
QUALITY OF LIFE OF PHYSICAL EDUCATION TEACHERS IN GRANDE FLORIANÓPOLIS MESOREGION, BRAZIL**QUALIDADE DE VIDA DE PROFESSORES DE EDUCAÇÃO FÍSICA DA MESORREGIÃO DA GRANDE FLORIANÓPOLIS, BRASIL****Juliana Regina Silva Guimarães¹, Raquel Krapp do Nascimento¹, Jorge Both², Giovana Zarpellon Mazo¹, and Alexandra Folle¹**¹Santa Catarina State University, Florianópolis-SC, Brazil² State University of Western Paraná, Marechal Cândido Rondon-PR, Brazil**RESUMO**

A discussão sobre os fatores que podem influenciar a qualidade de vida (QV) de professores de Educação Física é importante no cenário atual de transformações sociais aceleradas que refletem no contexto educacional. Com o objetivo de verificar a associação entre QV e características sociodemográficas, aplicou-se questionários de dados sociodemográficos e de qualidade de vida (WHOQOL-bref) a 298 professores de Educação Física da Educação Básica da mesorregião da Grande Florianópolis, Santa Catarina, Brasil. Utilizou-se no tratamento de dados, os testes Qui-quadrado, Mann-Whitney e Kruskal Wallis, com post hoc de Dunn ($p < 0,05$). Os professores de Educação Física apresentaram escores regulares na QV geral, maiores valores de escores no domínio das relações sociais e menores valores no domínio físico. As características como sexo, ciclos vitais, tempo de serviço na rede, turno de trabalho, número populacional e Índice de Desenvolvimento Humano dos municípios foram associados à QV geral e aos domínios físico, psicológico e ambiental. Conclui-se que a QV está associada às características sociodemográficas dos professores de Educação Física e que estas devem ser levadas em considerações no planejamento e na gestão educacional no ensino básico.

Palavras-chave: Qualidade de vida. Docentes. Educação Física. Educação básica.**ABSTRACT**

Based on the current scenario of accelerating social changes that reflect on the educational context, the discussion on the factors that might influence the quality of life (QOL) of Physical Education teachers is important. With the purpose of evaluating the association between QOL and sociodemographic characteristics, questionnaires on socio-demographic data and quality of life (WHOQOL-bref) were applied to 298 Physical Education teachers of Basic Education in Grande Florianópolis mesoregion, state of Santa Catarina, Brazil. The Chi-square, Mann-Whitney and Kruskal Wallis tests with Dunn's post hoc method ($p < 0.05$) were used for data analysis. The Physical Education teachers showed regular scores related to the general QOL; higher values for the social relations domain and lower ones for the physical domain. Some characteristics, such as sex, vital cycles, length of service in the school system, work shift, population number and the Human Development Index (HDI) of the municipalities were correlated with general QOL, as well as with the physical, psychological and environmental domains. It is concluded that QOL is associated with the socio-demographic characteristics of Physical Education teachers; thus, this should be taken into consideration when thinking of educational planning and management in Basic Education.

Keywords: Quality of life. Teachers. Physical Education. Basic Education.**Introduction**

Quality of life (QOL) is a concept related to personal, sociocultural and psychological aspects¹, characterized as a series of individual needs that is an important indicator of well-being². This is a broad concept that encompasses several dimensions of human experiences, and perceptions on different life domains³. It can be understood based on the daily experience of each one involved⁴, usually related to important elements in life, such as the work environment, family and friends⁵.

Under this perspective, the physical and psychological exhaustion caused by the work environment occur according to the organization and the specificity of each profession⁶. In the case of teachers, the work characteristics make them face aggravating conditions related to their QOL, such as fast work pace, high physical and psychological

effort, repetitive tasks, school routine with distressing and worrying situations, in addition to intense concentration in the same task⁷.

The teaching career can be characterized as stressful due to the long working hours during which teachers often need to give up their free time to meet the demands and requirements imposed by the profession⁸. Considering the specific case of Physical Education teachers, the curricular component has peculiar characteristics related to their professional colleagues, such as classes held in open spaces, exposure to different adverse weather conditions⁹ and excessive noise¹⁰.

In this context, considering the specificity of the professional characteristics of teachers from different areas of knowledge who work in Basic Education schools, and their self-perceived QOL, it is noteworthy that some investigations have sought to identify differences in QOL by considering some variables, such as the school systems^{11,12}, time spent working professionally¹³, employment relationship¹², and weekly workload¹⁴. The information obtained in these surveys revealed that the teachers who showed the best QOL work in municipal schools, have a shorter length of service (up to three years), have part-time teaching workload (up to 29 hours/week), besides being linked to substitute teachers from the school systems¹¹⁻¹⁴.

In addition to professional characteristics, there are studies in the literature that aim at associating the perceived QOL with the personal characteristics of teachers, such as sex^{15,16} and age¹⁷. These studies showed that teachers with a more positive perceived QOL are men aged up to 39 years old. However, there is a lack of studies that assessed the Physical Education teachers in Basic Education in the state of Santa Catarina with regard to their sociodemographic characteristics. In this scenario, it should be mentioned that Santa Catarina was considered the third Brazilian state with the highest Human Development Index - HDI (0.774), that is, with a high degree of economic development and QOL offered to the population¹⁸. Therefore, knowing the QOL of Physical Education teachers is important. This information can contribute to subsidize educational planning and management actions for Basic Education in the state.

Under this investigative scenario, considering the QOL construct and the teachers' sociodemographic characteristics, the present study aimed at evaluating the association between the quality of life and sociodemographic characteristics of Physical Education teachers in Basic Education in Grande Florianópolis mesoregion, Brazil. This shall provide the professionals with expanding information on possible associations, specifically with regard to their curricular component.

Methods

Sample

This is a descriptive quantitative-based cross-sectional study. The research was carried out in Grande Florianópolis mesoregion, in the state of Santa Catarina, Brazil, which consists of 21 municipalities.

Seventeen Municipal Secretaries of Education (municipal schools) and 13 cities linked to the Regional Coordination of Florianópolis (state schools) participated in the investigation. They agreed with the research by signing the Declaration of Acknowledgment and Agreement of the institutions involved. Data collection took place in 2017.

The study population consisted of 368 Physical Education teachers from municipal schools (n=218) and state ones (n=150). Regarding these numbers, 5 percentage points of sampling error were considered, and a sample of 190 professors was stipulated to be reached (113 municipal and 77 state schools). Finally, the sample embraced 298 Physical

Education teachers, 159 of them working in municipal schools and 139 from state schools. Thus, a new sample was calculated by stipulating 2.49 percentage points of error.

Procedures

Data collection was performed by using a sociodemographic questionnaire designed for the study, in addition to WHOQOL-bref instrument. The questionnaire consisted of 15 items related to the following aspects: personal characteristics: sex (male/female), age (life cycles: up to 29 years old, 30 to 39 years old, 40 to 49 years old, 50 years old or over), and marital status (with/without a partner). Academic and professional characteristics were also considered, that is, degree (with/without graduate studies), school system (state/ municipal schools), Physical Education teaching time (Professional Development Cycles¹⁹: admission - 1 to 4 years; consolidation - 5 to 9 years, affirmation - 10 to 19 years, renewal - 20 to 27 years, maturity - 28 to 38 years), length of service in school system (up to 3 years, 4 to 10 years, 11 to 20 years, 21 years or over), employment relationship (permanent employee/substitute teacher), having teaching as main income source (yes/no), another income source (yes/no), education level (1 level, 2 levels or more), number of schools (1 school, 2 schools or +), work shift (day/day and night), total weekly workload and workload in the school system (up to 29 hours, 30 to 39 hours, 40 hours or more). Based on the answers obtained in the questionnaire about the city where the school was located, data on the population size and HDI of each municipality were collected on the website of the Brazilian Institute of Geography and Statistics (IBGE)²⁰.

The WHOQOL-bref was developed by the Quality of Life Group of the World Health Organization (WHO)²¹, translated and validated for the Brazilian reality by Fleck et al.²². This questionnaire evaluates the perceived QOL of Physical Education teachers, based on 26 questions: two of them referring to general QOL and 24 related to physical and psychological domains, social relationships and environment. Responses are given on an ordinal scale from 1 to 5, corresponding to intensity (not at all-extremely), capability (not at all-completely), frequency (never-always) and evaluation (very dissatisfied-very satisfied- very poor-very good). The evaluation of the instrument is carried out by using its own syntax, and the final scores can be changed into a scale from zero to 100, so that the closer to zero the QOL is, the more negative, and the closer to 100, the more positive²². The scores proposed by Saupe et al.²³ were considered in the analyses by using some categories for assessing the general perceived QOL and domains (physical, psychological, social relationships, environment): positive (above 71); regular (from 41 to 70); negative (up to 40).

Contacts were made with representatives from the Municipal Secretaries of Education and the Regional Coordination of Grande Florianópolis in order to introduce the study, request authorization and survey the number of Physical Education teachers. Data collection was carried out according to the recommendation of the institutions:

- Direct mail (13 municipal schools, and state schools in distant locations): sending the questionnaires and the Free Informed Consent Form (FICF) inside an envelope with the research identification, distributed by the Secretaries through the school correspondence service. After filling out the documents, the teachers sent them back to the Secretaries in sealed envelopes to be open by the researchers;
- Continuing education meetings (two municipal schools): presence of the researchers in periodic training meetings offered by the Secretaries. The questionnaires and the FICF were delivered to the teachers before the beginning of the training. They were filled out individually and returned before the beginning of the training activities;

▪ Schools (a municipal school and state schools in nearby locations): the questionnaires and the FICF were given to the school principals, who passed them on to the Physical Education teachers. After filling out, the teachers returned the questionnaires in sealed envelopes to the principals, and then they were removed by the researchers.

Ethical aspects

The study was approved by the Committee on Ethical Research with Humans of the Brazilian university referred to as *Universidade do Estado de Santa Catarina* (Opinion 2.339.574/2017). All the Physical Education teachers participated in the research by reading and signing the FICF.

Statistical analysis

An electronic spreadsheet was created in Microsoft Excel 2016 to categorize data related to sociodemographic issues. After categorization, the Kolmogorov-Smirnov test revealed no data normality. The analysis was performed by using descriptive statistics (mean and standard deviation) and inferential statistics, SPSS version 20.0. For associating the independent variables (sociodemographic characteristics) and dependent ones (QOL) the Chi-square test (for a single group with balanced distribution in the groups), Mann-Whitney and Kruskal Wallis tests with Dunn's post hoc were performed, and a significance level of 95% ($p < 0.05$) was adopted.

Results

When characterizing the sample of Physical Education teachers (Table 1), it was seen that the group had a heterogeneous distribution. Only the variables related to sex, school system and employment relationship had a homogeneous distribution. On the other hand, a sampling bias was found, that is, most teachers had a partner; they were aged between 30 and 39 years old, had graduate studies, were in the career affirmation cycle and had been working for up to three years. In addition, there was a predominance of teachers who worked at a single education level and in one school; they had a day shift with a workload of 40 hours or more. Most teachers had teaching as their main income source; they lived in municipalities with medium HDI and with a population of 200,000 or more inhabitants.

Table 1. Characterization of the sample of Physical Education teachers from Grande Florianópolis mesoregion, 2017 (n=298)

Variables	Categories	n(%)	p**
Sex	Female	153(51.3)	0.643
	Male	145(48.7)	
Marital status	With a partner	194(66.2)	<0.001
	Without a partner	99(33.8)	
Vital cycles	Up to 29 years old	67(22.7)	<0.001
	From 30 to 39 years old	103(39.9)	
	From 40 to 49 years old	82(27.8)	
	50 years old or +	43(14.6)	
Degree	Without graduate studies	112 (37.7)	<0.001
	With graduate studies	185 (62.3)	
Professional Development Cycles*	Admission (1 to 4 years)	69(23.6)	<0.001
	Consolidation (5 to 9 years)	67(22.9)	
	Affirmation (10 to 19 years)	91(31.2)	
	Renewal (20 to 27 years)	46(15.8)	
	Maturity (28 to 38 years)	19(6.5)	
School system	State schools	139(46.6)	0.247
	Municipal schools	159(53.4)	
Length of service in schools	Up to 3 years	125 (42.5)	<0.001
	4 to 10 years	90 (32.0)	
	11 to 20 years	54(18.4)	
	21 years or +	21 (7.1)	
Employment relationship	Permanent employee	141(47.5)	0.384
	Substitute teacher	156(52.5)	
Education level	1 level	208(69.8)	<0.001
	2 levels or +	90(30.2)	
Number of schools	1 school	163 (57.8)	0.009
	2 schools or +	119 (42.2)	
Work shift	Day	250 (84.2)	<0.001
	Day and night	47(15.8)	
Total workload	Up to 29 hours	37 (12.5)	<0.001
	30 to 39 hours	50(16.8)	
	40 hours or +	210 (70.7)	
Workload in the school system	Up to 29 hours	84 (28.2)	<0.001
	30 to 39 hours	69 (23.2)	
	40 hours or +	145 (48.7)	
Teaching as main income source	Yes	249(84.4)	<0.001
	No	46(15.6)	
Another income source	No	178(59.9)	<0.001
	Yes	119(40.1)	
Human Development Index (HDI)	Up to 0.799	166 (55.7)	0.049
	Over 0.800	132 (44.3)	
Population of the municipality	Up to 50.000	92 (30.9)	<0.001
	51 to 199,000	74 (24.8)	
	200,000 or +	132 (44.3)	

Note: *Classification proposed by Farias et al.¹⁹; ** Probability estimated by the Chi-square test for a single group

Source: the authors

When associating QOL and its domains with the sociodemographic characteristics of the Physical Education teachers working at schools in Grande Florianópolis (Table 2)

some significant evidence was observed ($p < 0.05$). Regarding General QOL, it was seen that teachers up to 29 years old and the ones who were 50 years old or older had a higher QOL score, whereas teachers who had been working in schools for 4 or up to 10 years had lower QOL indices. With regard to the QOL domains, it was found that the teachers who had 4 to 10 years of employment relationship in the school system showed lower rates for the physical domain, whereas teachers who worked day and night shifts, in municipalities with a HDI of up to 0.799 and with a population of up to 50.000 inhabitants had higher scores in the physical domain. Considering the psychological domain, male teachers aged up to 29 years and 50 years old or older who worked day and night had higher scores in this domain. In turn, the teachers who worked in municipal schools with a workload of up to 29 hours a week did not have teaching as their main income source, but had another income source as well. They showed the best rates for the environment domain.

Table 2. Association between QOL and sociodemographic characteristics of Physical Education teachers

Characteristics	General Md(Q1-Q3)	Physical Md(Q1-Q3)	Psychological Md(Q1-Q3)	Social relationships Md(Q1-Q3)	Environment Md(Q1-Q3)
Total	63,5(57.0-69.8)	57.1(50.0-64.3)	66.7(58.3-70.8)	75.0(58.3-83.3)	60.7(50.0-71.4)
Sex	p=0.056***	p=0.311	p*=0.011	p=0.652	p=0,055
Female	62.8(56.2-68.7)	57.1(50.0-64.3)	62.5(58.3-70.8)	75.0(60.4-83.3)	60.7(47.3-67.9)
Male	64.4(58.7-70.9)	57.1(50.0-64.3)	66.7(58.3-75.0)	75.0(58.3-83.3)	60.7(53.7-71.4)
Vital cycles	p=0.033****	p=0.062	p=0,039	p=0.273	p=0.051
Up to 29 years old	65.6(59.4-72.0)a	57.1(50.0-64.3)	66.7(62.5-75.0)a	75.0(66.7-83.3)	64.3(53.6-71.4)
30 to 39 years old	63.0(55.5-67.0)b	53.6(50.0-60.7)	62.5(58.3-70.8)b	75.0(58.3-75.0)	60.7(50.0-67.9)
40 to 49 years old	61.9(53.9-70.1)b	57.1(46.4-64.3)	62.5(54.2-70.8)b	75.0(58.3-83.3)	57.1(46.4-71.4)
50 years old or +	65.5(58.8-71.0)ab	60.7(53.6-67.9)	66.7(64.2-75.0)ab	66.7(66.7-83.3)	64.3(53.6-71.4)
Degree	p=0.141	p=0.051	p=0.118	p=0.479	p=0.948
Without GS*	64.8(57.4-71.0)	58.9(50.0-64.3)	66.7(58.3-75.0)	75.0(66.7-83.3)	60.7(50.0-71.4)
With GS	62.4(56.5-69.4)	57.1(50.0-60.7)	62.5(58.3-70.8)	75.0(58.3-83.3)	60.7(51.0-67.9)
School system	p=0.371	p=0.617	p=0.658	p=0.779	p=0.007
State school	63.1(56.3-68.8)	57.1(50.0-64.3)	66.7(58.3-70.8)	75.0(58.3-83.3)	60.7(46.4-67.9)
Municipal school	63.7(57.1-70.5)	57.1(50.0-64.3)	62.5(58.3-70.8)	75.0(66.7-83.3)	64.3(53.6-71.4)
Length of service	p=0.009	p=0.003	p=0.160	p=0.078	p=0.213
Up to 3 years	64.6(58.0-71.0)a	57.1(50.0-64.3)a	66.7(58.3-70.8)	75.0(66.7-83.3)	60.7(53.6-71.4)
4 to 10 years	61.5(54.7-66.8)b	53.6(46.4-60.7)b	62.5(56.2-70.8)	66.7(58.3-75.0)	60.7(46.4-67.9)
11 to 20 years	62.1(56.5-68.6)ab	57.1(50.4-64.3)a	62.5(50.0-70.8)	66.7(58.3-75.0)	60.7(49.1-71.4)
21 years or +	70.2(55.1-76.3)a	60.7(51.8-69.6)a	66.7(56.3-79.2)	75.0(66.7-91.7)	64.3(55.4-78.6)
Workload	p=0.112	p=0.958	p=0.514	p=0.295	p=0.026
Up to 29 hours	66.4(58.0-71.8)	57.1(50.0-64.3)	66.7(58.3-70.8)	75.0(58.3-89.6)	64.3(54.5-71.4)a
30 to 39 hours	64.0(52.5-67.3)	57.1(50.0-60.7)	66.7(58.3-70.8)	75.0(58.3-75.0)	57.1(46.4-67.9)b
40 hours or +	62.4(57.1-68.9)	57.1(50.0-64.3)	62.5(58.3-70.8)	75.0(66.7-81.3)	60.7(50.0-67.9)b
Shift	p=0.069	p=0.005	p=0.016	p=0.080	p=0.589
Day	63.0(56.2-69.9)	57.1(50.0-62.5)	62.5(58.3-70.8)	75.0(58.3-83.3)	60.7(50.8-71.4)
Day and night	65.8(61.9-68.9)	60.7(53.6-67.9)	70.8(62.5-75.0)	75.0(66.7-83.3)	60.7(57.1-67.9)
Teaching as main income source	p=0.072	p=0.597	p=0.282	p=0.486	p<0.001
Yes	63.0(56.4-68.8)	57.1(50.0-64.3)	62.5(58.3-70.8)	75.0(58.3-83.3)	60.7(48.2-67.9)
No	66.2(58.4-74.4)	57.1(50.0-64.3)	66.7(60.4-75.0)	75.0(58.3-91.7)	67.9(60.7-75.0)
Another income source	p=0.094	p=0.565	p=0.375	p=0.774	p=0.001
No	62.7(56.7-68.4)	57.1(50.0-64.3)	66.7(58.3-70.8)	75.0(66.7-79.2)	60.7(50.0-67.9)
Yes	65.8(57.0-71.0)	57.1(50.0-60.7)	66.7(58.3-75.0)	75.0(58.3-83.3)	64.3(53.6- 75.0)
HDI**	p=0.057	p=0.012	p=0.152	p=0.766	p=0.134
Up to 0.799	64.3(58.6-70.4)	57.1(50.0-64.3)	66.7(58.3-71.9)	75.0(58.3-83.3)	60.7(53.6-71.4)
Up to 0.800	62.7(55.0-68.5)	57.1(50.0-60.7)	62.5(54.2-70.8)	75.0(58.3-83.3)	60.7(46.4-67.9)
Population	p=0.060	p=0.033	p=0.085	p=0.427	p=0.175
Up to 50,000	65.9(59.7-70.8)	57.1(50.9-64.3)a	66.7(59.4-75.0)	75.0(66.7-83.3)	64.3(53.8-75.0)
51 to 199,000	63.2(56.4-70.4)	57.1(50.0-64.3)ab	62.5(58.3-70.8)	70.8(58.3-83.3)	60.7(53.6-67.9)
200,000 or +	62.7(55.0-68.5)	57.1(50.0-60.7)b	62.5(54.2-70.8)	75.0(58.3-83.3)	60.7(46.4-67.9)

Note: *Graduate studies; **Human Development Index; ***Probability estimated by Mann-Whitney test, Kruskal Wallis test with Dunn's post hoc of multiple comparison; ****The values in bold show a significant statistical difference.

Source: the authors.

Discussion

This study aimed at evaluating the association between the quality of life and sociodemographic characteristics of Physical Education teachers. It is noteworthy that the survey reached 81% of Physical Education teachers working in public schools in Grande

Florianópolis mesoregion. The assessment of the teachers' general QOL revealed regular scores; the social relationships domain showed the highest scores, whereas the physical domain had the lowest scores. The results regarding general QOL are similar to the data shown by studies carried out with Brazilian teachers of Basic Education from different areas of knowledge^{12,24}.

A study performed with Polish Physical Education teachers found that most teachers of this discipline had a positive perceived QOL²⁵. This difference in the perceived QOL of teachers in the same area of knowledge might be related to differences regarding school, in addition to economic, social and cultural contexts of the two countries.

Social relationships had the highest positive scores among the domains of quality of life for Physical Education teachers. Positive scores were also found in the evaluation of social relationships in research with Basic Education teachers from different areas of knowledge²⁶ and, specifically, with Physical Education teachers^{9,25}. With regard to QOL, this domain with its facets (personal relationships, social support and sexual activity) becomes an indicator of relationships built both at work and outside it²⁴. However, the present study did not show a significant association with these teachers' sociodemographic characteristics.

Despite this, and considering teaching routine, the social support from colleagues, principals and family members is effective, since teachers reduce stress and better deal with work demands³. Thus, it can be understood that the good relationship with peers at school might have positively influenced the evaluation of this domain. In the specific case of Physical Education teachers, it is noteworthy that they generally have the dynamism, creativity and empathy of the students as main characteristics. Such aspects facilitate the establishment of social relationships and provide a friendly relationship between students and teachers⁹.

The assessment of the physical domain with the lowest scores carried out by the Physical Education teachers herein investigated is corroborated by the perception of the professionals in the same field from municipal public schools⁹. However, public school teachers from different areas of knowledge evaluated the environment domain as the most affected one with regard to their QOL^{14,27}.

Considering the physical domain facets, that is, pain and discomfort, energy and fatigue, sleep and rest, mobility, daily living activities, dependence on medication or treatments, and work capacity²², this different perception might be the result of the Physical Education teachers' specific routine, which differs from the one of other teachers. Their classroom is the gym, the multi-sport courts, the courtyard or the corridors. These structures are often far from the school building, which require longer displacements from the teachers to perform their daily activities in each period taught¹⁰. In addition, the teaching of the discipline contents, that is, fights, gymnastics, sports, dance, games, verbal communication, among others, which often require practical demonstration by the teacher, are aspects that might increase the physical exhaustion in relation to their colleagues⁹.

Regarding the sociodemographic characteristics and QOL domains, it was found that sex was associated with the psychological domain, since men had higher scores than women. In addition, the male group showed a more positive QOL for the general assessment and the environment domain. Thus, studies carried out in Brazil¹¹ and in the Czech Republic¹ reinforced that women tend to have a more negative perceived QOL when compared to men. Women often have a double workday; one at home (domestic chores, childcare) and another at school (planning, teaching classes). Thus, an overload

situation can cause health problems⁸ and, consequently, reflect on a more negative perception on both, general QOL and the domains.

The younger (up to 29 years old) and older (over 50 years old) groups of Physical Education teachers revealed a more positive general perceived QOL and psychological domain; they also showed higher scores in the environment domain. The international literature has studies with different results, that is, they found a more positive perceived QOL for teachers aged up to 39 years^{16,17}. On the other hand, some studies carried out by Sağlam and Yilmaz¹⁵ in Turkey found similar results, that is, teachers up to 30 years old had a better perceived QOL.

Younger teachers are in the process of starting the teaching career, still looking for a stable life, whereas older ones are in the final phase of their careers, preparing themselves for retirement, thus, they are more relaxed in relation to the demands of work activities²⁸. This might have contributed to both groups to show a more positive perceived QOL.

With regard to the school system, it was found that Physical Education teachers from municipal schools had a more positive perception of the environment domain. By observing the facets of this domain (financial resources, opportunities to acquire new information and skills, physical environment and transportation)²², this result can be more easily understood.

Therefore, it is emphasized that the Municipal Secretariats of Education have different characteristics from state schools, given that they have a smaller structure and are closer to the schools. This facilitates the teaching work, since teachers have faster access to their managers. In addition, considering the Brazilian reality, the municipal systems have a lower number of professionals, thus, better career plans and a lower workload in the classroom are often available. This provides the teachers with opportunities for systematic and frequent continuing education, which tends to influence a more positive perceived QOL²⁴.

Regarding the length of service of Physical Education teachers, it was evident that teachers with a long-term employment perceived themselves as having a more positive general QOL and physical mastery than their colleagues with less time in the area. In this case, it is considered that these teachers deal more easily with pedagogical aspects and situations mediated between students and faculty. Since these elements are relevant, they might have influenced the results found. On the other hand, such findings differ from those shown in the literature with regard to both, teachers from different areas of knowledge¹² and the Physical Education ones¹³, since the teachers with longer years of service in their school system showed worse QOL evaluation scores, compared to their colleagues with less length of service.

The present study showed that Physical Education teachers with a lower workload in the school system and who did not have teaching as their main income, but had another income source as well, had a better perceived QOL in the environment domain. Similarly, studies on the QOL of teachers reinforce that those with a lower workload have a better perceived QOL^{12,14}. On the other hand, as remuneration is one of the strongest points that interfere in the QOL of public school teachers, dissatisfaction with salary might make some teachers seek other ways to increase family income⁹.

The Physical Education teachers investigated in the present study, who worked both day and night shifts, had higher scores in the physical and psychological domains of QOL than teachers who worked only during the day. It is worth mentioning that with a greater work demand it was expected that these teachers would have a more negative evaluation of the domains. However, it can be inferred that these teachers, in addition to having greater permanence and financial dependence on their performance in Basic

Education schools, they might have a more affective and emotional relationship with the school, which generated such results.

Another aspect to be highlighted is that night shift students have different characteristics; they are generally older students who are more responsible and interested in their education, which generates more mature dialogues with teachers. Considering the specificity of night teaching, it should be noted that the classes are shorter (40-minute long) and the workload intended for Physical Education is shorter (two classes per week). Thus, the physical and psychological exhaustion of teachers on this shift is less when compared to teachers who work only on the day shift.

Regarding the characteristics of the municipality where the schools are located and the QOL of Physical Education teachers, higher scores for the physical domain were found among teachers who work in cities with medium HDI and up to 199,000 inhabitants. Thus, it is recognized that in smaller municipalities teachers live closer to schools; they know the community where they work, in addition to having greater facility to develop the daily life activities, since mobility in these cities is faster and generally better. With regard to QOL, living and/or working in cities with a high HDI might be harmful, as their fast pace makes people put physical well-being aside⁹.

Conclusions

In conclusion, the Physical Education teachers who work in municipal and state schools in Grande Florianópolis mesoregion, Brazil, showed regular scores in the general QOL, positive values for the scores related to the social relations domain, and regular lower values for the physical domain. Likewise, there was an association regarding general QOL with life cycles and length of service. Other associations were found, that is, the physical domain with work shift, length of service, HDI and population number; the psychological domain with sex, vital cycles and work shift; the environment domain with workload and the fact of the individuals have teaching as their main income, but another income source as well. This information might help subsidize educational planning and management actions in public Basic Education.

It is noteworthy that the present study has some limitations, that is, not all the school systems in Grande Florianópolis mesoregion were included in the research, in addition to the fact that this is a cross-sectional research. However, the study showed important information for understanding the association between QOL and sociodemographic characteristics of Physical Education teachers. Further longitudinal studies are suggested to compare the QOL in different periods throughout the school year, and use other data collection instruments that provide the teachers with a greater meaningful evaluation of their QOL and its relationship with their working conditions in public schools.

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ORCID:

Juliana Regina Silva Guimarães: <https://orcid.org/0000-0002-2564-8239>

Raquel Krapp do Nascimento: <https://orcid.org/0000-0002-3578-5878>

Jorge Both: <https://orcid.org/0000-0002-8238-5682>

Giovana Zarpellon Mazo: <https://orcid.org/0000-0002-7813-5592>

Alexandra Folle: <https://orcid.org/0000-0001-8972-6075>

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Correspondence address: Raquel Krapp do Nascimento. Universidade do Estado de Santa Catarina, LAPRAPEF/CEFID Rua: Pascoal Simone, 358, Bairro Coqueiros, Florianópolis, SC, CEP 88080-350. E-mail: quelkrapp@gmail.com.