## ARTIGO ORIGINAL



## PERCEPTION OF QUALITY OF LIFE OF BRAZILIANS AND PORTUGUESE MEASURED THROUGH AN ONLINE PLATFORM

Percepção da qualidade de vida de brasileiros e portugueses aferida por PLATAFORMA ON LINE

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#### **ABSTRACT**

Purpose: Quality of life (QOL) has been studied in various contexts and it presents complex components that compose a particular perception of the context where people live. This study evaluated the perception of QOL in Brazil and Portugal who participated in an online survey in both countries. Methodology: An online platform was built for data collection with socio-demographic information on physical activity. WHOQOL-bref from the World Health Organization (WHO) was the instrument used was to assess the perception of QOL. Results: The results show that the Portuguese have a higher QOL perception than the Brazilians do, especially in terms of physical and environment aspects, reflecting, in part, the socio-economic characteristics of these countries. Conclusions: This study emphasizes the importance of discussions on quality of life to consider models of a healthy life, quality of sleep and leisure.

**Keywords**: Quality of life. Life style. Perception. Socioeconomic status.

#### **RESUMO**

Objetivo: A Qualidade de Vida (QV) tem sido estudada em diversos contextos e apresenta componentes complexos e diversos que compõem uma percepção individual do contexto em que as pessoas vivem. O objetivo desse estudo foi avaliar a percepção da QV de brasileiros e portugueses que participaram de inquérito on line em ambos os países. Metodologia: Foi construída uma plataforma online para coleta de dados onde constaram informações sociodemográficas de prática de atividade física e o instrumento da Organização Mundial da Saúde (OMS) WHOQOL-bref para avaliação da percepção da QV. Resultados: Entre os resultados destaca-se QV superior dos portugueses em relação aos brasileiros, principalmente nos domínios físico e meio ambiente que refletem, em parte, as características socioeconômicas destes países. Conclusão: Este estudo enfatiza a importância das discussões sobre qualidade de vida para considerar modelos de vida saudável, qualidade do sono e lazer.

Palavras-chave: Qualidade de vida. estilo de vida. Percepção. status socioeconômicos

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## **INTRODUCTION**

Quality of life (QOL) has a complex concept that involves multidimensional aspects and reflects the person's perception about the context of values where they live. QOL is associated with personal well-being, allowing every person to have a perspective of themselves. The measurement of QOL is subjective and provides information on the relationships and social needs, health status, as well as person's expectations and life habits [1].

Life habits influence the perception of QOL and those incorporated in childhood and adolescence are often carried through adulthood and old age [2].

Healthy lifestyle habits comprise a balanced diet and physical activities, which promote health and QOL in all aspects. There is a positive association between physical activity and the perception of QOL, especially in terms of physical aspects that are related to the ability to work, energy for daily activities and locomotion [3,4,5]

This study evaluated the perception of QOL of Brazilians and Portuguese to identify possible differences.

#### MATERIAL AND METHODS

## O Study design

The study was designed in a descriptivecorrelational structure of transverse and retroanalytical type with non-probability sampling by convenience [6]. It was carried out in compliance with STROBE guidelines [7].

## Respondents and eligibility criteria

The sample consisted of volunteer who received invitation to participate in the survey on line. In Brazil, 944 volunteers participated and 132 in Portugal.

In Brazil, it was requested disclosure through communication advisory of federal universities, via social networks. For the survey in Portugal, an electronic invitation was made to students of the community of the University of Porto, a partner institution of the University of São Paulo. Similar to Brazil, the invitation comprised information on the survey, contact with researchers and access link to the survey with the Free Consent Term, which, once accepted, allowed viewing and filling out of the data suggested in the instrument.

Respondents who did not fill out the date correctly were removed.

#### Ethical aspects

This research was evaluated and accepted by the Committee of Ethics in research on Human Beings No. 87 from Luiz de Queiroz College of Agriculture of the University of São Paulo.

#### Data collection instrument

Socioeconomic-demographic characteristics

Sample characteristics and identification of possible variables that could contribute to the perception of QOL and level of physical activity were collected through a form, with questions

regarding age, gender, education, marital status and income.

## Physical activity level

For the assessment of the level of physical activity, we used a short and abbreviated version of the International Physical Activity Questionnaire (IPAQ), which is an instrument designed to estimate the level of habitual physical activity in groups and populations of different countries and socio-cultural contexts. Its formulation was proposed by the International Consensus Group on Measurements of Physical Activity, under the auspices of the World Health Organization (WHO) [8].

#### Quality of life

For the evaluation of QOL, we used the WHOQOL-bref instrument developed by the WHO, consisting of four areas, namely physical, psychological, social and environmental relations and 26 facets. (WHOQOL-100) [9].

#### Data analysis

For data analysis, Brazilian volunteers were raffled randomly to select 132 volunteers to ensure a fair comparison of variables between the countries. We used the comparison test of Mann-Whitney because of the non-adherence of the sample to the Gaussian normal distribution, through the statistical package SPSS 15.0.

## **RESULTS**

In Brazil, 944 respondents accessed the data collection system and 132 in Portugal. The profile of the volunteers showed that the average age of respondents in Brazil corresponded to 16.31 years of age (± 11.34) lower than that in Portugal, 27.16 years (± 9.78). The results of marital status showed that respondents in Brazil were single (51.4%) and Portugal (68.2%) the majority was married. The profile of respondents as well as income distribution are shown in Table 1.

**Table 1.** Socio-demographic characteristics of participants in the survey in Brazil and Portugal, 2013.

	Brazil	Portugal 27.16 (SE ±9.78)	
Average age	16.31 (SE ±11.34)		
Income	$5.80(SE \pm 2.01) MW*$	4.96(SE ±1.65) MW**	
Gender	%	%	
Feminine	53.7	53.0	
Masculine	41.0	41.7	
Schooling	%	%	
Middle school complete	0.1	0.8	
High school incomplete	0.1	0	
High school complete	1.7	5.3	
College degree incomplete	21.4	2.3	
College degree complete	18.2	10.6	
Post-graduation	53.2	75.8	
Marital status	%	%	
Single	51.4	14.4	
Married	36.8	68.2	
Widow/widower	0.5	0.8	
Divorced	3.0	8.3	
Others	3.1	3.0	
Incomplete data*	5.3	5.3	
n	944	132	

MW: Minimum wage U\$171,69\*\* Minimum Wage (current on the collection time) = U\$580,25

<sup>\*</sup> Missing

The results concerning physical activity show similarity between the groups. Most individuals (86%) in total have an active lifestyle, which can be justified, in part, by the profile of the volunteers.

However, the results indicated that 39% of the Brazilians and 48% of the Portuguese did not meet the minimum recommendation in terms of physical activity, classified as sedentary or inadequately active.

The test of Mann-Whitney was use to compare the results of perception of QOL between both countries (Table 2). A previous random raffle was carried out of 132 of the total sample in Brazil to ensure equity of sample size and thus perform the statistical analyses. So, for QOL, the scores are similar. For social relationships, scores in are higher and the opposite occurs for physical scores in both countries.

**Table 2.** Comparison between quality of life of survey respondents in Brazil and Portugal, 2012.

Aspects	Country	n	Average	SD (±)	p*
	Brazil	132	58.76	11.15	0.002
Physical	Portugal	132	62.58	10.90	
	Brazil	132	65.27	9.70	0.603
Psychological	Portugal	132	65.56	11.85	
Social relationships	Brazil	132	71.52	16.73	0.071
	Portugal	132	74.49	17.16	
	Brazil	132	63.77	13.31	0.004
Environment	Portugal	132	68.15	13.16	
General	Brazil	132	74.43	17.05	0.786
	Portugal	132	75.18	14.56	
	Total	264			

<sup>\*</sup>Mann- Whitney test -p = < 0.05

The results show statistically significant for physical and environment aspects, with higher scores for Portuguese individuals.

## **DISCUSSION**

When compared to Brazilians, Portugueses present higher scores in all aspects of QOL, although statistical difference was only identified in physical and environmental aspects. Despite similarity between the groups, the number

of respondents in Brazil was substantially higher than in Portugal. This could cause bias regarding sample size when comparing the groups, therefore, a random selection was made of the database from Brazil to minimize this fact.

The physical aspect consists of facets,

namely pain and discomfort, energy and fatigue, sleep and rest, mobility, daily activities, dependence on medication or treatments and work capacity. Some of these facets are related to life habits, such as regular physical activity and proper sleep, and others related to chronic conditions that can lead to the reduction of physical autonomy [10].

Although the perception of the physical aspect among the Brazilians is lower than that measured among the Portuguese, we highlight the fact that the Brazilian respondents are younger than the Portuguese, which suggests, in part, fewer cases of chronic conditions health that can lead to the reduction of autonomy, evident component in the physical aspect [11, 12].

On the other hand, this result may also be due, in part, to the lifestyle of the Brazilian volunteers in which the condition of sleep, rest or energy can be limiting and result in lower scores of perception of QOL. [13,14].

The facets that comprise the environmental aspect are physical security and protection, home environment, financial resources, health and social care – availability and quality, opportunities to acquire new information and skills, in addition to recreation/leisure opportunities, physical environment (pollution/noise/traffic/weather) and transport [15]. Brazilian respondents showed lower scores that the Portuguese did.

Other results have shown that the environment receives the lowest score in studies conducted on university students in Brazil <sup>[16, 17, 18, 19]</sup>. This fact can be attributed to the living

conditions of Brazilians with high demands on a national level related to physical security, health, schooling and reduced opportunity and time for leisure activities [20].

In addition, these items are related to living conditions that, inevitably, are associated with public policies of the country and the region in which the survey respondents reside, in addition to dissatisfactions related to health, quality of education, structure of institutions, basic sanitation, health resources, culture, public transport and leisure are still present, despite ongoing policies. [21, 22, 22]. As this is limitation is known in Brazil, lower scores are expected, representing a limitation in perception of QOL.

#### **CONCLUSION**

The people in Brazil have a perception of quality of life lower than that of the Portugueses. The physical aspect obtained the lowest score. The results highlight the differences between life habits, cultural issues and public policies in each country.

This study emphasizes the importance of discussions on quality of life to consider models of a healthy life, quality of sleep and leisure; However, it is not only the structural importance of the physical environment od residence has significance to improve the aspects of the environment.

Compliance with Ethical Standards: Funding: This study did not have funding. Conflict of Interest: The authors of this study declare that there is no conflict of interest.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

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