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QUALITY OF LIFE PERCEIVED BY CHILDREN/ADOLESCENTS AND THEIR PARENTS

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Abstract

The impact of children's and adolescents' quality of life reflects in their development whilst adults, therefore the importance to intervene as soon as possible to encourage it. This study aims to identify the quality of life perceived by children/adolescents and their parents by investigating how quality of life connects with sociodemographic variables (age, sex, and schooling age). The aim of this study is to characterize the quality of life of children and adolescents in a school context and compare their perspectives with that of their parents and to analyze the influence of sociodemographic variables on the quality of life perceived by children/adolescents. A quantitative descriptive and correlational research design was used with a non-probabilistic and convenience sample, composed by children/adolescents and their parents. We used an ad hoc questionnaire with items to identify sociodemographic characteristics and a scale to identify quality of life using faces. The study sampled 567 children/adolescents with an average age of 12.40 years (±1.591), with 50.6% being female and 592 parents answered the questionnaire (parent version), with the average age of 40.43(±2.586), with 84.8% being female. 97.9% of the children/adolescents indicated a good quality of life while 2.1% indicated a bad quality of life, with an average value of 8.45 (±1.55). The data from the parents are similar (M=8.30±1.5), but not statistically significant. Subjective perceptions of quality of life constitute important data to promote health and are relevant indicators in the area of public health. Although our data reveals a good quality of life, an intervention at school with an approach to the factors that promote mental health and development is suggested.

Keywords: Children, adolescents, quality of life, education, parents.

1. Introduction

The interest in studying the quality of life of children and adolescents in different areas of knowledge, such as health, education, psychology, nursing and health economics is growing, such as its conceptualization and possible methods of evaluation (Soares et al., 2011). The concept of quality of life is understood as the way in which the individual assumes and perceives his own existence in relation to his material conditions (Renwick, Brown, & Nagler citado por cited in Vélez, & García, 2012). For WHO (cited by Vélez, & García, 2012) the quality of life is the perception that an individual has of his place in existence, in the context of the cultural and value system in which he lives and in relation to his objectives, expectations, norms and concerns. It is a very broad concept, and is mediated in a complex way by the subject's physical health, his psychological state, his level of independence, his social relations, as well as his relations with the other essential elements of his environment.

There are two tendencies regarding the conceptualization of the term quality of life in the health area: quality of life as a more generic concept and health-related quality of life (Wallander, & Schmitt, cited by Gaspar, Matos, Ribeiro, Leal, & Ravens-Sieberer (2008). Perceived health, called "Health-Related Quality of Life" (HRQOL), is described as a construct that encompasses components of well-being and physical, emotional, mental, social and behavioural functions, the way they are understood by oneself and by others.

Several instruments have recently been developed for evaluating the health-related quality of life of children and adolescents, especially in the United States and in different European countries (Gaspar et al., 2008). The predominance of the use of instruments with a multidimensional and quantitative approach is verified; however, Soares et al. (2011) report that the association with qualitative approaches is well accepted, especially in association with other complementary techniques at the time of triangulation of standardized questionnaires, such as focus groups, participant observation, ludic proposals, in order to better explore interactional dimensions, facilitating access and respect to the experience developed by children and young people (Leal, 2011). Before the Kidscreen project, no standardized, cross-cultural instruments were found for application with equivalent relevance in paediatric populations in different European populations. There are difficulties enumerated as to whether children are able to express opinions, attitudes and feelings about their HRQOL, and whether their ability to understand the concept or to assess aspects of their own health and well-being is determined by their age, maturity and cognitive development of the child. Recent research shows that children are able to report their well-being and functional capacity if the questionnaire is age and cognitive level appropriate (Gaspar et al., 2008). In our study, although dealing with children over 9 years of age, we used a face scale adapted from the Pais (2012) study.

2. Problem Statement

The impact of the quality of life of children and adolescents has repercussions on their development as adults (Pardo-Guijarro et al., 2015). Nowadays, children and adolescents are recognized as social actors in their own lives, as well as the lives of others and the society in which they live (Gaspar et al., 2008). Intervening as early as possible in promoting the quality of life of children and adolescents is of interest to the stakeholders.

3. Research Questions

The following research questions were addressed in our study: What is the quality of life perceived by children/adolescents and their parents? To what extent is the quality of life perceived by children and their parents related to sociodemographic variables (age, sex and year of schooling of children/adolescents).

4. Purpose of the Study

The study aims to characterize the quality of life of children and adolescents in a school context and compare their perspectives with that of their parents and to analyze the influence of sociodemographic variables on the quality of life perceived by children/adolescents. The purpose is to implement an intervention program that promotes health-related quality of life in children and adolescents at school level through the MAISaudeMental Project (CENTRO-01-0145-FEDER-023293).

5. Research Methods

The research design comprised a quantitative descriptive and correlational study, with a non-probabilistic and of convenience sample. The inclusion criteria considered for the recruitment process was children and adolescents attending school between the 5th and 9th grades of the 2017/2018 school year of a Viseu School Grouping.

The instrument used to collect data was presented in two versions: the children/adolescent version and the parents' version, referring to the data of the children. It consisted of two parts: an ad hoc questionnaire for sociodemographic characterization and the child's/adolescent´s health data and a face scale adapted from the study of Pais (2012) with faces of various expressions [from the left, with a sad face and corresponding to a lower quality of life, to the right that showed a face with a bigger smile corresponding to a higher quality of life]. Each child/adolescent and their parents were asked to indicate which face best described their quality of life.

Ethical procedures were complied with, such as the application to the Ethics Committee of the Viseu School of Health (Notion no. 20) and to the National Data Protection Commission (Ref. 03.01, Official Letter 38790 of 12/18/2017) and the study was declared favourable. Authorization was requested from the Directorate-General for Education, which granted the request for inquiry nº 0012100017. Authorization of the Director of the Grouping was also obtained.

The principal researcher went to the institution and delivered in envelopes, organized by class, the instruments to collect data to the professor in charge of the institution to be delivered to each class director: an individualized envelope containing the informed consent to be signed by each parent and the parents' version questionnaire; another envelope that contained the children's / adolescents' version questionnaire. The questionnaires (parents/children) were numbered and paired to remain anonymous.

After the parents had completed the questionnaire and handed it over with the informed consent to authorize the completion by the children, each questionnaire was placed in a closed, unidentified envelope. The children handed over their parents' questionnaires and respective consents to the class director, who then distributed the questionnaires to the children / adolescents in the classroom, ensuring

their anonymity. Each class director handed over the envelopes to the head of the institution who in turn returned them to the researcher. The data collection took place in January 2018.

The face scale consists of 10 numbers and 6 faces, where 10 signified the best quality of life (Smile) and 0 the worst quality of life (Sad). The quality of life results from the score obtained in the scale, being considered as better quality of life for those who obtained a score ≥ 5 and a worse quality of life with a score < 5.

The statistical treatment was performed through the SPSS program (Statistical Package for the Social Sciences) version 25 of 2018 for Windows, with descriptive and inferential analysis. In inferential analysis, the level of significance was set at 5% (p = 0.05).

6. Findings

6.1. Socio-demographic characterization of children

The sample included 567 children and adolescents with a minimum age of 9 years and a maximum of 17 years (average of 12.40 ± 1.591 years). We found that 287 (50.6%) were female and 280 (49.4%) were male. As for schooling, 96 (16.9%) of children/adolescents attend the 5th grade, 119 (21%) the 6th grade, 101 (17.8%) the 7th grade, 122 (21.5%) the 8th grade and 129 (22.8%) the 9th grade. We found that 439 (77.4%) children/adolescents live with their parents, 105 (18.5%) live only with their mother, 8 (1.4%) live only with their father and 15 (2.6%) with others (stepmother, stepfather, etc.). We found that the family dimension is mostly nuclear.

6.2. Socio-demographic characterization of parents and children

592 parents answered the parents' questionnaires, with an average age of 40.43 (± 2,586). The majority of the respondents are female 502 (84.8%), with 90 (15.2%) being male. The professions of the respondents, according to the Portuguese classification of professions (Instituto Nacional de Estatística, 2011), are mostly those of group 2 (31.6%) (Specialists in scientific activities), followed by group 5 with 12.0% (Workers in personal services, security & safety and salesmen), group 7 with 11.0% (Skilled workers in industry, construction and craftsmen) and group 4 with 9.6% (Administrative staff). The remaining groups of professions are also represented but with minimal percentages. It should be noted that 6.5% are domestic workers and 8.9% are student-workers.

The age of the children referenced by the parents corresponds to that of the children/adolescents, with an average of 12.43 years. The sex of the children referred by the parents is slightly different from what the children referred, with 305 (51.5%) males and 287 (48.5%) females. This difference is due to the fact that there were 25 more parents responding than children/adolescents and they are male.

We found that almost all children/adolescents (92.9%) live with their parents, with a small percentage (14.4%) living with the mother or father and 8 (1.4%) with others.

6.3. Quality of life perceived by children/adolescents

In order to answer the research question, we found that the children/adolescents showed a positive perception with an average value of 8.45 (±1.55), ranging from 0 to 10 (Table 1). The coefficient of

variation (CV) presents a moderate dispersion and the values of asymmetry and Kurtosis leptokurtic curves and skewed to the right.

Table 01. *Quality of life perceived by children / adolescents*

Quality of Life	Min	Max	M	DP	CV (%)	Sk/erro	K/erro
Face scale	0	10	8.45	1.55	18.34	-13.87	12.082

Note. Min = Minimum; Max = Maximum; *M* = Average; *DP* = Standard Deviation; CV = Coefficient of Variation; Sk/erro = Skewness/erro; K/erro = Kurtosis/erro

Considering 5 as a cut-off point for the face scale, 555 (97.9%) of the children/adolescents presented good quality of life ($\geq$ 5) and 12 (2.1%), a worse quality of life (< 5).

From the inferential analysis, it is concluded that males have a better quality of life with an average of 8.49 ($\pm$ 1.52), slightly higher than the females (8.40 $\pm$ 1.58), and it was found that the t test did not find any statistical significance ($t_{565} = 0.652$; p = 0.515). Our data is similar to that of the study by Romero-Olivaa et al. (2017) because it also found that boys posted a higher quality of life levels than girls, and did not find significant differences when applying the t-test.

Regarding age, children aged $\leq$11 years reveal a higher quality of life perception (8.80 $\pm$ 1.38) than those aged 12-13 years (8.47 $\pm$ 1.51). The oldest $\geq$14 years (7.99 $\pm$ 1.68), presented weaker perception of quality of life. The differences between the groups by the Anova test are statistically significant with the quality of life ($F_{2;564} = 12.368$; p = 0.000) located by the Tukey Pos hoc test among those aged $\leq$11 years and $\geq$14 years (p = 0.000) and between those of 12-13 years and $\geq$14 years (p = 0.07). Romero-Olivaa et al. (2017) also found that younger adolescents (12-14 years) presented higher averages on the KIDSCREEN-52 scale than older ones (16-18 years), but did not find statistically significant differences associated with age. Nascimento et al. (2016) report that adolescence is a very important period in the psychosocial development of young people and that the initiation of puberty and the changes in the body (especially overweight and obesity) have a negative impact on quality of life.

The findings on the quality of life data according to the year of schooling verify that those who attend the 5th grade are those with the highest quality of life (8.88 $\pm$ 1.41), followed by those of the 6th grade (8.71 $\pm$ 1.403), the 7th grade (8.51 $\pm$ 1.460), the 8th grade (8.31 $\pm$ 1.564) and the poorest quality of life indexes were of those attending the 9th grade (7.95 $\pm$ 1.709). It is noted that the average gets lower as the student attends higher levels of schooling. There are statistically significant differences between the variables under study ($F_{5;562} = 0.478$; p = 0.000). The Post hoc test found differences among those who attend the 5th (p = 0.000), 6th (p = 0.001), 7th (p = 0.045) and 9th grade. The potential of the test is 99.1%.

6.4. Quality of life of children/adolescents perceived by parents

In order to answer the second part of our research question, we analysed the data on parents' perception. Table 2 shows that the values are slightly lower than those reported by the children/ adolescents but reveal a positive perception (M = 8.30 $\pm$ 1.54). Gaspar, Matos, Batista-Foguet, Ribeiro, & Leal (2010) verified that parents tend to perceive the quality of life of their children as better than their children and these results are contrary to those found.

The coefficient of variation (CV) presents a moderate dispersion and the values of asymmetry and Kurtosis leptokurtic curves and skewed to the right.

Table 02. Quality of life perceived by the parents of children / adolescents

Quality of life	Min	Max	M	DP	CV (%)	Sk/erro	K/erro
Face scale	0	10	8.30	1.54	18.55	-17.34	26.20

Note. Min = Minimum; Max = Maximum; *M* = Average; *DP* = Standard deviation; CV = Coefficient of Variation; Sk/erro = Skewness/erro; K/erro = Kurtosis/erro

Considering the same cut-off point for the face scale, 577 (97.5%) of the parents reported that their children had a good quality of life ($\geq$ 5) and 15 (2.5%) had poor quality of life (< 5).

6.5. Children's health

Most parents, 550 (92.9%), reported that their children do not have any chronic illness or physical condition and 42 (7.1%) answered that they do. We also sought to compare the level of quality of life of children who do not have a disease with those who have a disease and found that both have good quality of life, but the first mentioned with a slightly higher average (8.33 ± 1.55) than those with disease or chronic physical condition (M = 8.0 ± 1.41), with marginal significance (Z = -1.935; p = 0.053). Nascimento et al. (2016) verified that there is a negative impact on the quality of life of overweight/obese children/adolescents in physical and psychosocial aspects. In our study, we found that the disease has an impact on the perception of quality of life, although with marginal significance.

6.6. Quality of life perceived by children/adolescents versus parents

We wanted to identify if there were significant differences in the quality of life perceived by the children/adolescents and their parents but the t-test revealed no statistically significant differences (t_{1157} = 1.572; p = 0.116.).

7. Conclusion

We have found that the quality of life perceived by children/adolescents and their parents is good. We cannot say that these results surprise us because these children and adolescents study in a school that provides an educational service of excellence and that allows their students to develop personalization paths, as well as knowledge, skills and values necessary for academic and professional success (Group of Schools Infante D. Henrique, 2018). As these results are only part of the MAISaudeMental Project, we consider it necessary to perform an analysis together with other quality of life monitoring instruments that have been applied.

This data is important to continue the project in line with intervention with a contextualized and evaluated program to promote the quality of life. We wish to highlight the importance of evaluating the quality of life of children and adolescents in their own perspective and that of their parents', just as has been done in other studies (Vélez, & García, 2012; Gaspar et al., 2010). We consider that there is still work to be done in favor of the quality of life of older children and adolescents in family and social relationships, and in support of feeling good and being satisfied with oneself, since this group presents a

lower quality of life. Positive self-image, good friends, and good family relationships are important and quality of life may be threatened when these factors are negative (Helseth, & Misvær, 2010).

Comprehension of socioeconomic and cultural rights and education for the health of the child/adolescent in the educational community is also important. In this approach, it is also important to take into account the specific factors and needs of each child and adolescent (Soares et al., 2011), and help them live with illness or situations of vulnerability. It is important to keep in mind that the case or the content of the interventions must be objectified according to the age group and development phase, so there is the opportunity to exchange personal experiences.

As for the limitations of the study, it is of a transversal nature, making it impossible to systematically evaluate over time. It would be important to carry out a longitudinal study where, in addition to the information collected by the children/adolescents and their parents, there could be information gathered by the teachers as well as variables on academic success. Just as in the Pardo-Guijarro et al. (2015) study, there could also be a research on the quality of the interaction of children/adolescents and their parents by the importance that parents place in the education and development of the children.

Acknowledgments

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