBB-R) [63]. The scale consists of four factors evaluated by 15 items answered on a five-point Likert-type scale. Reliability was $\omega = .74$ for job satisfaction; $\omega = .70$ on the social climate factor; $\omega = .84$ on personal impact; and $\omega = .69$ on the motivation for quitting factor.

Procedure

Data were collected from care professionals who were volunteer participants. After explaining the purpose and relevant information on the study, they were asked to answer the questionnaires sincerely, guaranteeing the confidentiality of their answers. The questionnaires were administered online, including control questions for detecting random answers. This study was approved by the Bioethics Committee of the xxxxxxxxxxxxxxxx (Ref: xxxxxxxxxxxxxxxx).

Data analysis

First, to explore the relationships of the variables, correlation analyses were performed and descriptive statistics were calculated. A two-stage cluster analysis was done for burnout which enabled cases to be classified by mean scores on each of the burnout dimensions. For the comparative analysis of the clusters to detect whether there were significant differences with regard to the rest of the variables in the study, a Student's *t* test was done using the Cohen's *d* to estimate the effect size.

Then stepwise multiple linear regression models were estimated. For each of the models, the burnout dimensions were entered as the dependent variables. The predictor variables were those where statistically significant differences were found after the comparative analysis: Proactive personality, Regulatory focus (Openness to new things, Autonomy, and Sense of obligation), Self-efficacy, and Job Crafting (Increasing structural job resources, Increasing social job resources, and Increasing challenging job demands). Data processing and analysis was done using the SPSS statistical package version 23.0 for Windows.

Finally, a simple mediation analysis was performed, taking the burnout dimensions as dependent variables. In each case, the possible mediators entered were those involved in the equation resulting from each of the linear regression models computed. The PROCESS macro for SPSS [64] with bootstrapping using 5000 bootstraps was applied to process the mediation models.

Results

Proactive personality, regulatory focus and self-efficacy and their relationship with job crafting: Correlations and descriptive analyses

As observed in Table 1, proactive personality correlated positively with all the regulatory focus components, both in promotion and prevention. Furthermore, proactive personality was related positively to self-efficacy. The Job Crafting dimensions were positively correlated in all cases with proactive personality: Increasing structural job resources, Decreasing hindering job demands, Increasing social job resources, and Increasing challenging job demands.

Self-efficacy showed positive correlations with four elements of the regulatory focus, and also with the dimensions of Job Crafting. Finally, the relationships established between the components of regulatory focus and Job Crafting were positive and significant in all cases.

Table 1. Proactive personality, Regulatory focus, Self-efficacy, and Job Crafting. Correlations and descriptive statistics

	PP	ONT	A	OEO	SO	SE	IStJR	DHJD	ISoJR	IChJD
PP	□									
ONT	.69***	□								
A	.45***	.42***	□							
OEO	.24***	.33***	.29***	□						
SO	.60***	.57***	.51***	.38***	□					
SE	.66***	.51***	.33***	.11***	.50***	□				
IStJR	.65***	.56***	.45***	.23***	.68***	.59***	□			
DHJD	.31***	.30***	.20***	.34***	.13**	.25***	.26***	□		
ISoJR	.29***	.32***	.17***	.43***	.20***	.20***	.24***	.51***	□	
IChJD	.57***	.59***	.33***	.28***	.43***	.46***	.56***	.36***	.46***	□
<i>M</i>	82.47	4.81	4.76	4.43	5.55	31.47	4.71	3.91	3.83	4.58
<i>SD</i>	14.21	1.03	.94	1.36	.96	4.91	.81	1.34	1.26	1.16

Note. PP= Proactive personality; ONT= Openness to new things; A= Autonomy; OEO= Orientation to the expectations of others; SO= Sense of obligation; SE= Self-efficacy; IStJR = Increasing structural job resources; DHJD = Decreasing hindering job demands; ISoJR = Increasing social job resources; IChJD = Increasing challenging job demands. ** $p < .01$; *** $p < .001$.

Burnout profiles: Differences in individual variables and in Job Crafting

First, the mean scores for the study sample in the Burnout dimensions were: Personal impact ($M=2.11$), Personal dissatisfaction ($M=2.14$); Quitting motivation ($M=2.37$), and Social climate ($M=3.93$). A two-stage cluster analysis performed to classify the cases by scores on the Burnout dimensions (Figure 1) found two groups or clusters.

The first cluster (C1), made up of 21.5% of the cases ($n=138$), was characterized by scoring above the overall mean in the Personal impact ($M=3.05$), Personal dissatisfaction ($M=2.95$), and Quitting motivation ($M=3.05$) dimensions, and lower than the sample mean score in Social climate ($M=3.41$).

The second cluster (C2), with 78.5% of the cases ($n=505$), was defined by scores below the sample mean in Personal impact ($M=1.85$), Personal dissatisfaction ($M=1.92$), and quitting motivation ($M=2.18$); and a score higher than the mean in Social climate ($M=4.07$).

Titles: Figure 1. Cluster composition

Legends: Note. Factors in order of importance of input. (*) Cluster comparisons.

Table 2 shows the mean scores on the individual variables and the Job Crafting components when the Burnout profiles found based on the cluster analysis were compared. As observed, Cluster 2 has significantly higher scores than Cluster 1 in Proactive personality, Openness to new things, Autonomy, Sense of obligation, Self-efficacy, Increasing structural job resources, Increasing social job resources, and Increasing challenging job demands. No statistically significant differences

were found between Burnout profiles for the regulatory focus Orientation to the expectations of others factor, and for the Job Crafting Decreasing hindering job demands dimension.

Table 2. Proactive personality, Regulatory focus, Self-efficacy and Job Crafting. Descriptive statistics and *t* test by Burnout profile

	Burnout		<i>t</i>	<i>p</i>	<i>d</i>					
	C1	C2								
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>				
PP	138	74.59	17.53	505	84.62	12.33	-6.30	.000	.61	
ONT	138	4.33	1.22	505	4.94	.93	-5.46	.000	.53	
A	138	4.47	1.22	505	4.84	.84	-3.32	.001	.32	
OEO	138	4.42	1.43	505	4.44	1.34	-.15	.874	-	
SO	138	5.04	1.33	505	5.68	.78	-5.38	.000	.52	
SE	138	29.17	6.25	505	32.10	4.27	-5.17	.000	.50	
IStJR	138	4.06	1.10	505	4.89	.60	-8.42	.000	.81	
DHJD	138	3.76	1.22	505	3.95	1.36	-1.53	.125	-	
ISoJR	138	3.60	1.23	505	3.89	1.26	-2.35	.019	.23	
IChJD	138	3.98	1.25	505	4.74	1.07	-7.16	.000	.69	

Note. PP= Proactive personality; ONT= Openness to new things; A= Autonomy; OEO= Orientation to the expectations of others; SO= Sense of obligation; SE= Self-efficacy; IStJR = Increasing structural job resources; DHJD = Decreasing hindering job demands; ISoJR = Increasing social job resources; IChJD = Increasing challenging job demands.

Multiple linear regression models for Burnout

In the Personal impact dimension, two models resulted, the second of which explained 16.6% of the variance ($R^2=.16$). The validity of the model, as determined by the Durbin-Watson *D*, was 2.07. According to the standardized coefficients, Increasing structural job resources had the most explanatory value.

In Job dissatisfaction, as observed in the table, two models were found. In the second, the explained variance was 19.7% ($R^2=.19$) and the $D=2.13$, confirming the model's validity. In this case, Increasing structural job resources was the strongest predictor in the equation.

For Quitting motivation, the regression analysis revealed a single model, where the Increasing structural job resources variable was the only one which entered the equation, with an explained variance of 15.7% ($R^2=.15$). The Durbin-Watson $D=1.93$.

Finally, for the Social climate dimension of Burnout, two models were found in the regression analysis, where the second of them showed an explanatory value of 18.9% ($R^2=.18$) and with $D=1.95$, confirming the model's validity.

Table 3. Stepwise Multiple Linear Regression Models for the Burnout dimensions

IMPACTO PERSONAL	Model	<i>R</i>	<i>R</i> ²	<i>Corrected R</i> ²	Change statistics	Durbin Watson		
Standard error of estimation	Change in <i>R</i> ²	Change in <i>F</i>	Sig. of change in <i>F</i>					
1	.40	.16	.15	.64	.16	122.21	.000	2.07
2	.40	.16	.16	.64	.00	4.55	.033	
Modelo 2	Unstandardized coefficients	Standardized coefficients	<i>t</i>	Sig.	Collinearity			
<i>B</i>	Std. error	Beta	Tol.	VIF				
(Constant)	3.93	.17		22.32	.000			
IStJR	-.29	.03	-.34	-7.68	.000	.65	1.53	
SE	-.01	.00	-.09	-2.13	.033	.65	1.53	
INSATISFACCIÓN LABORAL	Model	<i>R</i>	<i>R</i> ²	<i>Corrected R</i> ²	Change statistics	Durbin Watson		
Standard error of estimation	Change in <i>R</i> ²	Change in <i>F</i>	Sig. of change in <i>F</i>					
1	.43	.19	.19	.58	.19	152..32	.000	2.13
2	.44	.19	.19	.58	.00	4.03	.045	
Model 2	Unstandardized coefficients	Standardized coefficients	<i>t</i>	Sig.	Collinearity			
<i>B</i>	Std. error	Beta	Tol.	VIF				
(Constant)	3.90	.14		26.38	.000			
IStJR	-.29	.03	-.37	-8.02	.000	.57	1.75	
PP	-.00	.00	-.09	-2.00	.045	.57	1.75	
ABANDONO MOTIVACIONAL	Model	<i>R</i>	<i>R</i> ²	<i>Corrected R</i> ²	Change statistics	Durbin Watson		
Standard error of estimation	Change in <i>R</i> ²	Change in <i>F</i>	Sig. of change in <i>F</i>					
1	.39	.15	.15	.58	.15	119.75	.000	1.93
Model 1	Unstandardized coefficients	Standardized coefficients	<i>t</i>	Sig.	Collinearity			
<i>B</i>	Std. error	Beta	Tol.	VIF				
(Constant)	3.81	.13		28.43	.000			
IStJR	-.30	.02	-.39	-10.94	.000	1.00	1.00	
CLIMA SOCIAL	Model	<i>R</i>	<i>R</i> ²	<i>Corrected R</i> ²	Change statistics	Durbin Watson		
Standard error of	Change in <i>R</i> ²	Change in <i>F</i>	Sig. of					

estimation			change in F					
1	.42	.18	.18	.56	.18	142.14	.000	1.95
2	.43	.18	.18	.56	.00	5.66	.018	
Model 2	Unstandardized coefficients	Standardized coefficients	t	Sig.	Collinearity			
B	Std. error	Beta	Tol.	VIF				
(Constant)	2.30	.13		17.01	.000			
IStJR	.31	.02	.40	11.03	.000	.94	1.06	
ISoJR	.04	.01	.08	2.38	.018	.94	1.06	

Mediation models

Based on these results, we saw a need to evaluate whether, in those cases where more than one variable was included in the equation, the factors with the least predictive value were acting as mediators in the effect of the IStJR dimension of Job Crafting on the Burnout components. To find out, we computed simple mediation models, in which the mediators were the factors involved in the corresponding equation in each case.

Figure 2 shows the simple mediation model for Personal impact. The first regression analysis estimated the effect of the IStJR dimension with Self-efficacy as the result variable (M), and was found to be significant $\beta=3.54$, $p<.001$). The following regression analysis, taking Personal impact as the result variable (Y), estimated the effect of the independent variable $\beta=-.29$ $p<.001$ and the mediator $\beta=-.01$, $p<.05$, which were statistically significant in both cases.

The total effect of the model was significant $\beta=-.34$ $p<.001$. Finally, the analysis of indirect effects using bootstrapping found a no significant effect $\beta=-.04$, $SE=.02$, 95% CI (-.100, .001).

Titles: Figure 2. A simple mediation model of Self-efficacy on the relationship between the IStJR dimension of Job Crafting and Personal impact of burnout

In Figure 3, the mediation model proposed for job dissatisfaction showed a significant relationship between the IStJR dimension of Job Crafting (X) and Proactive personality (M): $\beta= 11.39$, $p<.001$. The estimate of the direct effect $X \rightarrow Y$ demonstrated the existence of significance in the relationship $\beta= -.29$, $p<.001$. In addition, the estimation of the $M \rightarrow Y$ effect was also significant $\beta=-.004$, $p<.05$, although with a small magnitude. With the analysis of indirect effect ($X \rightarrow M \rightarrow Y$), using bootstrapping, no significant values were found $\beta= -.04$, $SE=.02$, 95% CI (-.102, .002).

Titles: Figure 3. Simple mediation model of Proactive personality on the relationship between the IStJR dimension of Job Crafting and Job dissatisfaction of Burnout

Finally, Figure 4 shows the simple mediation model for Social climate, as another of the dimensions of burnout. In the first regression analysis, the result variable was the ISoJR dimension of Job Crafting (M), and the effect of the IStJR dimension was estimated, finding it to be significant $\beta=.37$, $p<.001$. With the following regression analysis, taking Social climate as the result variable (Y), the effects of the independent variable $\beta=.30$, $p<.001$ and the mediator $\beta=.04$, $p<.05$ were estimated, with a total effect of the model of $\beta=.32$, $p<.001$. Finally, based on the indirect effect analysis, in this case, the effect was significant $\beta=.01$, $SE=.007$, 95% CI (.002, .032).

Titles: Figure 4. Simple mediation model for ISoJR on the relationship between the IStJR dimension of Job Crafting and Social climate of burnout

Discussion

Based on the first results, we can state that the relationships between the components of the regulatory focus, general self-efficacy and proactive personality with Job Crafting among nursing personal are in all cases positive and significant. Thus, the individual resources mentioned above are determinant in promoting significant change in work behavior and Job Crafting [27,29]. According to previous studies, the presence of proactive personality is associated with proactive behavior in creating work [23]. Similarly, since the perception of self-efficacy affects how one acts and individual motivation [41], it is no wonder that those with a stronger tendency to create their own job, also show higher levels of general self-efficacy. Our results concerning the regulatory focus differ somewhat from the meta-analysis of Rudolph et al. [29]. These authors found a relationship between all the dimensions of Job Crafting except decrease in hindering job demands and the promotion regulatory focus.

Furthermore, the second objective of this study was to analyze the predictive value of the above variables and their relationships with Burnout, among nursing professionals. The cluster analysis showed two groups of workers. The mean scores in proactive personality, self-efficacy, regulatory focus and Job Crafting were significantly higher for professionals in Cluster 2, except in the regulatory focus Orientation toward expectations from others factor and Job Crafting's Decrease hindering job demands, where no differences were found between the groups. Thus, the professionals least affected by the burnout syndrome showed higher levels in all the individual variables mentioned above. This coincides with the literature, which suggests that Job Crafting [21,26], proactive personality [35-37], general self-efficacy [48,49] and the promotion regulatory focus are associated with a decrease in Burnout among workers.

The predictor models for each of the Burnout factors in all cases showed an increase in the Job Crafting structural resources as the variables with the most weight. This result follows the proposal by Gordon et al. [21], in which Job Crafting was a negative predictor of Burnout level in workers. After computing the mediation models, it was found that self-efficacy mediated in the relationship between the Burnout personal impact factor and Job Crafting, although they do have a direct effect on personal impact. Self-efficacy was related to beliefs about the extent to which one controls one's own future [43], which could mean more control of the negative effect of work on one's life.

The model of Job Crafting's increase in structural resources and personal dissatisfaction in Burnout established proactive personality of direct effect, but not as the mediator in this relationship. Thus, having a personality directed at actively promoting positive changes in the surroundings promotes significance of work [35] and improvement in professional adaptability [32], when changes are made and improve the work environment [31].

Finally, the burnout factor related to the relationship workers have with their coworkers and superiors at work (social climate) had as a predictor, like the rest of the dimensions, the increase in the structural resources of Job Crafting, where the mediator was the increase in social resources of job crafting. Thus, the increase in interaction with coworkers and superiors [24] acted as a mediator in the predictor effect of the increase in job skills and competencies on social climate at work. Therefore, levels of Burnout in nursing caused partly by deficient relations with superiors and coworkers [8-10], are lessened by the direct effect of actively increasing job skills and by the mediating effect of the increase in interactions with other workers.

Conclusions

Work and social changes that we have been witnessing in recent times have promoted a need to investigate the protective effects of positive individual variables against job risks. Job Crafting has been shown to be a variable promoting positive changes in the work environment that acts as a predictor of employee Burnout levels.

Among the limitations of this study, is the difficulty in comparing the results, because even though the Burnout Brief Questionnaire Revised Nursing Health Personnel (CBB-R) has shown adequate psychometric properties for this group of

workers, the shortage of studies done to date based on this scale impedes comparison of findings. In addition, the area where the professionals were working, which could be related to Job Crafting, was not taken into account. In areas of major structuring, where the ability for active Job Crafting is more limited, such as the Emergency Room, there may be less Job Crafting by employees, and the relationships with Burnout may be different.

This study showed the possibility of palliating the negative effects of burnout by increasing the professionals' ability to design their own job. Thus, training in Job Crafting, along with the rest of the variables analyzed for healthcare employees could decrease burnout associated with very high levels of chronic job stress.

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Figures

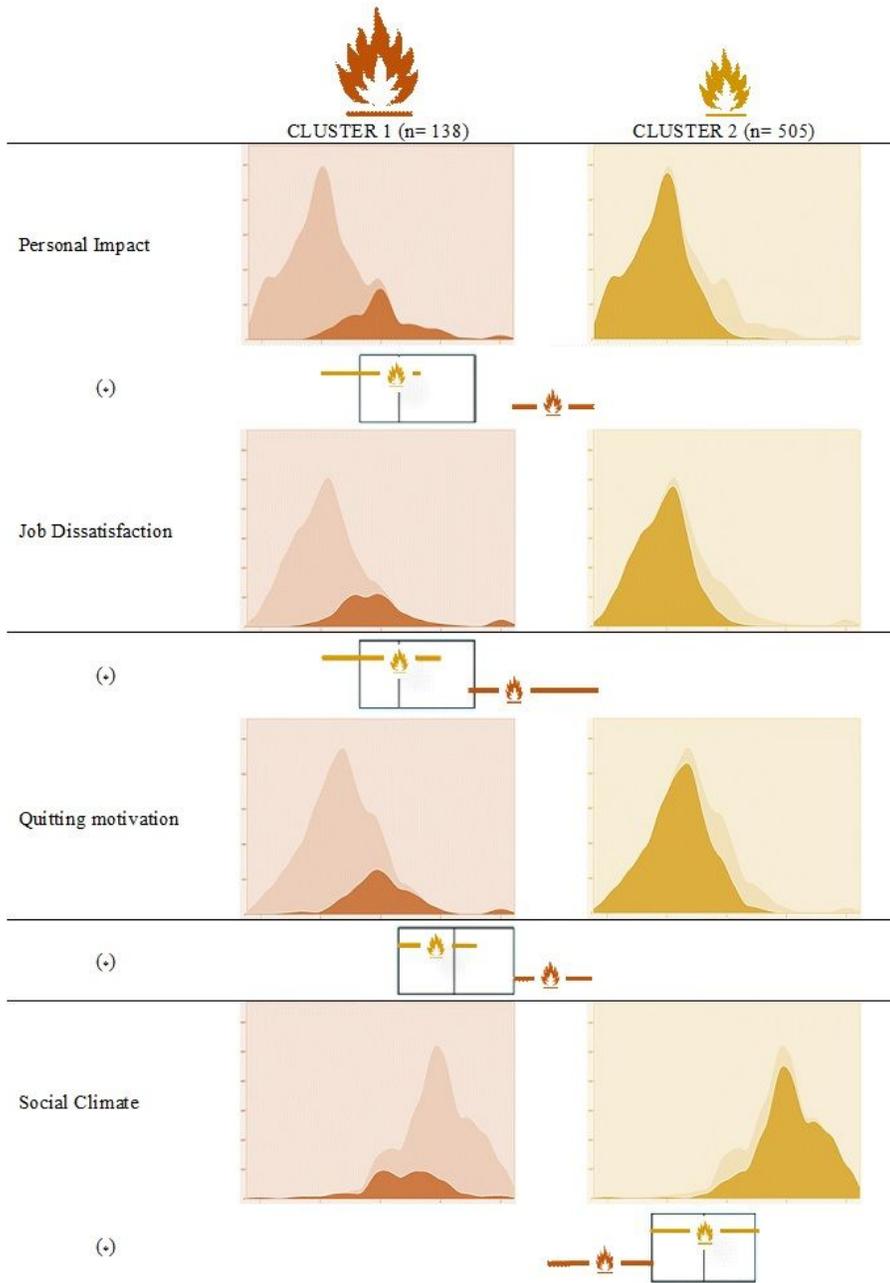


Figure 1

Cluster composition Legends: Note. Factors in order of importance of input. (*) Cluster comparisons.

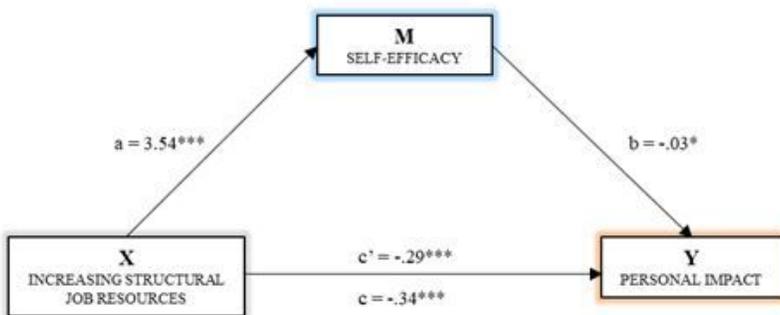


Figure 2

A simple mediation model of Self-efficacy on the relationship between the IStJR dimension of Job Crafting and Personal impact of burnout

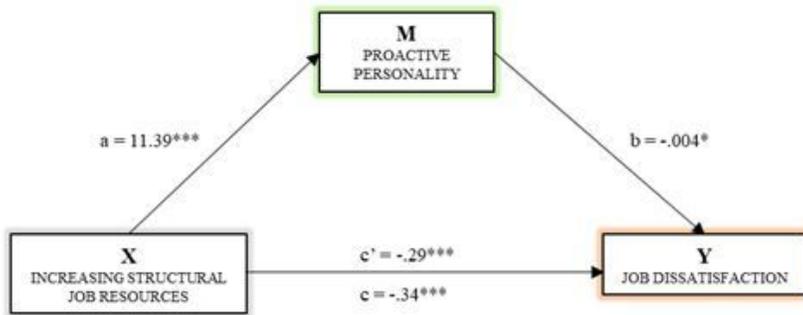


Figure 3

Simple mediation model of Proactive personality on the relationship between the IStJR dimension of Job Crafting and Job dissatisfaction of Burnout

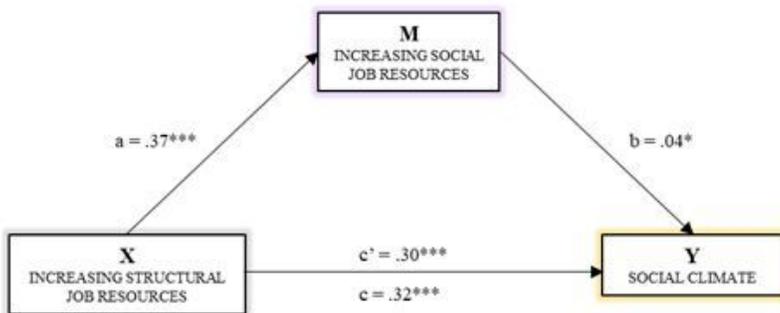


Figure 4

Simple mediation model for ISoJR on the relationship between the IStJR dimension of Job Crafting and Social climate of burnout