

# Evaluation of Psychosocial Aspects in Groups Working in the Timber Industry and Its Relationship with the Social Support

José Dionísio de Paula Júnior, Luciano José Minette

Department of Post-Graduate Degree in Forestry Science, Federal University of Viçosa (UFV), Minas Gerais State, Brazil

## Email address:

dionisiodepaula@yahoo.com.br (J. D. de P. Júnior), minette@ufv.br (L. J. Minette)

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**Abstract:** Analyze the psychosocial aspects of workers in the timber industry and its relationship with the social support. The study sample was composed of 146 workers from the production sector of two furniture industries which was divided in two groups: Group 1 (study) and Group 2 (control). The Group Study was formed by 80 workers and the Group Control of 66 workers. The instrument used to assess the common mental disorders was the Job Content Questionnaire (JCQ) was used to evaluate the psychosocial factors at work environment. The results showed significant differences at the Decision Latitude ( $p=0,04$ ) and Job Insecurity ( $p=0,01$ ) dimensions when comparing the groups of workers. There were not significant differences in the others variables. The study had significance for the variables decision latitude and job insecurity for those aspects of professional workers in the work environment.

**Keywords:** Job Content Questionnaire (JCQ), Occupational Health, Workers

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## 1. Introduction

World furniture manufactures, in general, and the Brazilian one, in particular, have suffered radical changes in the last few years. Large scale production has replaced skilled craftsmanship, and the typical small workshop gave place to the large capital industry. The tasks the furniture industry workers are committed to may be risky to the welfare of the latter, since the chain of production, the tools, machinery and equipment may be not properly chosen as regards employees' good health [1].

Workers' healthfulness is an area of Public Health which comprehends the fields of disease control, work organization and assistance. To attain its ends, it applies diagnosis treatment and illness rehabilitation [2]. Moreover, it combines other disciplines skills, say, Social Medicine, Public Health, Occupational Health, Sociology, Epidemiology, Engineering and Psychology, not to mention several others, which, connected to Scientific Knowledge provide new directions in understanding the link between health and work [3].

Concerning what is above mentioned; science has long acknowledged the dramatic ties between work and physical

illness. It is, however, a recent standing the fact that continuous and uniform work may lead to subtle but serious progressive injury, either bodily or mental [4].

Besides, occupational diseases are highly frequent in furniture manufacture work posts. In damaging the workers' wellbeing, those maladies lead to company losses, due to the decrease of skilled labor and workforce which, in turn, result in a product quality decline [5].

Beyond any doubt, workplace disease causes have many features, environmental factors standing out from others to introduce new methods of health care research, which take workers stress and mental wellbeing into account. Scientific evidence brought to light various factors associated with mental disorder, such as brain hormonal imbalance, personality traits, genetic and situational vulnerability [6].

Hence, actions taken in favor of workers' health should focus on variables and work processes which take into account the links between health and the whole complexity of work factors. This will require a multidisciplinary and cross-sectional approach. The measurement of risk recognition and control in workplace are esteemed suitable to intervene in occupational health care and perpetually improve health and safety conditions [2, 7, 8].

The aim of this study is, thus, to analyze the psychosocial aspects of workers in the timber industry and its relationship with the social support.

## 2. Method

This study is a cross-sectional study, considering the period between September and November 2012, regarding two furniture industries in the State of Minas Gerais, Brazil. The research sample took into account 146 workers from the production sectors of two timber industries. The Group Study (are submitted to social support frequently in the work environment). Group control (Without social support in the work environment). The Group Study was formed by 80 workers and the Group Control of 66 workers.

The survey sample took into account 146 workers from the productive sectors of two timber industries.

To compute the sample, it was employed the average compare through independent groups, by means of the statistical program EPIDATA 3.1<sup>®</sup> (Análisis Epidemiológico de Datos Tabulados) [9].

The inclusion criteria were the male workers in the production sector of the Company, who agreed to take part in the research, when presented the consent form, who showed up in the firm by the data collection day. For research purposes, they had to be employed for, at least, six months, with a minimum one-year experience in the furniture branch. Also none must be taking anti-depressants in the considered period, with ages between 20 and 60 years old.

The *Job Content Questionnaire* (JCQ) is a well-arranged instrument, designed for the evaluation of the existing psychosocial features in the exclusive work environment. Its full accepted version includes 49 questions organized in five

separated features [10].

Data analysis employed Statistical Package for the Social Sciences (SPSS) IBM<sup>®</sup> software, version 20.0.

Categorical variables were subjected to an analysis of the frequency distribution (absolute and percentage). Continuous variables were presented through measurement of central tendency (Mean and Median) and dispersion (Standard Deviation-SD). The *Mann-Whitney* test for independent groups was applied to determine the effect of  $p \leq 0,05$  with significance. The study was approved and met all ethical requirements.

## 3. Result

The Group Study presented average age of 32,67 years (SD  $\pm$  10,17), against 33,73 years (SD  $\pm$  9,75) for Group Control. 76,20% (n=80) of Group Study members were young adult, while 77,30% (n=66) of Group Control members were all the same young adults. Both Groups had similar marital status of their members, considered the situation by the cohabitation with a mate. 60,0% (n=80) of the workers in Group Study had not completed elementary school, while 59,01% (n=66) were in this same situation in Group Control.

The Group Study had presented of 5,81 years (SD  $\pm$  6,15) of working time in the company against 4,80 years (SD  $\pm$  4,31) for Group Control, which introduced relationship for the variable "decision Latitude" ( $p=0,04$ ). Working time in the furniture industry in Group Study was 10,92 years (SD  $\pm$  9,07) with association with the variable "Job Insecurity" ( $p=0,01$ ) and an average of 6,94 years (SD  $\pm$  6,14), in the Group Control, table 1.

*Table 1. Distributions of variables according to the professional aspects of the workers.*

JCQ	Group			
	Study		Control	
	Time in company	Time in the furniture industry	Time in company	Time in the furniture industry
Skill Discretion	0,87	0,39	0,13	0,87
Decision Authority	0,52	0,33	0,21	0,46
Decision Latitude	0,65	0,32	0,04*	0,66
Psychological Job Demands	0,78	0,67	0,16	0,46
Physical Exertion	0,65	0,85	0,63	0,46
Physical Isometric Loads	0,72	0,74	0,99	0,28
Physical Job Demand	0,93	0,80	0,79	0,37
Job Insecurity	0,32	0,01*	0,37	0,35
Coworker Support	0,23	0,82	0,11	0,46
Supervisor Support	0,11	0,08	0,40	0,90

\*Mann-Whitney

## 4. Discussion

This investigation focused itself in comparing social and psychosocial features affecting production workers of two wood industries.

Regarding workers age, this study's average age was similar to a production line worker research, which found out an average 31,9 years old (SD  $\pm$  8,30) [11].

Both Groups comprised mainly professional young adults.

As for Common Mental Disorders, it was verified a correspondent predominance of young adults among urban workers (55,40%) [12]. Electric sector workers were also preeminently young adults, averagely 36,8 years old (SD  $\pm$  8,00) [13]. As for perception main difficulties, the investigation found out the majority of young adults among the affected furniture industry workers (76, 40%) [1].

Regarding the presence of spouse variable, both Groups showed equivalent distribution. A study on electric sector

workers revealed a greater incidence of married men or either unmarried ones who, nevertheless, lived with a mate [8]. As for this aspect, incidentally, these workers showed higher indexes of absenteeism [14].

Study on inactivity disorders and physical hindrances to the workers' perception found out relations to incomplete elementary education [15].

Working time of the investigated groups was classified considering the period of work in the specific company and the whole period in a furniture industry. Group Study showed an average 5,81 years of company work as compared to an average 4,80 years for Group Control. Ergonomic factors show effect in an average 7,3 years [1]. Thus, research on factors associated to work showed an average 12,8 years of activity in the company [16].

The longer one works in the furniture industry, the greater his stability in the job. This shows how rewarding these experiences can be and in so many aspects, leading to favorable relationships in the professional environment [17]. The extension of working time in the same type of professional activity requires periodic monitoring due to the many risks to which workers in the furniture industry are exposed. Hence, when researching duration and benefits, Authors point out the length of time in professional activity as a cause of absenteeism and development of occupational diseases, inferring a positive relationship between time and work illness [18].

This investigation found out significant differences as for the variable "decision authority", when compared Group 1 and Group 2, revealing positive association. Another study on work-related stress, it also describes positive association for the "decision authority" with evaluation of psychosocial factors at work [19]. When verifying professional and psychosocial features, "decision authority", say, the ability of decision making at work, showed significant association with the variable "Time in the company" and "time in work sector" [8]. Regarding psychological factors, a study on mental health proved deep correlation between nervousness at work and effort-reward imbalance, revealing both indicators measure a similar, but not identical, construct [20].

Following this reasoning, regarding "decision latitude" that is the possibilities of skill use by workers, the investigation proved there be a positive relation [21]. When carefully examined among professional features, the occupation, as a variable, also proved positive association with decision latitude. Mental health, for its sake, showed positive association when Common Mental Disorders considered. It proved that the feature is inversely correlated with social support, while directly associated with depression [22]. Research that associated new occurrences to gender, age and training influences, found out no correlation between Groups 1 and 2 [23].

## 5. Conclusion

Thus, the study had significance for the variables decision latitude and job insecurity for those aspects of professional

workers in the work environment.

In this context, it is important to implement organizational changes in the work environment to establish a better understanding of the social conditions of the workers.

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