ABSTRACT

This article examines the influence of human resources policies on occupational health variables, such as engagement and job satisfaction, with regard to Chilean prison employees. 80 workers at the Women's Prison of Iquique were evaluated and results show that 77% and 88% have a moderate to high score in terms of engagement and job satisfaction respectively. The 24% variation in engagement of the workers studied can be explained by policies aimed at promoting personal interests, while 32% of the variation in job satisfaction could be explained by policies of self-efficacy and personal interests. The above data permits the assertion to be made that human resources policies have a role that is relevant and necessary to modify and improve the occupational health conditions of these public sector workers.

Keywords: Human Resources; Prisons; Job Satisfaction; Efficiency; Self Efficacy; Workers; Occupational Health; Chile.

INTRODUCTION

Research has progressively paid more attention to workers’ occupational health. However, this has been limited or practically nonexistent as far as penitentiary organizations are considered.

Several studies have reported that workers from penal institutions present high stress indicators1-2, a fact that entails progressive physical and mental deterioration, with high burnout, suicide and violence levels3-4, poor remuneration and a moderate perception or organizational support, all of them constituting risk factors for workers themselves and for organizational targets associated to the effective execution of sentences.

Theoretically occupational health has taken a positive role in organizations5, becoming a premise that the generation of welfare needs occupational, personal and extra-organizational resources to effectively manage the demands of work6-9. Nevertheless, it is surprising how in the search of welfare, research is strongly linked to individual variables such as personality10, psychological welfare, life satisfaction, self-efficacy and social skills, among others, challenging the role of other factors. This would support the associated hypothesis that emergent discipline is becoming a positive individualistic model11, therefore excluding the possibility of social transformation12-13.

Policies and procedures are occupational resources used by organizations to achieve their productive objectives. However, they also entail a reduction of labor demands which entail psychosocial damage and can be motivating by themselves14, therefore significantly affecting other organizational results such as occupational health15.

This study assesses the influence of human resources policies on occupational health variables such as engagement and job satisfaction among officers of a Penal Institution in Iquique, Chile. The analysis is carried out on the basis of the Organizational Motivation Diagnosis and Development Model, OMDDM hereafter16.
The Organizational Motivation Diagnosis and Development Model

The OMDDM hypothesizes that performance and motivation highly depend on specific organizational policies such as: the expectations of self-competence or self-efficacy, the expectations of reward and personal interests\textsuperscript{16-17}. The better the policies, the higher satisfaction and engagement levels will be, since these would promote health and the perception of organizational justice among workers\textsuperscript{18-19}. On the other hand, as long as organizational policies are deficient, limited or create an imbalance effort-reward or are less focused in the creation of intrinsic motivation, there will be more symptoms of poor occupational health \textsuperscript{20} and job dissatisfaction\textsuperscript{21}.

It is worth noting that the public sector has made relevant efforts in this regard, particularly those derived from Act N. 20.212\textsuperscript{22} which establishes a system of remuneration associated to achievements, based on the evaluation of performance, and a yearly budget, among other advances which will presumably entail a positive effect for organizational objectives and for the sector’s workers.

Occupational health

The latest publications have reported that engagement remains one of the more relevant occupational health indicators since it entails important improvements regarding the business’s results, such as a reduced absenteeism, less rotation, fewer security incidents and less product defects\textsuperscript{23}.

Engagement is an emotional construct positively associated to work, which is mainly characterized by dedication, vitality and commitment\textsuperscript{24-25}. “Engaged” employees present high energy levels, effectively connect with their job activities and see themselves as capable of managing the demands of their job.

Literature has reported that engagement is a consequence of both labor resources such as social support and organizational policies entailing socialization and training\textsuperscript{26}, as well as personal resources: self-efficacy and organizational trust\textsuperscript{29} among others\textsuperscript{27-28}. However, in our country we lack more research on this issue.

On the other hand, job satisfaction is an important variable for organizations, its impact on performance, rotation\textsuperscript{30}, absenteeism\textsuperscript{31-33}, welfare\textsuperscript{34} and on positive indicators such as engagement\textsuperscript{35} has been proved. It is an intermediate variable associated to organizational results which has been widely studied\textsuperscript{36}. Some authors have defined job satisfaction as an attitude or a set or attitudes towards job that can create positive or negative evaluative judgments among employees\textsuperscript{37}. However, this would not be a specific attitude but a general attitude resulting from different specific attitudes towards job and related factors\textsuperscript{38}.

Literature on this issue includes several publications on satisfaction antecedents such as those related to job position\textsuperscript{39}, organizational practice\textsuperscript{15}, organizational justice\textsuperscript{40-41}, organizational climate\textsuperscript{38}, leadership\textsuperscript{42-44} and social skills\textsuperscript{36, 45}.

MATERIAL AND METHODS

Design and Procedure

The study was based on a retrospective cross-sectional correlation and explicative design. The population under study was composed of officers from a female detention facility in Iquique, Chile.

The sample included 80 officers. 44 were men (55%) and the remaining 35 were women (43.8%), with an average age of 38 years (SD=7.36). 45% presented between 1 and 5 years of service, 86% were gendarmes and 91% had indefinite contracts or one-year renewable contracts.

For the collection of information each participant was given a booklet which included all the instruments, anonymous answers and questions on sociodemographic variables. They were given 45 minutes to complete the survey in their workplace and under the supervision of researchers.

INSTRUMENTS

Abbreviated Questionnaire OMDDM\textsuperscript{16}. It includes 38 items whose reliability is $\alpha=0.92$ (Cronbach’s alpha) and a Likert-like 4 point scale where 1 represents “Totally disagree” and 4 “Totally agree” (see Table 1, organizational policies and management criteria). Some of the items included in this questionnaire are “The tasks that I have to develop are clearly defined”, “I am appropriately rewarded when I do my job well”, “My job is interesting”.

Engagement Scale, Spanish adaptation\textsuperscript{46} of the Utrecht Work Engagement Scale (UWES\textsuperscript{25}). It includes 15 items with a reliability index of $\alpha=0.85$ vigor, $\alpha=0.90$ dedication and $\alpha=0.88$ commitment. It is a seven point Likert scale where 0 is “never/not
ever” and 6 is “always/every day”. Some of the items included in the vigor, dedication and commitment scale are respectively the following: “I am very persistent at work”. “Work is inspiring for me”. “When I am working I forget everything else”.

### Table 1: Policies and organizational management variables within OMDDM

<table>
<thead>
<tr>
<th>OMDDDM policies</th>
<th>Organizational management variables</th>
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<tbody>
<tr>
<td>Expectations of Self-efficacy policies</td>
<td>Training Job descriptions Success criteria Controllablity</td>
</tr>
<tr>
<td>Reward policies</td>
<td>Performance assessment Reward system Equity</td>
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<tr>
<td>Personal Interest policies</td>
<td>Intrinsic Motivation</td>
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</table>

Overall Job satisfaction Scale\(^6\). It includes 15 items with a reliability of \(\alpha=0.92\). It includes a Likert like 5 point scale where 1 represents “dissatisfied” and 5 “very satisfied”. Some of the questions included are “Physical conditions of the job”. “Work colleagues”. “Possibility to use my skills”. The estimated reliability for the questionnaire through Cronbach’s alpha was 0.88. Its factorial structure evidenced an important factor which accounted for 72% of the variability observed\(^4\).

### Data analysis techniques

Statistical software SPSS version 17 was used for this purpose by means of univariate, bivariate and multivariate analysis. The association between quantitative variables was assessed through Pearson’s correlation matrix and multiple linear regression analysis was carried out through “Forwards” method. Punctuations obtained in engagement and job satisfaction scales were considered dependant variables and organizational policies (expectations of self-efficacy, expectations of reward and personal interests) were considered predictive variables.

### RESULTS

Table 2 depicts the statistical description and the correlations obtained for the variables under study. In fact, intrinsic motivation policies together with management variables such as success criteria and job defintors have the best perception by employees (M=4.40; M=3.14 and M=3.06 respectively). On the contrary the less valued are reward and equity policies (M=1.88 and M=2.16 respectively). Furthermore, 77% of officers state a moderate to high level of work engagement and 88% present moderate to high job satisfaction.

The correlation matrix shows that self-efficacy and personal interest-oriented policies are related as expected with work engagement and job satisfaction. The findings show a specific positive correlation between success criteria policies, engagement and job satisfaction \((r=0.414, p<0.01 \text{ and } r=0.417, p<0.01, \text{ respectively})\). Furthermore, positive correlation is proven for job descriptions policies, engagement and job satisfaction \((r=0.306, p<0.01 \text{ and } r=0.344, p<0.00 \text{ respectively})\), training policies \((r=0.384, p<0.01 \text{ and } r=0.53, p<0.01)\) and intrinsic motivation policies \((r=0.524, p<0.05 \text{ and } r=0.460, p<0.05)\). Remaining policies such as controllability, performance evaluation and equity are only positive and significantly correlated with job satisfaction \((r=0.378, p<0.01 \text{ and } r=0.299, p<0.01 \text{ and } r=0.985, p<0.00 \text{ respectively})\) but not with work engagement with which positive but insignificant correlations are concluded. It is worth noting that the reward policy was the only policy which showed no significant association with occupational health variables under study, which could be due to a poor evaluation by officers.

To evaluate the predictive capacity of policies over work engagement a multiple linear regression analysis was carried out, which showed that only personal interest policies had a statistically significant impact on work engagement, accounting for 24% of this variable \((Ra^2=0.245; F=23.676; p<0.05)\), which would oppose what expected by the OMDDM, since both the self-efficacy and the reward policies were excluded from the analysis because of inadequate levels of significance.

As for the magnitude of the impact of OMDDM factors over Job Satisfaction, it is worth noting how self-efficacy and personal interest-oriented policies account for 32% of the variance of job satisfaction \((Ra^2=0.328; F=15.576; p<0.05)\). This result indicates that when organizational policies including clear job descriptions and success criteria, together with coherent trainings are implemented and when officers perceive that they count with the organizational resources to develop their jobs, the natural consequence is job satisfaction as an indicator of occupational health (see Table N. 2).
On the other hand, descriptors associated to organizational policies reveal that there is a favorable perception of policies targeted at intrinsic motivation, success criteria and job descriptions. This means that the officers developing their job in the correctional facility under study state that the setting’s benefits and strategies satisfy their work needs, and therefore play a significant role in their intrinsic motivation. Furthermore, they believe that the implementation of compliance standards together with a clarified description of responsibilities and tasks is convenient. This reveals a positive evaluation of the implementation of Act N. 20.216, which considers these factors, among other issues. However it is also worth noting that both the reward system and equity reveal the lower punctuations, a fact that might be interpreted as officers believing that the job is highly demanding but the economic recognition is not equivalent to these requirements, which entails a perception of lessened equity. Therefore, presumably the reward system in this kind of setting does not seem a sufficiently explored policy, and thus its low appreciation.

The results of the associative analysis reveal how personal interest and self-efficacy oriented policies have a positive and significant correlation with work engagement and job satisfaction therefore confirming the relevant role of self-efficacy and intrinsic motivation in the issue of labor management. In fact, as long as organizational management intends to satisfy the needs of officers and the clearer compliance...
Occupational health in a Penitentiary Center in Chile: a view from Human Resources policies

standards are established, the more specific and appropriate the description of responsibilities and positions is and the more relevant training is, more likely are work engagement and job satisfaction levels to increase. These findings allow confirming the role of self-efficacy in the cognitive promotion of work engagement 28, and how in this case it would be enhanced by organizational policies, as a potentially moderating variable.

It is also important to say that reward and controllability policies behave as expected only as far as job satisfaction is concerned but not with work engagement, therefore achieving significant positive relations only with the first but not with the latter. This could be due to the fact that work engagement could be less susceptible to external appreciation and more sensitive to internal features.

With regard to the predictive hypothesis set out in the study, multiple regression analysis shows how only policies targeted at personal interests are predictors for work engagement, representing 24% of its variance. On the other hand, self-efficacy and personal interest policies account for 32% of the variance of job satisfaction. This fact confirms the relevant role of organizational policies as far as occupational health is concerned 14, and these findings allow us to be particularly optimistic as far as the organizational management developed in this institution is concerned, which is clearly being appreciated by its workers.

We must also consider that the lack of explanatory data on the reward policy should not be interpreted as a lack of influence of this variable, since its impact on bad health indicators 20 and on job dissatisfaction in other populations 21 has already been established. It should rather be understood that the use of optimal reward system has been underestimated in the Gendarmerie, a fact which is in line with the scarce budget of the public sector, a reason for frequent conflict in the state’s organizations. Furthermore, this result could also show that officers lack expectations as far as rewards are considered, a fact which could be associated with a sense of frustration or despair since although Act 20.216 sets a bonus system for the achievement of targets, it seems that officers believe that there is an imbalance between the effort and the actual reward, thus impairing the advance of occupational health 20, as observed in other populations 18.

To sum up, the results suggest that the efforts concerning the organizational management of this Gendarmerie unit are focused on the specification of targets, the description of responsibilities inherent to certain positions, the development of appropriate training programs and the implementation of policies aimed at the achievement of intrinsic motivation, all of which are positively influencing occupational health in this population.

Results should be carefully analyzed since although the role of organizational policies is confirmed in this sample, we must not forget that other studies suggest that there is a reciprocal relationship between organizational and personal resources 24, a fact that suggests a moderating role of self-efficacy and intrinsic motivation 27.

This study intends to contribute in terms of research and management, by considering occupational health from variables associated both to personal 10 and organizational 8-9 resources. We believe that reducing the work crisis to the workers’ competence is a way of projecting the problem to the more vulnerable elements in the equation 13, and it also highlights the lack of concern in assuming the conflict, excluding the possibility of social transformation 12.

Despite the results not being definitive, since it is a limited sample, the findings of OMDDM 16 enable the extrapolation of such results to similar contexts. Future research should assess the moderating role of self-efficacy and intrinsic motivation, as well as the evaluation of psychosocial risk factors in this setting as to provide indicators associated to these factors that eventually create health issues in this population.

Finally, this research revalidates the OMDDM 16 as an easily operating model which supports diagnosis and promotes occupational health among employees from Chilean public organizations.

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