

**09 - QUALITY OF LIFE OF DOCENTS OF GRADUATE PRODUCTION ENGINEERING:  
CASE STUDY OF PROFESSORS OF BRAZILIAN SOUTH**

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**Abstract**

The present study has the object analyze Quality of Life (QOL) of docents who act in graduation in Production Engineering in the Brazilian South. For that, the instrument WHOQOL-bref was applied by Google Drive platform to 42 professors of Production Engineering inserted in programs of graduation in the Brazilian South. For the stage data analysis, it was used tool for calculating the scores and descriptive analysis about the instrument, available in Pedroso et al. (2010). The results emphasize the bigger lack in QOL of the respondents, about the facets, they were: Physical Environment (51.19), Sleep and rest (57.74) and Positive Feelings (59.52), but they contribute to justify the elevate scores at Home Environment (82.14) and Self-esteem (81.55). Thus, it allows to infer that the docent profession exerts negative and positive influences on the quality of life about this public.

Keyword: Evaluation of Quality of Life, Graduate Professors, Production Engineering.

**1 Introduction**

Conceptually, the quality of life is studied in different ways, since the diversity of areas to research and evaluate. This study considers the quality of life (QOL) as "the individual's perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (FLECK, 2000, p. 34).

With regard to research directed to assess QOL, it is emphasized that the genesis of these occurred in medicine, based on the possibility of measuring the effectiveness of medical treatment given to patients (PATRICK, 2008). As an academic contribution to research focused on assessment of QOL enable detection points of lack of a population group living in general or specific condition and/or distinguish external factors that influence the individual's QOL. Such opportunities are essential to support the making strategies decisions to improve the QOL of a group.

In general, the assessment QOL occurs through the use of instruments made for this purpose. Among these, we can mention the WHOQOL-100 and WHOQOL-bref, prepared by the WHOQOL group targeted the general population and, due to its rigorous methodological procedure of construction, have recognized academic value.

As for the general population, it considers that the professors working in graduate school in the field of Production Engineering fall into this group. It is noteworthy that QOL is influenced by factors related to work and, in the case of teaching, there is great demand for cognitive, effective and instrumental content, which influence the QOL about these professionals (FLECK, et al. 1999; MARTINEZ, VITTA; LOPES, 2009).

Nevertheless, these professionals are exposed to academic productivity process, which occurs because of the evaluation methods used by development agencies and due to the resulting activities of accumulation generates negative effects on the life of the researcher (ARANTES; LOBO; FONSECA, 2004; LUZ, 2005; 2006; PICININ, 2014).

In this sense, it is relevant to investigate the QOL of graduate professor in Production Engineering, as damage to the QOL of this public may hinder their academic performance, reducing their ability to innovate and pursue teaching, which would harm the individual in their professional and personal perspective.

The light of the factors abovementioned, this study aimed to analyze the QOL of professors who work in the graduate in Production Engineering in Southern Brazil.

**2 Methodological procedures**

Gil (2010) grounded in literature, this study is classified as follows: the nature of the research is classified as applied; in relation to the objectives is classified as exploratory; and, finally, with regard to the approach to the problem is classified as quantitative.

The sample of this study was obtained through sampling non probabilistic for accessibility. At its end, the 124 professors in the southern region entered in graduate school in surveyed Production Engineering, this study obtained a sample of 42 (33.87%), 33 men and nine women.

The data collection phase was carried out in digital form, through forwarding an e-mail requesting that the WHOQOL-bref questionnaire was answered in the Google Drive platform. As for the WHOQOL-bref instrument, directed to the general population, this assesses QOL through the domains: Physical, Psychological, Social Relationships and Ambient (CHACHAMOVICH; FLECK, 2008).

The contact of the professors inserted in graduate school of Production Engineering in the South country was through the following: (i) the data (contacts) of active professors in graduate school were obtained in the Platform Sucupira; (ii) contacts not found were searched the websites of the graduate programs in specific Production Engineering; (iii) where the email was not found, he walked the questionnaire via Lattes, through the "contact" item; (iv) have been sent emails to all researchers recorded the Platform Sucupira.

It also ponders that were sent to professors three contacts with two-week interval between each shipment. The analysis and interpretation of data returned by the WHOQOL-bref instrument occurred aid tool for the calculation of scores and descriptive statistics of the tool available in Pedroso et al. (2010).

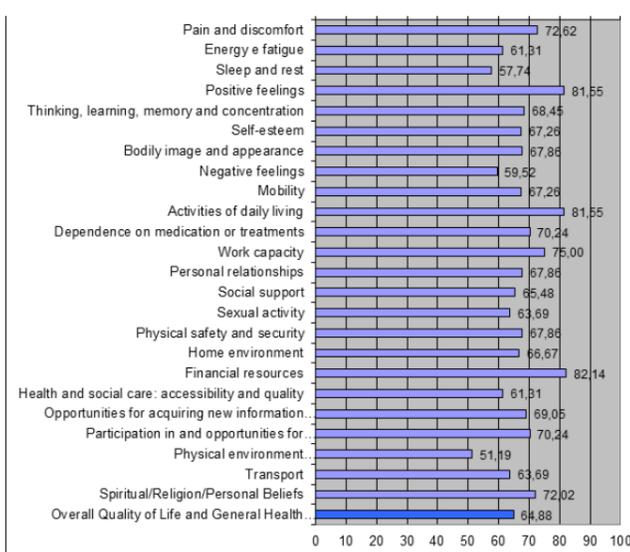
### 3 Results and discussion

The population of professors linked to graduate programs in Production Engineering area investigated by this study amounted to 42 respondents. Of these, it considers that 33 were male and nine are female.

Of the 42 docents who participated in the survey, it is worth mentioning that 12 professors hold productivity grants in research or technological development and 30 does not have productivity grants. It is noteworthy that 28 act as professors in federal public institutions, 13 in private institutions and, therefore, only two are active in state public institutions.

Regarding the results related to the assessed QOL group, Graph 1 shows the score obtained by this group to the relevant aspects of QOL investigated by WHOQOL-bref instrument, as with the conversion of inverted issues present in this instrument.

Graph 1 – Score of the facets of QOL of WHOQOL-bref instrument of professors of graduation in Production Engineering in the Brazilian South



Source: Field Research (2016).

It appears that the facets with the highest score in the group of professors linked to graduate programs in Production Engineering area were home Environment to the Financial resources (82.14) Self-esteem (81.55) and Mobility (81.55).

Regarding the facet Financial resources (82.14), it is noteworthy that according to Barros (2010) the place of residence is closely linked with the social rise and this, in turn, effectively relates to schooling the individual. Thus, it is assumed that the high score regarding the Home Environment (82.14) facet is justified in socioeconomic status and education of professors connected to graduation.

Another well punctuated facet that is similar to the above scenario is justification Esteem (81.55). Naturally, being linked to a graduate program is an indication of success in the professional career of docents, and therefore tends to boost satisfaction with the own ego and self-esteem.

In this context, Mosqueira and Stobäus (2006) state that the individual lacks positive self-esteem. This, in general, is achieved through the sense of appreciation of others and self-realization as a human being. However, Barros (2010) indicates that individuals who complete a higher level course experience pride of experience and prestige. This is consistent with the view that the professional career directly affects the self-esteem. For the investigated sample showed to be highly elevated.

Regarding the aspect of mobility (81.55), whose score was the third highest, the premise that the study considers the general population, not exposed to physical and/or health problems, indicates that this scenario it is not an abnormality. To check whether this scenario is replicated in other public, it was included to this discussion the study of Asuncion, Miranzi and Scorsolini-Comin (2010). The authors investigated the QOL of nursing workers not exposed to physical and/or health problems, and found as higher score mobility facet (90.98). This convergence results in a priori indicates that general populations tend to have high satisfaction with the mobility aspect.

Unlike, for the aspects evaluated by WHOQOL-bref instrument that had worse scores Physical Environment (51.19) Sleep and rest (57.74) and positive feelings (59.52).

Based on the reports the literature, the rationale for the low score for the three above mentioned aspects is the lack of time. Normally, to maintain the link in graduate programs, professors are exposed to a process called academic productivism, due to the need to meet the metrics imposed by regulatory agencies (LUZ, 2005; 2006). Thus, researchers tend to devote their free time and out of teaching to make to academic research, which limits their hours of sleep, the time available for leisure and thus their perception of being well enjoying life.

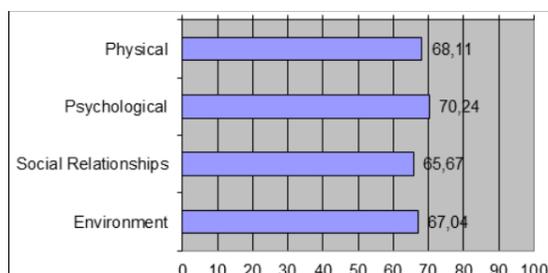
In addition, with regard to positive feelings facet (57.74), another reason for the low score is the stress arising from the requirements that professors are exposed to remain tied to a graduate program. According to Picinin (2014), even if the Capes not make an individual evaluation of professors linked to graduate programs, their evaluation criteria require the individual to improve their individual performance for the program to be maintained or increased.

In this scenario, according to Nascimento (2010), it took some graduate programs to adopt a policy that the docents publish or let the graduate program to which they belong. This obviously makes the work manages to professional stress,

which certainly reduces their positive feelings.

Graph 2 shows the score obtained by the group of professors linked to graduate programs in Production Engineering field in the Brazilian South is relevant to the domains of QOL investigated the WHOQOL-bref instrument. The "total" item, calculated by the simple arithmetic average of the other areas, has been inserted in this graph to further analyze and compare it with the aspect of self-assessment of QOL.

Graph 2 – Score of domains of QOL of WHOQOL-bref instrument of professors of graduation in Production Engineering in the Brazilian South



Note that the domain returned best score in the investigated group was psychological (70.24), followed by the Physical domains (68.11), Environment (67.04) and Social Relationship (65.67).

Regarding the Psychological domain (70.24) and Physical (68.11), which returned the best scores, such a scenario seems to be common in academics. By dealing with a similar group to what is being examined in the present study, we chose to compare with Martinez, Vitta and Lopes (2009), who investigated the QOL of professors of Bauru. In their results, the authors also found higher scores in these fields, but with a reversal in score order, as the Physical domain (15.83) returned mark above the Psychological domain (15.6).

Although the order of the fields has not been matched in both surveys there was a closeness between the returned values, which indicates that there is a tendency for these two fields to excel in research on QOL in academics.

Regarding the fields Environment (67.04) and Social relationship (65.67), Martinez's study, Vitta and Lopes (2009) also found similar scenario, but with the Environment domain being the worst scored. Like the foregoing, there is a trend of dissatisfaction in relation to these questions in the class of professors.

This scenario, however, does not replicate in other populations. Paschoa, Zanei and Whitaker (2007), to evaluate the QOL of workers nursing field returned as scored better control the social relations that, in the case of university professors graduate, were the worst punctuated domain. Thus, it is assumed that there is some peculiarity in the group of university professors who reduces their satisfaction with the social relations domain (65.67). As most of the respondents are from public institutions, it is inferred that the stability or the "obligation" of living with the same co-workers in social relationship of professors.

In this sense, to analyze the Social relationship (65.67) domain facets, it is observed that the worst score was support and personal support (63.69). Thus, there is evidence that the group of graduate professors in the Brazilian South Production Engineering is not satisfied with the support that you receive from your colleagues and/or friends. Possibly this is due to difficulties that professors have to maintain their social relationships, due to the lack of time due to his professional journey or derivations of "stability" of employment.

Regarding the Ambient (67.04) domain, it is observed that the Home Environment (82.14) facets and Transport (72.02) reached a high score, but facets Financial Resources (61.31), Physical Environment (63.69), Physical Security and Protection (66.67) and Health and social care (69.05) boosted dissatisfaction in this regard.

This scenario allows us to infer that the professors of graduate programs in Production Engineering of the South country, even if they can through their earnings to live in a home environment and maintain a transport condition which are satisfied, we present dissatisfied with issues relating to social problems of which Brazilian society is exposed, such as pollution, urban mobility, the quality of health and public safety. Because it is people with high education, they tend to be less alienated in relation to social problems they face, and this tends to change their satisfaction in these aspects.

When comparing the total score of the fields returned by the study population, which was 67.74, with the score of self-facet assessment of QOL, which reached 64.88 points, it is observed that the values differed by 2.86 points. This indicates that teachers have investigated a slightly pessimistic perception of their QOL or subjectively, gave greater weight issues which are most dissatisfied in this assessment.

#### 4 Final considerations

The teaching career in higher education institutions demand the fulfillment of various requirements that are more exacerbated with those who work in graduate school. Thus, it is prudent to identify the points of lack of this public on their QOL.

In this sense, the present study aimed to analyze the QOL of professors who work in the graduation of Production Engineering in the Brazilian South. The results show that the worst aspects of QOL returned by WHOQOL-bref were Physical Environment (51.19) Sleep and rest (57.74) and Positive Feelings (59.52). The justification, as the facets Physical Environment (51.19) Sleep and rest (57.74), is linked to lack of time caused due to the accumulation of necessary academic activities to raise or keep score of post programs graduation. Regarding the Positive Feelings (59.52) facet, the justification found refers to the relevant stress the constant need for academic production.

In the fields, it was noted that the domain that returned the highest score in the investigated group was Psychological (70.24), followed by the Physical (68.11) domain, Ambient (67.04) and Social Relations (65.67). The highest score in the Psychological (70.48) and Physical (70.27) was replicated in other investigations related to academics (MARTINEZ; VITTA; LOPES, 2009), suggesting that this is a trend in this audience. Regarding the lower scores, Social relationship (65.67) domain returned different scenario to other research with workers in general and in this sense the dissatisfaction in the group of professors seems to be related to low satisfaction with the support they receive your colleagues and/or friends.

Regarding the Environment (67.04) domain, it seems, dissatisfaction is related to Brazilian social problems that affect all social strata, such as Security and Physical Ambient.

In short, considering that this study met the objective of analyzing the QOL of professor in graduate program of Production Engineering of the South country, contributing to the discussions on the docent career and showing that this preliminarily influence QOL of the individual in their positive and negative aspects.

#### References

- ARANTES, E. M. M.; LOBO, L. F.; FONSECA, T. M. G. Pensar: a que será que se destina? Diferentes tempos de uma reflexão sobre a morte anunciada do educador. *Psicologia & Sociedade*, Belo Horizonte, v. 16, n. 1, p. 50-68, 2004.
- ASSUNÇÃO, H. B.; MIRANZI, S. S.; SCORSOLINI-COMIN, F. Qualidade de vida dos trabalhadores de enfermagem das unidades de pronto socorro de um hospital universitário. Unesp. Franca. Seminário de saúde do trabalhador de Franca. Set. 2010.
- BARROS, M. M. L. Trajetórias de jovens adultos: ciclo de vida e mobilidade social. *Horizontes antropológicos*, Porto Alegre, v. 16, n. 34, p. 71-92, 2010.
- CHACHAMOVICH, E.; FLECK, M. P. A. (2008). Desenvolvimento do instrumento WHOQOL-OLD. In: FLECK, M. P. A. (Org.). *A avaliação de qualidade de vida: guia para profissionais da saúde*. Porto Alegre: Artmed, 102-111 p.
- FLECK, M. P. A. et al. Desenvolvimento da versão em português do instrumento de avaliação de qualidade de vida da OMS (WHOQOL-100). *Revista Brasileira de Psiquiatria*, São Paulo, v. 21, n. 1, p. 19-28, jan./mar. 1999.
- FLECK, M. P. A. O instrumento de avaliação de qualidade de vida da Organização Mundial da Saúde (WHOQOL-100): características e perspectivas. *Ciência e Saúde Coletiva*, Rio de Janeiro, v. 5, n.1, p. 33-38, 2000.
- GIL, A. C. Como elaborar projetos de pesquisa. 5ª. São Paulo: Atlas, 2010.
- LUZ, M. T. Prometeu acorrentado: análise sociológica da categoria produtividade e as condições atuais da vida acadêmica. *Physis: Revista de Saúde Coletiva*, Rio de Janeiro, v. 15, n. 1, p. 39-57, 2005.
- LUZ, M. T. Fragilidade social e busca de cuidado na sociedade civil de hoje. In: PINHEIRO, R.; MATTOS, R. A. (Org.). *Cuidado: as fronteiras da integralidade*. 3. ed., Rio de Janeiro: CEPESC/UERJ, ABRASCO, 2006. p. 9-20.
- MARTINEZ, K. A. S. C.; VITTA, A.; LOPES, E. S. Avaliação da qualidade de vida de professores universitários da cidade de Bauru-SP. *Salusvita*, Bauru, v. 28, n. 3, p. 217-224, 2009.
- MOSQUEIRA, J. J. M.; STOBÁUS, C. D. Auto-imagem, auto-estima e auto-realização: Qualidade de vida na universidade. *Psicologia, Saúde e Doenças*, Lisboa, v. 7, n. 1, p. 83-88, 2006.
- NASCIMENTO, L. F. Modelo Capes de avaliação: Quais as consequências para o triênio 2010-2012? *Administração: Ensino e Pesquisa*, Rio de Janeiro, v. 11, n. 4, p. 579-600, Out/Nov/Dez. 2010.
- PASCHOA, S. ZANEI, S. S. V.; WHITAKER, I. Y. Qualidade de vida dos trabalhadores de enfermagem de unidades de terapia intensiva. *Acta Paulista Enfermagem*, São Paulo, v. 20, n. 3, p. 305-310, 2007.
- PATRICK, D. L. A qualidade de vida pode ser medida? Como?. In: FLECK, M. P. A. et al. (Org.). *A avaliação de qualidade de vida: guia para profissionais da saúde*. Porto Alegre: Artmed, 2008. p. 29-39.
- PICININ, C. T. A produção técnico-científica dos bolsistas de produtividade e professores dos programas de pós-graduação da área da administração: uma análise da área no triênio 2010-2012. 2014. 335 f. Tese (Doutorado em Administração) – Programa de Pós-Graduação em Administração, Universidade Positivo, Curitiba, 2014.
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#### Abstract

The present study has the object analyze Quality of Life (QOL) of docents who act in graduation in Production Engineering in the Brazilian South. For that, the instrument WHOQOL-bref was applied by Google Drive platform to 42 professors of Production Engineering inserted in programs of graduation in the Brazilian South. For the stage data analysis, it was used tool for calculating the scores and descriptive analysis about the instrument, available in Pedroso et al. (2010). The results emphasize the bigger lack in QOL of the respondents, about the facets, they were: Physical Environment (51.19), Sleep and rest (57.74) and Positive Feelings (59.52), but they contribute to justify the elevate scores at Home Environment (82.14) and Self-esteem (81.55). Thus, it allows to infer that the docent profession exerts negative and positive influences on the quality of life about this public.

Keyword: Evaluation of Quality of Life, Graduate Professors, Production Engineering.

#### QUALITÉ DE VIE DES PROFESSEURS D'ÉTUDES SUPÉRIEURES DE INGÉNIERIE DE PRODUCTION: ÉTUDE DE CAS DE PROFESSEURS DU SUD BRÉSIL

##### Abstrait

La présente étude a pour objet d'analyser la qualité de vie (QV) de docents qui agissent dans l'obtention du diplôme en ingénierie de production dans le sud du Brésil. Pour cela, l'instrument WHOQOL-bref a été appliqué par la plate-forme Google Drive à 42 professeurs de l'ingénierie de production insérées dans les programmes de diplôme dans le sud du Brésil. Pour l'analyse de données sur le stade, il a été l'outil utilisé pour le calcul des scores et des analyses descriptives sur l'instrument, disponible en Pedroso et al. (2010). Les résultats soulignent le plus grand manque de QV des répondants, sur les facettes, ils étaient: Environnement physique (51.19), Sommeil et repos (57,74) et des sentiments positifs (59,52), mais ils contribuent à justifier les scores Elevate à la maison pour l'environnement (82.14) et l'estime de soi (81.55). Ainsi, il permet de déduire que la profession docent exerce des influences négatives et positives sur la qualité de vie sur ce public.

Mot-clé: Évaluation de la qualité de vie, les professeurs d'études supérieures, Ingénierie de Production.

#### CALIDAD DE VIDA DE LOS DOCENTES DE INGENIERÍA DE PRODUCCIÓN DE POSTGRADO: ESTUDIO DE CASO DE PROFESORES DE SUR DE BRASIL

##### Resumen

El presente estudio tiene por objeto la calidad de vida (CDV) de los docentes que se desempeñan en la graduación en Ingeniería de Producción en el sur de Brasil analizar. Para ello, el instrumento WHOQOL-bref se aplicó por la plataforma de Google Drive a 42 profesores de Ingeniería de Producción insertados en los programas de graduación en el sur de Brasil.

Para el análisis de datos etapa, se utiliza la herramienta para el cálculo de los resultados y análisis descriptivo sobre el instrumento, disponibles en Pedroso et al. (2010). Los resultados ponen de relieve la mayor carencia en la CDV de los encuestados, alrededor de las facetas, que eran: Medio Físico (51,19), el sueño y el descanso (57,74) y sentimientos positivos (59,52), pero contribuyen a justificar las puntuaciones elevadas en el hogar para el Medio Ambiente (82,14) y la autoestima (81,55). Por lo tanto, permite inferir que la profesión docente ejerce influencias negativas y positivas en la calidad de vida de este público.

Palabra clave: Evaluación de la Calidad de Vida, Profesores de Posgrado, Ingeniería de Producción.

#### QUALIDADE DE VIDA DE DOCENTES DA PÓS-GRADUAÇÃO DA ENGENHARIA DE PRODUÇÃO: ESTUDO DE CASO COM PROFESSORES DA REGIÃO SUL DO BRASIL

##### Resumo

O presente estudo tem por objetivo analisar a Qualidade de Vida (QV) de docentes que atuam na pós-graduação em Engenharia de Produção na região Sul do Brasil. Para tal, o instrumento WHOQOL-bref foi aplicado, por meio da plataforma Google Drive, em 42 docentes de pós-graduação da Engenharia de Produção inseridos em programas de pós-graduação na região Sul. Para a etapa de análise dos dados, foi utilizada a ferramenta para os cálculos dos escores e estatística descritiva do referido instrumento, disponibilizada em Pedroso et al. (2010). Os resultados enfatizam que a maior carência na QV do público em exame, quanto às facetas, foram: Recreação e lazer (51,19), Sono e repouso (57,74) e Sentimentos positivos (59,52). Já os pontos de maior satisfação, em relação às facetas, foram: Ambiente do lar (82,14), Autoestima (81,55) e Mobilidade (81,55). Não obstante, o domínio que retornou maior pontuação no grupo investigado foi o Psicológico (70,24), seguido dos domínios Físico (68,11), Ambiente (67,04) e Relações sociais (65,67). Conclui-se que a carreira docente de professores da pós-graduação, de maneira direta ou indireta, justifica o baixo escore nas facetas Recreação e lazer (51,19), Sono e repouso (57,74) e Sentimentos positivos (59,52) e, antagonicamente, também ajudam a justificar os elevados escores nas facetas Ambiente do lar (82,14) e Autoestima (81,55). Desta forma, permite-se inferir que a carreira docente exerce influências negativas e positivas na qualidade de vida do público em exame.

Palavras-chave: Avaliação da qualidade de vida, Professores pós-graduação, Engenharia de Produção.