

## 67 - EVALUATION OF THE QUALITY OF LIFE IN THE WORK OF PROFESSIONAL BRICKLAYER IN CIVIL CONSTRUCTION WORKS OF GREAT PORTE IN THE CITY OF PONTA GROSSA

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### Abstract

The present work deals with the Quality of Life at Work in the professional Bricklayer in large works in the city of Ponta Grossa, state of Paraná. For the evaluation, the questionnaire Quality of Working Life Questionnaire (QWLQ - 78) was used, consisting of 78 (seventy - eight) questions distributed in 4 (four) domains. The sample consisted of 19 (nineteen) professionals and after tabulation of the data, they were treated by descriptive statistics, which demonstrated that the physical/health domain and psychological domain are most affected by the generally unhealthy working conditions offered for these professionals.

Keywords: Quality of Life at Work, Bricklayer, Civil Construction.

### 1. INTRODUCTION

The term Quality of Life, although it is being used in temporal terms in a recent way, it has multiple historical roots. This multiplicity also encompasses social, psychological, financial, material, family, and often personal criteria. Thus, what is characterized as relevant in quality of life for an individual or group of individuals may be overlooked for another individual or group, both in quantitative and qualitative character.

The World Health Organization defined Quality of Life as "the individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns." The fact that it reflects on how individuals perceive and react about their health status and other non-medical aspects of their lives, people's preferences and values, is what differentiates the quality of life from all other measures Of health care (BELTRAME, 2009).

Historically, ASIMOV (2006) suggests that the first manifestation of concern with quality of life at work occurred with the discovery of metallurgy, in the period between 4,000 B.C. and 3,600 B.C., at the end of the stone age and before the invention of the wheel and of writing, when it was realized that the production of copper alloys with arsenic caused diseases in the workers, being that after the abandonment of this form of production and the adoption of other alloys, especially the copper alloys with tin, enabled to the man entering the so-called Bronze Age.

It is also worth mentioning that the Euclides geometer, in 300 B.C., developed through mathematical studies ways of promoting production with less effort, benefiting farmers on the banks of the Nile. The discovery of Archimedes interfacing levers, in parallel time, also reduced the needs of great efforts on the workers, improving their work performance and producing quality of life at work.

In this brief historical approach, the improvement of the working conditions and the search for the optimization of production, concomitantly with the comfort of the worker is a constant search of the man.

In the case of Brazilian civil construction workers, for example, because of secular practices used in constructions and the low investment in the qualification of this professional, the practice of labor often turns out to be less than it could be in productive terms.

### 2. THE CIVIL CONSTRUCTION INDUSTRY

A country of continental dimensions such as Brazil and with a little more than 500 years of existence, it has a fundamental segment of civil construction in the generation of jobs and wealth, since there is a great need to build the most varied buildings in our territory.

This branch of the economy is also responsible for a large part of the employment of economically and economically disadvantaged sections of the male population, and is also considered one of the highest risk occupations, often leading to work-related accidents and pathology Painful, as these workers take on erroneous and inconvenient postures during the course of their work, in addition to the repetitive movements, as in the case of professional masons.

The Brazilian Occupational Classification (CBO) is the normative document for the recognition, naming and coding of titles and contents of occupations in the Brazilian labor market (MINISTRY OF LABOR AND EMPLOYMENT, 2012).

From its conception until the current moment, the Brazilian Classification of Occupations (CBO) has undergone some changes. Currently, the professional masons of the construction industry, which are the object of this work, are defined as Bricklayer of Buildings, Alvaner, Alvaner or Bricklayer, this professional has the functions in the construction work that go through the organization and preparation of the site, Construction of foundations and various structures of masonry and application of subfloors and various coatings. This occupation by CBO is classified under code 7152-10.

The Civil Construction industry is one of the branches of the Brazilian industry that absorbs a considerable number of workers, being the same of fundamental importance for the economy of the country, given its unique capacity to generate direct and indirect jobs. This can be verified by the fact that in the last decade, the Civil Construction Industry contributed with an average of 9% of Brazilian gross domestic product (GDP), while 16% of Brazilian industries have direct and / or indirect relations with industry (CIVIL CONSTRUCTION INDUSTRY COMMITTEE - ICC, 2007).

For SILVA (2008), the sector stands out as a labor-intensive activity, demanding many low-skilled jobs that serve the less educated and poorer sections of society. In addition, the sector occupies a strategic position in the generation of jobs, since the creation of a job in the construction industry demands reduced investments, when compared to the creation of employment in the industries more capital-intensive.

Contrasting this economic capacity, we can emphasize the presence of symptoms of physical pain in civil construction

workers, since the rhythm of the developed work activities is very exhausting, due to the involvement of many physical qualities or valences of the human organism. Bad conditions of work offered to the workers and their habitual low qualification.

### 3. METHODOLOGY USED

The terms assess, measure or measure are very subjective and concomitantly related to the proposed objectives. In the present scientific work there is the proposal to evaluate the Quality of Life in the Work of construction professionals - Bricklayer - in large works in the city of Ponta Grossa.

For QUIRINO and XAVIER (2007), there are two ways in which Quality of Life at Work can be measured in organizations. The first would be through the definitive approach, which would indicate the measurement of material conditions, such as the availability of equipment, salary patterns, the physical environment, among others. The second through the subjective approach, which would measure the level of satisfaction of workers with objective conditions (satisfactory or unsatisfactory).

The procedure adopted here was the subjective approach, using the Questionnaire - Quality of Working Life Questionnaire (QWLQ - 78), in the Likert scale between 1 and 5 points, with questionnaires that had a minimum of 80% (or 63) of questions answered, by a sample of 19 (nineteen) masons, all of them working in large works, in the city of Ponta Grossa, in the state of Paraná.

In this evaluation instrument there are 78 questions, distributed in 4 areas to be considered, as follows:

- Physical/Health Domain: indicators such as sleep quality, quality of food, heredity, comfort sensation, fatigue, satisfaction of basic physiological needs, chronic diseases, physical activity, work gymnastics, medical care and stress.

- Psychological Domain: in this field are evaluated indicators, such as: evaluation, self-control, self-esteem, camaraderie, degree of responsibility, freedom of expression, pride of work and safety.

- Personal Domain: indicators such as self-evaluation, personal and family leisure, housing, geographic changes, prejudices, personal privacy, personal fulfillment, boss / subordinate relationship, work / family relationship, family culture, respect of colleagues and superiors, transportation / mobility, personal values and beliefs, family values.

- Professional Domain: indicators such as: absenteeism, medical assistance, autonomy, bureaucracy, workload, cooperation between hierarchical levels, credibility of the superior, creativity, education, internal and external equity, time stability, ability and availability Of employees, identity with the task, company image (pride), work accidents, information about the total work processes, goals and objectives, level of challenge, participation in decisions, sharing of productivity gains, career plan and learning, Remuneration, feedback / recognition of their work, training, variety of task and preserved personal life.

Particularly in relation to the domains mentioned above, the value of 80% was also applied, with the minimum number of questions answered according to the following table:

Table 01 - Domains and Issues - QWLQ 78

DOMAINS	TOTAL OF FIELDS	MINIMUM ISSUES ANSWERS
Physical / Health	17	14
Psychological	10	08
Personal	16	13
Professional	35	28

Source: Authorship (2016)

At the time of application of the questionnaire instrument, there was a general explanation to the bricklayer, about the form and the objectives of the work, being the data taken in the first 30 (thirty) minutes of the work, so that the fatigue of the work developed during the Day, had no decisive influence on the answers.

### 4. RESULTS OBTAINED

The results obtained are described in the table below, as follows:

Table 01 - Sample Descriptive Statistics - Bricklayer

DESCRIPTIVE DOMAINS	DOMAINS			
	Physical/ Health	Psychologica	Staff	Professional
Arithmetic mean	54,85	65,13	66,88	59,04
Standard deviation	11,89	11,74	12,22	12,03
Minimum Value	20,59	45,00	43,75	38,57
Maximum Value	72,06	85,00	85,94	79,29
Sum	1097,06	1302,50	1337,50	1180,71
Confidence level (95,0%)	5,57	5,49	5,72	5,63

Source: Authorship (2016)

For the sample used by the bricklayer (n = 19), the results show that the physical / health domain has the lowest arithmetic mean and consequently the lowest index of Quality of Life at Work, while the highest index occurs in the personal domain.

### 5. CONCLUSIONS

The results show that the physical/health domain is the most affected in the Quality of Life measurement of the professional Bricklayer, making it clear that such a domain due to the environment of the construction site is usually an unhealthy place. The second area most affected and directly related to health issues is the psychological domain, and it is normal for this type of professional to be affected by situations of stress and depression, with indications for the use of drugs and high rates of alcoholism.

Civil construction is undoubtedly a category marked by a highly exhausting work process, usually consisting of abundant, poorly paid and low-educated labor. In construction sites accidents are common. Weigh on these workers the constant fear of unemployment, since the great majority is made up of outsourced labor. Many of them do not have a formal contract, without social protection, subjected to deplorable conditions of work, in total disrespect to the elementary clauses of the collective

agreement of the category. Within these conditions of precariousness are the irresponsibility and omission of the contractors, the high turnover, the use of precarious and improvised housing, unhealthy conditions of food and work and over-extended hours, without compatible wage monitoring (BUSNARDO, 2006).

The qualitative improvement of the physical work environment (construction site), access to safety equipment and the orientation of physical education professionals regarding physical exercises of a labor nature are factors that will enhance the work of these professionals, optimizing its production.

#### BIBLIOGRAPHIC REFERENCES

- ASIMOV, Isaac. The gods themselves. 3. ed. São Paulo: Aleph, 2006.
- BELTRAME, Mara Rubia Silva. Work capacity and quality of life in industrial workers. 2009. 167 f. Dissertation (Post-Graduate Program in Medicine: Medical Sciences) - Faculty of Medicine, Federal University of Rio Grande do Sul, Porto Alegre, 2009.
- BUSNARDO, Elaine Araujo. Self-management in Construction: a construction cooperative in Rio de Janeiro. Book of social psychology of work, v. 9, p. 53-71, 2006.
- COMMITTEE ON THE CIVIL CONSTRUCTION INDUSTRY. Construbussines 2007, Housing, Infrastructure and Employment. São Paulo, 2007.
- MINISTRY OF LABOR AND EMPLOYMENT. Brazilian Cadastre of Occupations (CBO). Developed by the Ministry of Labor and Employment. Displays information about occupations. Available at [www.mteco.gov.br/cbosite/pages/home.jsf](http://www.mteco.gov.br/cbosite/pages/home.jsf). Accessed on 21 Aug. 2012.
- QUIRINO, Tarcízio. Rego; XAVIER, Odiva Silva. Quality of life in the work of research organizations. Journal of Business Administration. The. 22, n. 1, p. 71-82, Jan / Mar. 2007.
- REIS JUNIOR, Dálcio dos. Quality of Life at Work: Construction and validation of the QWLQ-78 questionnaire. Ponta Grossa, 2008. 114 f. Dissertation (Master in Production Engineering). Graduate Program in Production Engineering, Federal Technological University of Paraná.
- SILVA, Anna Rachel Pessanha da. Profile of Construction Workers in the City of Rio de Janeiro (Evaluation of the Level of Worker Satisfaction). Journal of the National Congress of Excellence in Management, v. 4, p. 34-46, Aug. 2008.
- The WHOQOL Group. The development of the World Health Organization quality of life assessment instrument (the WHOQOL). In: Orley J., Kuyken W. (eds.). Quality of life assessment: international perspectives. Heidelberg: Springer Verlag; 1994. p. 41-60.

#### EVALUATION OF THE QUALITY OF LIFE IN THE WORK OF PROFESSIONAL BRICKLAYER IN CIVIL CONSTRUCTION WORKS OF GREAT PORTE IN THE CITY OF PONTAGROSSA

##### Abstract

The present work deals with the Quality of Life at Work in the professional Bricklayer in large works in the city of Ponta Grossa, state of Paraná. For the evaluation, the questionnaire Quality of Working Life Questionnaire (QWLQ - 78) was used, consisting of 78 (seventy - eight) questions distributed in 4 (four) domains. The sample consisted of 19 (nineteen) professionals and after tabulation of the data, they were treated by descriptive statistics, which demonstrated that the physical/health domain and psychological domain are most affected by the generally unhealthy working conditions offered for These professionals.

Keywords: Quality of Life at Work, Bricklayer, Civil Construction.

#### QUALITÉ DE L'ÉVALUATION DE LA VIE EN BRIQUETEURS PROFESSIONNELS TRAVAILLANT DANS TRAVAUX DE CONSTRUCTION CIVIL GRANDE RUSH CITY THICK

##### Résumé

Ce document traite de la qualité de vie au travail dans le mason professionnel dans les grands travaux de la ville de Ponta Grossa, État de Parana. Pour l'évaluation a été utilisé l'instrument d'enquête de qualité de travail of Life Questionnaire (QWLQ - 78), composé de 78 (soixante-huit) questions divisées par quatre (4) domaines. L'échantillon était composé de dix-neuf (19) professionnel et après la totalisation des données, ils ont été traités par des statistiques descriptives, qui ont montré que le physique domaine / santé et le domaine psychologique sont les plus affectés par les conditions de travail généralement malsaines offerts aux ces professionnels.

Mots-clés: Qualité de vie au travail, Briqueteurs, Construction.

#### LA CALIDAD DE VIDA DE EVALUACIÓN EN LOS ALBAÑILES PROFESIONALES QUE TRABAJAN EN OBRAS CIVILES CONSTRUCCIÓN DE GRAN EN RUSH CITY GRUESO

##### Resumen

Este artículo aborda la Calidad de Vida en el Trabajo en el albañil profesional en grandes obras en la ciudad de Ponta Grossa, estado de Paraná. Para la evaluación se utilizó el instrumento de la encuesta de Calidad de Trabajo of Life Questionnaire (QWLQ - 78), que consta de 78 (setenta y ocho) preguntas divididas por 4 (cuatro) dominios. La muestra está formada por diecinueve (19) profesional y después de la tabulación de los datos, que fueron tratados por la estadística descriptiva, lo que demuestra que el dominio físico/salud y el dominio psicológico son los más afectados por las condiciones de trabajo en general no saludables que se ofrecen a estos profesionales.

Palabras clave: Calidad de Vida en el Trabajo, Albañiles, Construcción

#### AVALIAÇÃO DA QUALIDADE DE VIDA NO TRABALHO DE PROFISSIONAIS PEDREIROS EM OBRAS DE CONSTRUÇÃO CIVIL DE GRANDE PORTE NACIDADE DE PONTA GROSSA

##### Resumo

O presente trabalho aborda a Qualidade de Vida no Trabalho no profissional Pedreiro em obras de grande porte na cidade de Ponta Grossa, estado do Paraná. Para a avaliação foi utilizado o instrumento questionário Quality of Working Life Questionnaire (QWLQ - 78), composto por 78 (setenta e oito) questões distribuídas por 4 (quatro) domínios. A amostra foi constituída por 19 (dezenove) profissionais e após a tabulação dos dados, os mesmos foram tratados pela estatística descritiva, os quais demonstraram que o domínio físico/saúde e o domínio psicológico são os mais afetados pelas condições geralmente insalubres de trabalho oferecidas para esses profissionais.

Palavras-chave: Qualidade de Vida no Trabalho, Pedreiros, Construção Civil.